



Environmental Science Career Family LEVEL DESCRIPTIONS

PURPOSE

Jobs in this family perform professional environmental and physical science work focused on the management, maintenance, and protection of South Dakota natural resources. The jobs in this family facilitate the protection of human health and the environment, quality of life, and economic development through the identification, measurement, management, and restoration of natural resources; enforcement of environmental rules and laws; development of standards; effective administration of programs, activities, and projects; and public education.





Environmental Science Career Family LEVEL 1 DESCRIPTION - Professional Track 803001 – Environmental Scientist I

S-1

Summary

Performs professional level environmental and physical science work that requires the application of basic scientific principles, practices, and techniques following established procedures and standards. Employees in this role perform assignments of specific tasks that are limited in scope, depth, and degree of skill required. To be successful in this role, employees seek guidance and advice from more experienced colleagues and are focused on gaining the knowledge and experience to perform more independently and participate in work of higher complexity.

Accountabilities

- Takes environmental samples and measurements, collects environmental information, organizes and enters data into database, performs simple statistical analyses for basic interpretation, and provides information to others.
- Performs field investigations and/or inspections that provide experience and familiarization with department operations, specific environment issues and rules, and State practices.
- Prepares routine summaries and technical reports for others' use in compliance determinations.
- Identifies potential problem areas/issues and contributes to developing solutions, including recommending improvements or action.
- Undertakes specified environmental science tasks of varying complexity to support and assist higher-level colleagues in:
 - more complicated field investigations and/or inspections;
 - providing specific initial analyses and interpretations for projects;
 - preparing more in-depth reports and documentation; and
 - writing and processing first level permits or portions of more complex permits.
- Processes and reviews for completion and compliance applications, surveys, and/or questionnaires; makes routine/simple determinations or passes on to others for interpretation.
- Provides technical information and assistance to others within and outside the department.
- Maintains, repairs, sets-up, and calibrates environmental equipment for efficient and accurate collection of samples/data.
- Learns relevant procedures, policies, and rules, and develops a general understanding of the work and the objectives/goals of the department.

Competencies

- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Communication:** Listens attentively and clearly conveys information and ideas to others.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Teamwork:** Works cooperatively with coworkers and treats them with respect.

Job Knowledge (typical education/experience needed for entry into the level)

4-year college degree in the environmental or physical sciences.

Career Development

This role provides the opportunity to gain environmental and physical science experience, build competence, and begin a long-term career with the State. The State offers unique environmental and physical science opportunities at this level that involve exposure to a variety of tasks and various areas of the State, expanded focus on a particular environmental area of interest, and educational advancement.

To develop proficiently in this role, it will be important to demonstrate patience, progressively learn and apply appropriate approaches on how work is performed within a state government environment, seek out answers to questions, learn how to set priorities and organize work, have confidence in own abilities, and effectively communicate (both written and verbal) with others.

For movement to the next level, an employee will need to demonstrate quality and effectiveness of work responsibilities and the full range of supporting behaviors, an understanding of the “why” behind procedures and policies, sound judgement, initiative and ability to take on more challenging responsibilities with greater independence, and desire to progress.



Environmental Science Career Family LEVEL 2 DESCRIPTION - Professional Track 803002 – Environmental Scientist II

S-2

Summary

Performs professional level environmental and physical science work that consists of structured assignments performed under guidance or within the framework of defined procedures, policies, practices, and standards. Work at this level requires analysis, judgment, interpretation of data, laws and rules, and identification of problem sources and possible remedial actions. Employees in this role coordinate and conduct field assessments of environmental issues and implement projects where analyses of situations or information require a review of a variety of factors. While employees in this role seek advice and guidance of more senior level colleagues on complex issues or situations, this role is for a well-grounded professional who has good knowledge of scientific principles and practices and has the ability to handle most regular issues independently.

