

## STATE OF SOUTH DAKOTA CLASS SPECIFICATION

**Class Title: Environmental Scientist**

**Class Code: 51472**

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### **A. Purpose:**

Conducts environmental inspections or investigations, collects and analyzes environmental data, manages databases, maintains environmental monitoring networks, reviews minor permits and licenses, and provides technical assistance to public entities to determine and improve compliance with environmental laws, rules, and regulations.

### **B. Distinguishing Feature:**

Environmental Scientists conduct environmental inspections or investigations, collect and analyze environmental data, recommend action to correct inadequacies or ensure compliance, and manage databases.

Environment Project Scientists implement and maintain environmental project(s), study(ies), or program(s).

### **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. Conducts environmental inspections and/or investigations for projects and incidents such as releases of petroleum and other regulated substances, licensed mining operations, water distribution and treatment systems, minor solid waste facilities, individual waste water systems, and swimming pools and beaches.
  - a. Performs inspections and follow-up inspections when necessary.
  - b. Investigates complaints.
  - c. Collects and analyzes environmental data.
  - d. Prepares summaries and technical reports.
  - e. Recommends improvements or action to correct inadequacies or ensure compliance.
  - f. Provides technical assistance to public entities.
  - g. Recommends enforcement action; initiates and prepares warning and violation letters.
2. Maintains environmental monitoring networks to monitor the condition of the state's natural resources and provide data for evaluation of the environment.
  - a. Identifies and evaluates potential new monitoring sites.
  - b. Maintains and orders sampling equipment.
  - c. Implements established collection schedules.
  - d. Collects soil, groundwater, surface water, and air samples.
  - e. Measures water levels or flows.
3. Maintains tracking networks or databases of environmental data to enable data analysis and ensure current data is available for use by other staff.
  - a. Designs format and content of database.
  - b. Inputs, edits, and updates data.
  - c. Retrieves data, analyzes data, and prepares reports.
4. Reviews minor permits and licenses to determine if they comply with established criteria.
  - a. Determines if users need to apply for minor permits.

- b. Reviews applications to operate under a general permit or water permit applications for completeness and compliance with established criteria.
- c. Evaluates permit inspection reports and prepares licenses.
- d. Reviews requests and prepares temporary permits.
- e. Provides technical assistance to permit applicants.
- f. Prepares public notices.
- g. Tracks compliance with minor permit and license requirements; recommends enforcement action when necessary.
- h. Prepares license revocations, cancellations, or suspensions in accordance with established procedures.

5. Performs other work as assigned.

#### **D. Reporting Relationships:**

Reports to a Natural Resources Administrator. Does not supervise.

#### **E. Challenges and Problems:**

Challenges include determining compliance with minor permit and license requirements, rules, laws, and regulations. The incumbent must be able to interpret information provided by land owners, local governments and private businesses, obtain any missing data, and explain compliance problems and requirements.

Typical problems include obtaining accurate and pertinent information from regulated sources, determining minor permit or license deficiencies, obtaining voluntary compliance with environmental laws and regulations, and dealing with business and land owners who are angry because of minor permit or regulatory requirements.

#### **F. Decision-making Authority:**

Decisions include determining when a violation of a standard occurs, what actions to take when problems are encountered during sampling, answering technical questions from the public, determining whether permit or license applications are complete, recommending water permits and licenses for cancellation consideration, determining compliance with laws and regulations, and recommendations on correcting deficiencies noted on inspections.

Decisions referred to a superior include approval of enforcement actions when a facility is not in compliance, the number of inspections to be completed, the release of sureties or liability, review procedures for minor permits, approval of correspondence or data requests, approval of database format and design, and approval of licenses and minor permits.

#### **G. Contact with Others:**

Daily contact with the general public, facility and project representatives, and local government staff to answer complaints, provide technical advice and assistance with regulated activities, and inspect facilities and projects for compliance with laws and regulations. Weekly contact is made with other state agencies and the federal government to discuss problem areas and provide information on inspection results.

#### **H. Working Conditions:**

Field inspections involve outdoor work in all types of weather on construction sites and waste water and water treatment plants, and around oil, mines, gas and water wells, and irrigation projects. Potential exposure to electrical hazards, 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;
- methods, procedures and purposes of scientific or field investigations and analyses;
- the principles of effective human relations and dealing with the public;
- the basic principles and terminology of data processing;
- basic statistical processes sufficient to collect and interpret data; technical report writing.

Ability to:

- establish and maintain effective working relationships with coworkers, municipal and industrial officials, agricultural producers, and the general public;
- apply statistical procedures to analyze environmental data;
- assemble and maintain data and prepare reports as required;
- communicate information clearly and concisely.