

Official Complaint with Colorado Department of Regulatory Agencies, Division of  
Professions and Occupations

It is my belief that during the August 5, 2015 Gold King Mine disaster, the Environmental Protection Agency (EPA) was involved in the practice of engineering as defined in Colorado Revised Statute 12-25-102 (10)(a):

"Practice of engineering" means the performance for others of any professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical and engineering sciences to such professional services or creative work, including consultation, investigation, evaluation, planning, design, and the observation of construction to evaluate compliance with plans and specifications in connection with the utilization of the forces, energies, and materials of nature in the development, production, and functioning of engineering processes, apparatus, machines, equipment, facilities, structures, buildings, works, or utilities, or any combination or aggregations thereof, employed in or devoted to public or private enterprise or uses.

and therefore was in violation of Colorado's Professional Engineers Practice Act as stated in the Colorado Revised Statute 12-25-104, Forms of organizations permitted to practice, which states:

A partnership, corporation, limited liability company, joint stock association, or other entity is not eligible for licensure under this part 1. **An entity may practice or offer to practice engineering in Colorado only if the individual in responsible charge of the entity's engineering activities performed in Colorado is a professional engineer licensed in Colorado.** All engineering documents, plats, and reports issued by or for the entity in connection with engineering work performed in this state must bear the seal and signature of the Colorado-licensed professional engineer who is in responsible charge of and directly responsible for the engineering work.

Because the EPA has not demonstrated a Colorado licensed professional engineer was engaged during the planning and design stages nor part of the Site Removal Team that was responsible for the Gold King Mine spill, the EPA was in direct violation of the Colorado statute, and should be subject to the same consequences any other entity in violation of this law would face. I believe the spill could have been prevented, or at the very least, significantly mitigated, if the EPA had followed the engineering practice laws established to safeguard life, health, property and to promote the public welfare.

Furthermore, point #5 of the Conclusion section of the EPA's Internal Review released on August 24, 2015 states, "The work plan contained an Emergency Action Plan (EAP), which included provisions for mine emergencies including cave-ins. However, based on the documents review by the Team, the work plan was lacking emergency protocols in the case of a significant flow or blow out." The EPA's own review affirms my belief that those conducting the work had not adequately prepared for a scenario like this. A licensed professional engineer would have reviewed potential risk factors/contingencies and carefully designed an appropriate solution in order to be prepared for such an incident. If the statute had been followed, the engineer would

have been able to direct the Site Removal Team into immediate action once the issue was first noticed.

Finally, in the aforementioned Internal Review, point #4 of the Conclusion section states (emphasis added), “**Additional expert opinions may be warranted** for sites with collapsed adits, complex interconnectivity of mine workings, and highly transmissive bedrock groundwater systems.” Additionally, under point #4 of the Recommendations second, the EPA concludes in its own internal review (emphasis added):

Information and rationale developed by a site team in anticipation of an investigation or cleanup action for sites where an adit blowout could be a concern (e.g., available pressure information, a reasonable estimate of the volume of water within the mine workings, or adit drainage flow rate data) **should be critically reviewed by a qualified and experienced Regional Mining engineer and or Mining Hydrologist/Geologist.** The Region may want to consider getting assistance from qualified outside parties such as other federal agencies, state agencies, or outside consultants in conducting this critical review.

Again, the EPA’s own review reaches a similar conclusion that during the Gold King Mine disaster and in similar situations in the future, an experienced engineer should be consulted early on in the process before undertaking work like that on the Gold King Mine.

The Gold King Mine disaster could have been prevented, or the spill could have been significantly mitigated and contained if the EPA followed the laws set forth in the Professional Engineers Practice Act, and employed a qualified designed team along with an on-site professional engineer as a member of the agency’s Site Removal Team. The Environmental Protection Agency must face the consequences of their negligence, so that this type of neglect is not overlooked, so that government agencies are held to the same standards as private entities, and so that the public’s health, safety, and welfare are safeguarded in the future.