Accountabilities

- Gathers, analyzes, and interprets environmental and natural resources information for identification, documentation, environmental impact, beneficial use, compliance, and actions.
- Plans, conducts, and oversees moderately complex field investigations, characterized by the variety of variables, possible relationships, and the number and level of standards and rules.
- Plans and conducts inspections involving a variety of variables, individuals involved, size of facility, complexity of equipment, processes, and complexity of policies, laws and rules to determine compliance and recommend and implement action.
- Prepares technical reports and other work products (e.g., maps, charts, evaluative letters); presents and explains information to the public, government officials, and other technical professionals.
- Implements project(s) and/or contract(s) and coordinates all related activities to ensure work is completed in accordance with specifications and regulations; communicates project developments to stakeholders.
- Under the direction of more senior colleagues, performs various phases or specific components of larger projects/activity areas, involving a number of policies, laws and rules, multiple parameters and issues, areas requiring significant analysis and judgement, and broad impact.
- Writes, issues, and processes moderately complex permits that protect human health and the environment, including analysis of potential impact and negotiation of conditions; may testify at hearings.
- Contributes to recommendations on changes to procedures, policies, laws and rules.
- Provides technical assistance and information and offers insights that contribute to the development of wider solutions or approaches to environmental issues or situations.
- Continues to learn related procedures, policies, laws and rules and provides interpretations and information to junior colleagues, regulated community, and public.
- Provides technical guidance and may review the work of junior colleagues to ensure work accuracy and quality and contribute to departmental performance goals.

Competencies

- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Communication:** Listens attentively and clearly conveys information and ideas to others.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Organization:** Plans ahead, sets priorities, and works in an orderly manner.
- **Problem Solving:** Recognizes and evaluates problems, and recommends sound solutions.
- **Teamwork:** Works cooperatively with coworkers and treats them with respect.

Job Knowledge (typical education/experience needed for entry into the level)

Requires a Bachelors degree in environmental or physical sciences and 1 – 3 years of progressive experience equivalent to Level 1 of the Environmental Sciences Job Family

OR Masters degree and no experience.

Career Development

This role provides the opportunity to gain more in-depth and involved environmental and physical science experience, including participation in project planning, ownership in writing reports, and initial exposure to various stakeholders. Opportunities at this level involve working independently, exercising judgement and making well informed decisions that require the interpretation of procedures, policies, laws and rules.

To develop proficiently in this role, it will be important to apply a thorough understanding of policies, laws, and rules; learn and progressively apply project management methods and processes; adjust to and operate in an unstructured environment (i.e., work within the unknown); and build an understanding of others' preferences/needs and adapt report writing accordingly.

For movement to the next level, an employee will need to perform responsibilities and assignments independently, confidently, accurately, effectively, and timely; demonstrate the full range of supporting behaviors; demonstrate an interest in expanding responsibilities by assisting other team members (junior colleagues, peers or supervisor) and/or by tackling larger and more complex assignments; and the desire to progress.



Environmental Science Career Family LEVEL 3 DESCRIPTION - Professional Track 803003 – Environmental Scientist III

S-3

Summary

Performs advanced or specialized environmental and physical science work requiring considerable independence in the exercise of judgment in determining approaches and in the interpretation of policies, laws and rules. Employees in this role develop and conduct field assessments and/or serve as a technical lead for a specific environmental activity (i.e., generally of statewide impact; affects a specific environmental sector or media; has unique processes and procedures, which may be similar to other activities; and may have unique authorizing legislation or regulations) or for multiple projects involving diverse and complex factors and require extensive interdisciplinary coordination among other environmental areas within and outside the department. While employees in this role seek advice and guidance of senior colleagues or management on unusual problems or matters affecting general policy, this role is for an advanced professional who has thorough knowledge of scientific principles and practices within own area and general knowledge of multiple environmental areas and can modify or develop new methods to meet specialized needs.

Accountabilities

- Gathers, analyzes, and interprets multiple sets of environmental and natural resources data/information to determine activity or project risk, impact, and needs; recommend corrections or enhancements; identify existing and potential environmental problems; and determine actions and/or participate in developing corrective measures.
- Sets priorities, parameters, and methods for data/information collection; designs monitoring networks.
- Designs, plans, conducts, and oversees complex field investigations, characterized by the variety of variables, possible relationships, and the number and level of standards and rules.
- Oversees, directs, and conducts inspections that are politically sensitive and are of high profile/visibility.
- Identifies compliance issues; assists in drafting and making decisions concerning enforcement actions.
- Prepares technical reports and other work products (e.g., maps, charts, evaluative letters) that require integration of information from multiple sources; performs a technical review of reports prepared by others; presents and explains information to the public, government officials, and other technical professionals.
- Develops conceptual design and directs multiple projects or manages an on-going activity, involving multiple stakeholders and a large number of complex rules; provides input to and monitors relevant budgets; may develop grant proposals and write applications for federal grants and to maintain federal equivalency.
- Writes, issues, and processes complex permits that maintain compliance and protect human health and the environment, including analysis of potential impact and negotiation of conditions; may testify at hearings.
- Assists in drafting policies, legislation, and rules relevant to own area to protect human health and environment.
- Develops procedures and recommends necessary criteria to ensure compliance with rules and state standards.
- Serves as a technical resource by leveraging and applying own specialized knowledge and expertise to provide consultative advice on specific technical issues, analyze situations and develop key insights, and help solve interdisciplinary environmental problems.
- Provides technical guidance, training, direction, and reviews the work of project members to ensure accuracy, quality and achievement of timelines. May provide input into performance reviews.

