

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES  
CLASS SPECIFICATION

BLASTING EXPERT

POSITION CODE: 04720  
Effective: 12-1-2012

DISTINGUISHING FEATURES OF WORK:

Under general direction, functions as a technical expert on complex scientific explosive, blasting, seismic conditions and/or mine reclamation, or serves as a extensive supervisor of district blasting or mine reclamation specialists; ensures compliance with state law and regulations pertaining to land reclamation and explosives blasting requirements; reviews blasting applications and plans submitted by private industry; participates and testifies in internal hearings and in court appeals; reviews variance requests; may issue citations for violations.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Serves as chief technical consultant to the division supervisor on complex matters including explosive handling and storage procedures, blasting designs and seismographic analysis pertaining to blasting and vibration control. Prepares detailed and comprehensive reports on conditions pertaining to explosive handling and storage and blasting vibration control.
2. As a working supervisor, assigns and reviews work; provides guidance and training to assigned staff; counsels staff regarding work performance; reassigns staff to meet day-to-day operating needs; establishes annual goals and objectives; approves time off; prepares and signs performance evaluations.
3. Formulates technical specifications and, as the department's liaison, advises mine operators and consulting engineers regarding specific blasting problems. Develops implements and evaluates training programs on blasting operations and general safety for the mining industry. Attends training seminars and professional conferences in order to keep job related certification/licenses current.
4. Serves as an expert witness in court proceedings on complex blasting issues in response to complaints filed by the general public or private groups.
5. Assists in drafting regulations and policy directives related to blasting and reclamation operations.
6. Reviews and/or conducts pre-blast surveys and follow-up blasting and mine reclamation inspections on-site and prepares comprehensive and technical reports pursuant to applicable laws.
7. Approves or denies variance requests for conditions which deviate from standard blasting procedures.
8. Reports any violation of laws, rules, and regulations relating to explosives; meets with appropriate division personnel to determine suitable course of action in enforcement cases; works with Attorney General's Office and division staff in prosecuting enforcement cases, negotiating settlements, and following up on adjudicatory orders.

BLASTING EXPERT (Continued)

9. Installs, operates and maintains seismograph and related computer equipment; interprets readings; prepares vibration projections.
10. Serves as member of the Illinois Seismic Mine Rescue Team.
11. Performs other duties as required or assigned which are reasonably within the scope of the duties enumerated above.

Education and Experience

Requires knowledge, skill and mental development equivalent to completion of two years college.

Requires three years of progressively responsible experience, within the mining or explosives industry, and/or a mining or explosives regulatory authority.

Requires possession of a current, valid Illinois Blaster's License or Blaster's Certificate.

Requires possession of a valid, appropriate driver's license or an ability to travel.

Knowledges, Skills and Abilities

Requires thorough knowledge of the Surface Mined Land Conservation and Reclamation Act and the Illinois Explosives Act.

Requires thorough knowledge of the rules and regulations promulgated by the State Mining Board regulating explosives.

Requires thorough knowledge of all other applicable state, and local laws and regulations pertaining to blasting, pre-blasting, noise and vibration, projection, and monitoring.

Requires thorough knowledge of explosives handling and storage, blasting operations, and blast monitoring techniques used in the mining industry.

Requires extensive knowledge of the rules pertaining to blasting under the Surface Coal Mining Land Conservation and Reclamation Act.

Requires extensive knowledge of mined land reclamation practices.

Requires extensive knowledge of proper recordkeeping and reporting procedures.

Requires extensive knowledge of explosives theory, including explosive products, functioning of explosives, initiation systems, delay systems, priming techniques, and the hazards of explosives.

Requires extensive knowledge of classroom presentation, teaching methods and techniques.

Requires extensive knowledge of the instruments utilized to record and interpret blast tremors.

Requires extensive knowledge of seismograph equipment and its use.

Requires ability to complete explosives and blasting safety course.

Requires ability to complete blasting design course.

Requires ability to enforce the provisions of the rules and regulations promulgated by the State Mining Board, as they pertain to mining blasting, explosives storage and aggregate reclamation.

Requires ability to enforce all other applicable federal, state, and local laws and regulations pertaining to blasting, pre-blasting, noise and vibration, projection, and monitoring.

Requires ability to coordinate, evaluate, monitor, and check the performance of pre-blasting surveys.

BLASTING EXPERT (Continued)

Requires ability to check and verify all blasting public notices and documentation, seismograph blasting records, and certification and training of explosive uses.

Requires ability to investigate, recognize, and procure pertinent information and data.

Requires ability to recognize deficiencies and operations and coordinate corrective measures.

Requires ability to collect and assemble pertinent detailed information in law violation instances.

Requires ability to discuss blasting problems and procedures with mine operators, blasting consultants, and blasting engineers.

Requires ability to prepare complete records and comprehensive inspection or investigative reports.

Requires ability to communicate effectively both orally and in writing.

Requires ability to establish and maintain satisfactory extensive relationships with mine operators and the general public.