



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC - 4 2015

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Qualifications of Individuals Involved with Gold King Mine

FROM: Mathy Stanislaus
Assistant Administrator

A handwritten signature in black ink that reads "Mathy Stanislaus".

TO: Gina McCarthy
Administrator

There has been a significant focus on the qualifications of individuals involved with the Gold King Mine, specifically the availability of a "mining engineer" prior to and during the removal operation. Based on discussions with Office of Solid Waste and Emergency Response (OSWER) personnel on the National Mining Team, mining engineers are trained in and focused on the development and operations of mines, not typically with an emphasis on the remediation of abandoned mines. The Office of Personnel Management (OPM) position classification standard for the Mining Engineering Series, GS-0880, supports this perspective. It notes that mining engineers in the federal service are primarily concerned with the following: (1) discovery and efficient extraction from the earth of metallic ores, nonmetallic minerals, and solid fuels; (2) the development, improvement, and use of safe, efficient, non-wasteful mining methods and equipment; the conservation of our Nation's mineral and natural resources; and (3) the health and safety of mine workers and the public. The description excludes the remediation of abandoned mines.

The federal government as a whole only has 124 individuals in a mining engineer job series (GS-0880). A majority of these individuals are at the Department of Interior (51), Department of Labor (38), and the Department of Health and Human Services (25). The remaining ones are spread across a number of agencies including the Securities and Exchange Commission, Export-Import Bank, Departments of Treasury and Agriculture, and the United States Army. Per the most recently available public data from OPM (June 2015), the Environmental Protection Agency (EPA) does not have any individuals in a mining engineer job series; however, the EPA does have engineers with extensive mining experience. The EPA has almost 2,000 employees in the Engineering and Architecture (08xx) job series. Almost one-tenth of these individuals hold doctorate degrees and over a quarter have master's degrees. In addition, there are many employees who may hold engineering degrees or Professional Engineering (PE) licenses who

may be classified in other job series including those serving in supervisory or management positions.

In addition, key personnel involved in activities related to Gold King Mine were EPA On-Scene Coordinators (OSCs). Each OSC must undergo a training program (beyond that required for other employees) to develop advanced knowledge, skills, and capabilities to address a wide variety of environmental responses. This training consists of a Core Competency Program over a three year period including 160 hours of Health and Safety courses; 54 hours of Contracts Training to attain certification as a Contracting Officer's Representative; approximately 300 hours of General Training regarding different types of responses, use of equipment, response processes (Stafford Act, oil spills, Incident Command System, Spills of National Significance), and Quality Assurance/Quality Control; and 85 hours of Spill Prevention, Control, and Countermeasure (SPCC)/Facility Response Plan (FRP) Inspection Training. Many of these courses require an annual or every 2 years refresher training to maintain certification. To ensure OSCs have achieved the required standard of training, each course includes a competency exam. All OSCs must attain a passing score to maintain their certification and must document proof of their training every three years to maintain their federal credentials.

EPA professionals that manage work at mining sites in the Superfund program are typically supported by contractors. For mining sites, the contractors are selected to include specialized expertise to support site work. Between the EPA staff and the contractor staff, at least one licensed PE is typical for cleanup work. States license PEs, and states generally expect, if not require, that individuals performing engineering work be licensed PEs.

At the time of the incident at Gold King Mine, EPA had a geological engineer on site who has a degree from the Colorado School of Mines with a background in mine site development and mine investigations. In addition, an EPA contractor, who is a Colorado-licensed professional engineer, was also on site. The contractor was also involved in the development of the work plan. Overall, the work at Gold King Mine has had a number of engineers and technical experts on site and/or involved in the planning over the years. This expertise includes professional staff from the State of Colorado (including a geological engineer with extensive experience in abandoned mines and a geologist with experience in mining and abandoned mines) and the EPA (including staff with experience in excavations, a civil engineer with a PE license, and a geological engineer with 12 years of experience in the development and management of underground mining operations and 28 years of experience at EPA with mining site response work).

If you have any questions or need additional information, please contact me.

cc: Stan Meiberg
Matt Fritz
Avi Garbow
Stacey Mitchell
Nichole Distefano
Barry Breen
Nitin Natarajan