Competencies

- **Assertiveness:** Acts with confidence and completes work independently.
- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Creativity:** Generates innovative ideas and uses them to solve problems or make improvements.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Organization:** Plans ahead, sets priorities, and works in an orderly manner.
- **Problem Solving:** Recognizes and evaluates problems, and recommends sound solutions.
- **Teamwork:** Works cooperatively with coworkers and treats them with respect.

Job Knowledge (typical education/experience needed for entry into the level)

Bachelors or Masters degree in physical or natural sciences and 4 – 6 years of progressive experience equivalent to Level 2 of the Environmental Sciences Job Family

Career Development

This role provides the opportunity to conceptually design and direct challenging environmental and physical science projects, have greater independence in decision making, and serve as a technical resource to others. Opportunities at this level involve the ability to choose types of projects that align with one's interest and the ability to display technical leadership, particularly in assisting with the development of agency policies and in the provision of guidance and mentorship of junior level colleagues.

To develop proficiently in this role, it will be important to gain an interpersonal understanding of stakeholders and others involved in projects and apply this understanding to communications, interactions, and in the discovery of the real issues/problems. It will also be important to gain an understanding and/or analyze the impact and implications of decisions while balancing the need for timely decisions; work under pressure and/or deadlines which require organization and prioritization of time and resources; and utilize own past experiences and knowledge and those of others.

For movement to the next level, an employee will need to have an awareness of own strengths and will have made it known to others one's interest in either leadership or further technical progression. For leadership, an employee will need to have demonstrated some leadership capability, have organizational skills, and a solid understanding of the activity area for assignment. For technical progression, an employee will need to be sought-out as a go-to person for technical guidance and are often selected to serve on regional/state committees.



Environmental Science Career Family LEVEL 4 DESCRIPTION - Professional Track 803004 – Environmental Scientist IV

S-4

Summary

Provides technical leadership and has deep technical knowledge of an environmental and/or physical science area or has thorough knowledge of multiple areas. Employees at this level are usually regarded as an expert in their areas and perform complex assignments often requiring the development of unique solutions to environmental problems due to the variables involved. Within this role, employees coordinate and conduct broad field assessments of environmental issues and/or serve as the technical lead for multiple activities and may lead a team comprised primarily of professional staff within the environmental and physical science and/or environmental engineering areas. Work requires an ability to interpret on a broad basis the principles, theories and concepts of a scientific specialty and regulatory requirements.

Accountabilities

- Serves as a technical partner to colleagues, leaders, and stakeholders. Provides technical consultative advice, insights, interpretations, implications, and recommendations to inform higher-level decisions; studies and recommends unique solutions to specific problem areas.
- Oversees, participates in, and develops and implements strategies for the collection, analysis, and interpretation of environmental and natural resources data/information. Leverages technical knowledge in looking at the broader level and identifies multiple linkages/relationships, issues, trends, and impact of decisions and projects.
- Develops new or upgrades to activities and/or projects, including setting program metrics and measures of success; applies for approval and oversees approved activities and/or projects.
- Coordinates multiple projects and/or activities involving a significant number of stakeholders and which require the need to facilitate participation of appropriate resources; a large number of complex policies, laws and rules, and/or are highly technical, challenging, and very public. Formulates and monitors relevant budgets; negotiate contracts; may develop grant proposals and write applications for federal grants or program delegation authorizations to maintain federal equivalency.
- Designs monitoring systems; directs, conducts, and provides technical oversight of inspections.
- Identifies compliance issues; drafts and makes decisions concerning enforcement actions.
- Prepares highly technical reports and publications for public distribution; reviews, edits, and provides technical approval for reports prepared by junior colleagues; presents and explains information to the public, government officials, and technical others.
- Recommends and drafts legislation and rules to correct deficiencies and ensure state authority.
- Looking at the broader, more macro or “bigger” picture level, identifies gaps, problems, or issues and drafts new or updates policies, laws and rules to maintain federal equivalency and protect environmental and human health.
- Writes, issues, and processes highly complex, potentially controversial permits to protect human health and the environment, including analysis of potential impact and negotiation of conditions; may testify at hearings.
- Serves on various committees and represents the department on a national and statewide level; provides expert testimony.
- Educates stakeholders and advocates policies, projects, and activities.
- Negotiates EPA and other federal commitments; maintains and follows through with commitments.
- Provides technical guidance, direction, and reviews the work of project members to ensure accuracy, quality and achievement of timelines. May provide input into performance reviews.

