STATE OF MINNESOTA CLASS SPECIFICATION

MINELAND RECLAMATION SPECIALIST SENIOR

KIND OF WORK

Professional environmental management and preservation work. Second of 2 classes in the Mineland Reclamation Specialist series.

NATURE AND PURPOSE

Under limited supervision/procedural control, designs mineland reclamation projects, to ensure successful revegetation of abandoned, publicly owned mines. Assignments are specific in nature and require use of independent judgment to supervise, inspect, monitor and evaluate land restoration projects to guarantee effectiveness. Provides direction to the mining industry to ensure compliance with State's rules for mineland reclamation. Performs related work as required.

DISTINGUISHING CHARACTERISTICS

This level is distinguished from the Mineland Reclamation Specialist designation by having the authority to develop, design and supervise reclamation projects. This job class will solve problems in conjunction with the Mineland Reclamation Supervisor. This level would insure compliance of projects so that private contractors meet specifications and desired project results. This level would consider what new methods need to be developed within the confines of a policy.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Directs the studies and research of revegetation techniques to collect information for effective future reclamation of disturbed land; review procedures and laboratory data; design and establish lab procedures and methods.

Develops mineland reclamation projects for private firm bidding by directing the determination of a specific sites' needs; by directing the preliminary professional and technical project design work; by preparing cost estimates; by directing final design drafts for reclamation projects; by fully defining in writing specifications, scope, and project details for presentation to perspective bidders.

Convenes all pre-bidding and pre-construction meetings with private contractors to insure when supplemental agreements are needed.

Designs and supervises repairs to projects as needed; ensure run-off waters are mitigated until vegetation can fully stabilize on newly constructed earthen slopes.

Prepare and publish reports to ensure results are shared with clientele and other interested organizations; provide information on how mineland facility laboratory studies and facilities can be improved.

Develop mineland reclamation revisions and amendments to reflect current and future reclamation procedures by studying statues, laws, and rules; by attending and speaking at public meetings and hearing required for rule development; by writing of new rules and regulations.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Vegetation and plant ecology, soil sciences and soil-plant interaction, and related sciences demonstrating a broad understanding of biological communities sufficient to correlate soil and vegetation suitability for different mineland reclamation sites.

The mining industry's techniques and corresponding environmental concerns as well as existing rules and regulations sufficient to review, evaluate, and determine compliance of permit applications.

Drainage of tailings if gold minings were performed and possible mitigation efforts and measures to combat drainage damage.

Laboratory techniques sufficient to provide accurate water and soil studies of areas affected by mines.

Project management sufficient to locate minelands requiring reclamation and determining type of reclamation needed.

Advanced mapping procedures sufficient to read aerial photos and locate/identify project sites.

Ability to:

Effectively manage and supervise the effectiveness of projects based on objectives being met and vegetation stabilization.

Evaluate business operations and develop creative solutions to problems.

Analyze and apply large volumes of scientific laboratory information.

Manage multiple projects with limited resources.

Conduct cost/benefit analyses of revegetation programs.

Develop, lead, organize and monitor plans for reclamation projects.

Skill in:

Oral and written communications.

Human relations sufficient to work with other governmental agencies as well as with private contractors.

LICENSURE/CERTIFICATION

May require: N/A

Est.: 11/85 Checked: Rev.: 2/27 T.C.: Former Title(s):