



COLORADO

Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

June 20, 2016

Stephen Poy
Agreement State Programs Branch
Division of Material Safety, State, Tribal, and Rulemaking Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission

Dear Mr. Poy,

As you know, the State of Colorado's Department of Public Health and the Environment is currently evaluating how the uranium ablation activities proposed by Black Range Minerals fit within the State of Colorado's current radioactive material licensing framework. The State is conducting a public stakeholder process where a number of possible options have been proposed, including no radioactive material license, a source material radioactive material license, a uranium milling radioactive material license, or some kind of new regulatory category. As an Agreement State, Colorado has the authority to regulate potential licensees using this new technology if they are required to have a license to handle specific types of radioactive materials. More information about the Black Range proposal and the Colorado stakeholder process, can be found on our website at <https://www.colorado.gov/pacific/cdphe/ablation-process-black-range-minerals>.

As part of our evaluation of the regulatory pathway for uranium ablation, we are now requesting an opinion from the NRC on the following two items:

1. Fundamental to the regulatory framework for uranium mills is the production of byproduct material which is defined in part as "the tailings or wastes produced by the extraction or concentration of uranium or thorium from ore processed primarily for its source material content..." Byproduct material from a conventional uranium mill contains both hazardous and concentrated radioactive material. Would the NRC consider waste, produced from a process that concentrates uranium, byproduct material if the waste does not contain hazardous materials or radioactive materials at concentrations above background?
2. It is our understanding that no current NRC regulation explicitly addresses the regulation of uranium ablation. We further understand that NRC has not made any other decision regarding how uranium ablation activities should be regulated. Nor do any of the Suggested State Regulations for Control of Radiation specifically address uranium ablation. And, to the best of our understanding, commercial-scale uranium ablation activities are being proposed solely in the State of Colorado at this time. Given this, we believe that any new regulations proposed in Colorado specifically to address uranium ablation are likely to fall within the NRC's Category D (Program Elements Not Required for Compatibility). Under Category D, the State of Colorado would have the flexibility to adopt and implement program elements based on those of the Commission or other program elements within the State's jurisdiction that are not addressed by NRC. Please let us know if NRC disagrees and if the NRC believes that the State of Colorado cannot enact new regulations for ablation technology and remain compatible with the NRC's program.

We greatly appreciate your response on this matter by August 1, 2016 so that we can incorporate your response into our current decision-making process. If you have any questions, please feel free to contact me at 303-692-3403 or jennifer.opila@state.co.us.

Sincerely,

Jennifer T. Opila, MPA
Radiation Program Manager
Hazardous Materials and Waste Management Division