Competencies

- **Assertiveness:** Acts with confidence and completes work independently.
- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Composure:** Remains focused under pressure and controls emotions.
- **Creativity:** Generates innovative ideas and uses them to solve problems or make improvements.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Organization:** Plans ahead, sets priorities, and works in an orderly manner.
- **Problem Solving:** Recognizes and evaluates problems, and recommends sound solutions.
- **Teamwork:** Works cooperatively with coworkers and treats them with respect.

Job Knowledge (typical education/experience needed for entry into the level)

Bachelors or Masters degree in environmental or physical sciences and 4 - 6 years of progressive experience equivalent to Level 3 of the Environmental Sciences Job Family, and working knowledge of state government.

Career Development

This role provides the opportunity to work as a subject matter expert; provide advice and work with senior level management on complex environmental and physical science issues; help shape agency policy and future statewide programs; and provide technical guidance to other agencies. Opportunities at this level involve advanced training on a national level and to serve as a valuable resource in defining the technical future of one's field.

To develop proficiently in this role, it will be important to focus growth on technical knowledge of several areas to maintain recognition as an expert; accept and be mindful of the risk and responsibility associated with being an expert; accept others priorities; convince others of a direction or approach without being directive; and maintain own ethical beliefs and standards.



Environmental Science Career Family LEVEL 1 DESCRIPTION - Managerial Track 803101 – Environmental Science Manager I

M-1

Summary

Manages work responsibilities and leads teams comprised primarily of professional staff, within the environmental and physical science and/or environmental engineering areas. Employees in this role provide day-to-day supervision over a team that carries out one or more activities (i.e., small to moderately sized programs) or projects and also contribute to other environmental areas or disciplines to support broad collaboration and success. Employees at this level may be regarded as an expert in their areas and perform complex assignments often requiring the development of unique solutions to environmental problems due to the variables involved. Work at this level requires thorough knowledge of the teams' requirements, the ability to address broad operational and strong functional issues, and the authority to make short-term operational decisions. This role is the first level of supervision where gaining people management skills and abilities is a major responsibility and focus.

Accountabilities

- Establishes goals and expectations for team members and makes recommendations on resources and budgetary requirements for annual planning purposes.
- Reviews work and monitors progress and performance of activities and projects, provides guidance and coaching, and motivates on an individual and team level to ensure consistency of work and achievement of goals.
- Assists in interviewing, hiring, and training new and existing employees and provides input on personnel actions such as performance reviews and discipline to ensure adequate and competent staff.
- Acts as a technical reference for the team, other technical colleagues, public, and government officials and maintains up-to-date knowledge of own environmental area of expertise.
- Identifies gaps or improvement areas, initiates and writes internal/local procedures and policies for team unit operation and responsibilities such as inspections, permitting, licensing, and enforcement; recommends and implements departmental policies.
- Manages activities and projects at the team level, taking a holistic approach within environmental area of responsibility; develops a direction and plans for meeting identified goals and objectives, including setting priorities; manages related budgets, grants, and/or other funds.
- Coordinates activities and plans, directs, and utilizes available resources across a broad area of responsibility to provide effective program management, achieve state, federal, and/or local goals, and ensure work is completed in accordance with established policies, laws and rules.
- Develops or evaluates and approves standards and criteria established by professional staff; reviews and approves staff prepared technical reports, recommended enforcement actions, and permits.
- Collaborates and communicates with other teams and technical experts to provide information and needed resources.
- Educates professional staff on new developments and communicates critical information to ensure compliance and advancements in methods and techniques.
- Initiates, prepares, negotiates, and manages grants and contracts to support the goals of the team and department and to maintain federal equivalency.
- Represents the department in an environmental area and manages activities with federal, state, and local agencies; communicates and advocates the importance of activities and projects; handles challenging communications.

