STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Environmental Project Scientist **Class Code: 51476**

A. Purpose:

Implements and maintains environmental project(s) and study(ies) to promote effective management of the state's natural resources.

B. Distinguishing Feature:

Environmental Project Scientists implement and maintain environmental project(s), study(ies), or program(s).
Environmental Program Scientists have primary responsibility for statewide, multi-faceted environmental program(s) that require extensive interdisciplinary coordination among several other programs within the department and federal, state, and local agencies.
Environmental Scientists conduct environmental inspections or investigations, collect and analyze data, recommend action to correct inadequacies or ensure compliance, and manage databases.

C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

1. Implements environmental project(s), program(s), or study(ies) to ensure compliance with laws, rules, and regulations.
   a. Serves as primary contact and coordinates activities with federal, state, and local agencies.
   b. Secures local agreement and commitment for project implementation.
   c. Proposes and implements plans and procedures for data collection and inspections.
   d. Conducts inspections to collect data and determine compliance.
   e. Reviews, analyzes, and interprets plans and data.
   f. Evaluates criteria and technical data for beneficial uses of natural resources.
   g. Initiates and implements action to correct problems; recommends strategies for improvement.
   h. Analyzes data to determine compliance with standards and regulations, or to determine exemptions to standards.
   i. Prepares formal summaries and scientific/technical reports.
   j. Recommends and implements enforcement actions.
   k. Informs public officials of project developments.
   l. Provides training and technical expertise to staff, local entities, and the public.
   m. Assesses the environmental impact of projects and plans to ensure there are no negative effects to the environment while facilitating the state's long range goals.
   n. Reviews environmental impact statements and writes departmental comments.

2. Writes minor permits and statements of basis to achieve compliance with laws, rules, and regulations.
   a. Analyzes potential impact of applicant's activities on the environment.
   b. Reviews requests for variances in minor permit conditions.
   c. Negotiates and establishes conditions and limits to include in permits.
   d. Writes minor permits and statements of basis.

e. Determines monitoring requirements or nature and schedule of inspections needed to ensure compliance.
f. Tracks and determines compliance with minor permit conditions; recommends enforcement action when necessary.

3. Reviews and evaluates assessment/remediation information for releases of regulated substances to determine if state and federal regulations have been followed.
   a. Determines whether additional remedial work or further assessment is needed.
   b. Recommends site closure.

4. Performs other work as assigned.

D. Reporting Relationships:

Reports to a Natural Resources Administrator. Does not supervise.

E. Challenges and Problems:

Challenges include technical evaluation of scientific data and information. The incumbent assesses the information for technical validity and reliability. After the data has been evaluated, the incumbent must present the data in a manner which is understandable to the general public as well as to technical experts.

Typical problems include interpretation of results of sampling analyses, determining or calculating permit effluent limits, preparing conditions for individual permits, uncovering unacceptable laboratory procedures and sample collection errors, determining which statistical analyses or models should be used, what sample procedures to use and the equipment needed to collect reliable samples, writing reports with incomplete data, and recommending appropriate enforcement actions if laws, regulations, or permit conditions are violated.

F. Decision-making Authority:

Decisions include recommendations for enforcement action and issuance of individual minor permits, appropriate procedures to use, whether collected data is valid and reliable, information to include in reports, selection of sites for monitoring networks, whether regulated facilities are in compliance with laws and regulations, and which procedures to use for collecting data.

Decisions referred to a superior include approval of enforcement actions, design of monitoring networks, minor permit conditions, and criteria for determining which sites or facilities to monitor.

G. Contact with Others:

Daily contact with staff of regulated facilities and the general public to answer questions on minor permit requirements and regulations and to provide technical assistance with problems. Weekly contact with federal and other state agencies to obtain interpretations of rules and regulations, coordinate work efforts, and discuss current projects.

H. Working Conditions:

Occasional field inspections may involve outdoor work in all types of weather on construction sites and waste water or water treatment plants, and around oil, mines, and gas and water wells. Potential exposure to hazardous chemicals, radiation, poisonous gases, and infectious bacteria.

I. Knowledge, Skills, and Abilities:

Knowledge of:

- the principles of natural science as they relate to environmental control;
- statistical models as they apply to analyzing and interpreting environmental data;
- water pollution biology, chemistry and bacteriology of water and wastewater, and the technology for water pollution measure and assessment;
- chemical and physical properties of air pollutants, pesticides, solid or hazardous waste, occupational health hazards, and ground water; and the technology for their measurement and control;
- federal, state, and local environmental laws and regulations;
- methods, procedures, and purposes of scientific or field investigations and analyses;
- the principles of effective human relations and dealing with the public.

Ability to:

- establish and maintain effective working relationships with the regulated community and the general public;
- interpret and implement environmental laws, regulations, and directives;
- select, compile, and analyze information to identify, substantiate, and solve scientific and technical problems;
- prepare and present technical reports to a variety of levels of expertise;
- assign priorities to work activities based on organizational goals and situational pressures;
- communicate persuasively and defend a position or decision.