Competencies

- Displays Integrity & Commitment
- Acts Decisively
- Builds Strong Alliances
- Demonstrates Astuteness
- Builds Competence
- Exercises Due Diligence
- Focuses on Customer Needs
- Achieves Successful Results
- Communicates Powerfully
- Develops Successful Teams

Job Knowledge (typical education/experience needed for entry into the level)

Bachelors or Masters degree in environmental or physical sciences and 3-4 years of progressive experience equivalent to Level 3 of the Environmental Sciences Job Family, including working knowledge of state government and evidence of people and budget management skills and abilities.

Career Development

This role provides the opportunity to begin a leadership career with the State through delegated authority to lead a team, to motivate, to mentor, and to impact team performance. Opportunities at this level involve exposure to a greater part of the business; more in-depth and regular interactions with higher level management, including participation in management decision making; and budget accountability.

To develop proficiently in this role, it will be important to shift focus from performing individual contributor work the majority of the time to a more balanced focus on leading a team and engaging in the work performed by team members. It will also be important to seek answers, guidance, and training to address one's gap in knowledge and abilities regarding the nuances of this role, including budget management and decision making authority.



Environmental Science Career Family LEVEL 2 DESCRIPTION - Managerial Track 803102 – Environmental Science Manager II

M-2

Summary

Directs and administers a comprehensive environmental program comprised of technical/professional teams and technical experts, within the environmental and physical sciences and/or environmental engineering areas. Employees in this role have both functional and administrative responsibility for the execution and success of multiple program activities where coordination across all teams is required. Work at this level requires thorough knowledge of legislative scope, program related environmental issues and requirements, ability to address broad operational issues, and the authority to make annual operational decisions within the context of longer-term planning.

Accountabilities

- Develops and negotiates annual plan for a comprehensive environmental program; understands and clearly articulates department goals and environmental requirements as context for tactical program planning, developing, prioritizing, implementing and monitoring of operations; establishes goals for individual teams/activities.
- Develops and has overall responsibility for program goals and objectives, policies and procedures, and technical standards.
- Evaluates economic feasibility and ensures activities and projects are developed and implemented in a manner that protects the environment and public health, preserves natural resources, promotes economic development, and facilitates regulatory compliance.
- Delegates supervision and/or coordinates activities across the program with the aim of accomplishing environmental goals while balancing economic feasibility, program costs, practices, and staffing.
- Instills a sense of vision and direction in teams and creates a positive work environment that leverages the strengths of members and focuses on individual, team, and program-wide developmental areas in order to increase the capabilities and ensure success of environmental and program goals.
- Identifies, allocates, reorganizes, and provides necessary resources and requirements to achieve program objectives and goals, considering future environmental needs and issues, and to meet the needs of staff.
- Develops and maintains excellent working relationships with internal and external stakeholders to ensure coordination, understanding of program goals, objectives and regularity requirements, and their effective communication; serves as department spokesperson in public forums.
- Anticipates program issues/problems and develops plans for problem resolution; drafts position papers, technical memoranda, and reports on program issues; prepares agenda items requiring board action.
- Prepares legislation; analyzes the impact of federal laws and rules on the program; testifies at hearings.
- Utilizes technical knowledge and experience to generate and develop insights, approaches, and improvements that may have impact beyond immediate program. Maintains and develops technical/managerial knowledge and networks.
- Manages and engages in effective people management activities such as recruitment, interviewing, hiring, training and retention, including personnel actions such as performance reviews and discipline to ensure adequate and competent staff.
- Develops budget projections, justifies needs, and manages budget(s) for program to ensure proper expenditure of funds. Negotiates and administers grants and contracts.

Competencies

- Displays Integrity & Commitment
- Acts Decisively
- Builds Strong Alliances
- Demonstrates Astuteness
- Builds Competence
- Exercises Due Diligence
- Focuses on Customer Needs
- Achieves Successful Results
- Communicates Powerfully
- Develops Successful Teams

Job Knowledge (typical education/experience needed for entry into the level)

Bachelors or Masters degree in environmental or physical sciences, progressive technical experience typically over 10 or more years, experience managing others in a supervisory capacity, developing and managing budgets, and working knowledge of state government.

Career Development

This role provides the opportunity to have independence and accountability for a program, gain pride from facilitating others' success, and to influence statewide policy. Opportunities at this level involve: work variety and the need to think through all of the variables; and interaction with key stakeholders both internally and externally.

To develop proficiently in this role, it will be important to identify what motivates key stakeholders, peers, and employees; delegate responsibility and focus primarily on leading and providing direction; and develop the talents and skills of team leaders.