Good morning Chairman Lowenthal, Ranking Member Gosar, and members of the House Subcommittee on Energy and Mineral Resources. My name is Alan Edwards. I serve two roles in the Wyoming Department of Environmental Quality (DEQ). These roles are the Deputy Director for DEQ and also the Administrator of the Wyoming Abandoned Mine Land program. My background includes being a professional engineer. I thank the Committee for inviting the State of Wyoming to share our perspective on the Abandoned Mine Land Program at this hearing.

The mission of the Wyoming DEQ is “to protect, conserve and enhance the quality of Wyoming’s environment for the benefit of current and future generations”. As we carry out our mission, we do so with the understanding that it must be done in a manner that protects our natural resources while maintaining the State’s economic strength and stability. Administering a responsible and effective AML program is a key element to achieving the mission of the agency. The work of AML enhances the quality of our environment through mitigating the historic
impacts associated with abandoned mines. DEQ is committed to managing our AML responsibilities in a cost-effective manner and to fully complying with the requirements outlined in the Surface Mining Control and Reclamation Act (SMCRA).

The Surface Mining Control and Reclamation Act was adopted by Congress in 1977. SMCRA includes Title V to address permitting, enforcement and reclamation for coal mines. The law also created Title IV (The Abandoned Mine Land (AML) Program) to address reclamation of coal mines abandoned before 1977. It is important to note the relationship between the Title IV and Title V programs. SMCRA requires that states have an approved Title V program in order to receive AML funds for a Title IV Program. An AML reclamation fee is assessed on each ton of coal mined for the purpose of conducting AML reclamation. Therefore, the AML reclamation activities are directly linked to the continued production of coal.

Wyoming’s Title V regulatory program was approved on November 26, 1980. Wyoming became a certified state under Title IV on May 25, 1984. Wyoming became certified on the basis of the best available information at the time. Early work to develop the inventory was essentially done through “boots on the ground”. As our understanding of historic mining in the state has improved our AML inventory has continued to grow.

For certified states, SMCRA directs AML funding to be used first towards newly found coal reclamation projects and non-coal reclamation projects of equal or greater priority. After all coal reclamation projects and non-coal reclamation projects are funded, funds can then be used for public facilities. In compliance with SMCRA, Wyoming continues to be committed to developing a plan for addressing any newly discovered coal reclamation as those are found. Wyoming’s AML program has conformed to these requirements of SMCRA.

As noted previously, Wyoming’s inventory was small at the time of certification due to limited technology and having to rely on ground surveys. Since the inception of the AML program under SMCRA, through technology and the increased understanding we have gained through years of experience, Wyoming has continued to update and add to our AML inventory. For example, one of the new technologies that was applied in the field this year was LIDAR, which provided the ability to better map underground voids and features through 3D optical imaging of mine workings. Wyoming conducted an extensive field inventory survey this summer in some
areas that were considered to be of potential concern. This work focused on areas with existing critical infrastructure (pipelines, transmission and distribution lines, roads, structures, etc.) that could be at risk. The field work established that numerous historic underground mines pose a significant hazard and risk for several reasons. In some areas, mines that were depicted as being at certain depths were actually much shallower than indicated on historic maps. Many mines have also experienced progressive collapse with significant voids at just below the ground surface posing serious risk to people and infrastructure.

Some examples of what was found include:

- Mine voids at about 5’ in depth under a natural gas pipeline with shallow underground mine workings extending approximately one (1) mile along the pipeline.
- For 2,000 feet, a natural gas line lies over a shallow underground coal mine and a mine fire.
- Vertical collapse of an underground mine under a cooling water pipeline a power plant, exposing the pipeline in numerous places. This left the pipeline suspended across the voids.

Wyoming, like all other AML programs, has experienced new features being discovered every year. In the spring or after rainfall events numerous new features have been discovered. Those must all be addressed, some more urgently than others. As a result, the Wyoming AML inventory has continued to grow each year. The results of this year’s field work are being tabulated and we expect to have a final number of newly discovered coal projects and estimated costs in the near future. Early indications are that there may be an additional amount of high priority coal needs of approximately $125,000,000 added to the inventory by the end of the year. A plan is being developed for how those newly discovered coal reclamation needs will be addressed in future grant years. It is important to emphasize again that the newly discovered needs are almost entirely coal. Wyoming AML plans to expand its field work into identified areas of concern in the upcoming year which may result in further coal reclamation projects. It is clear that Wyoming’s AML work is not done.

In Wyoming, people are moving further out into the country into areas not previously developed. Unfortunately, this sometimes results in people unfamiliar with historic mining building above
underground coal mines. This then becomes a potential hazard requiring attention by AML. Public lands in Wyoming managed by the Bureau of Land Management, the U.S. Forest Service, the National Park Service and others comprise about 48% of the state. The public has been increasingly utilizing those lands for recreation such as four wheeling, hiking and sightseeing. Abandoned mines that previously may not have been a high concern have become high priorities due to increased public exposure.

DEQ has been fiscally responsible with the AML funds we have received. The emphasis has been to put the greatest amount of our annual distributions into reclamation. For example, the administrative cost for AML to manage the program based upon the certified in lieu reclamation funding for 2019 will be 4.4%. The Wyoming AML program relies on consultants to perform National Environmental Policy Act analysis, cultural and other required pre-construction activities as well as providing design and construction management. This is with the intent of keeping the AML staff small while maximizing the amount of funds that employ people outside the agency to conduct reclamation activities in the field. To put this in perspective, under Wyoming’s AML program, funding of reclamation projects includes an average of 71% spent on construction and 29% spent on engineering design consulting services, program administration and managing the subsidence insurance program.

Wyoming has accomplished a lot as a result of the AML funding:

- 25,255 acres reclaimed as habitat and range land.
- 2,473 mine openings closed.
- 619,000 linear feet of highwalls remediated (117 miles - approximately the distance from Washington, D.C. to Richmond, Virginia.)
- 500,000 cubic yards of grout placed (equivalent to 10 football fields 26 feet deep)
- 127 miles of impaired streams restored

AML reclamation also results in economic benefit to the state, local communities and citizens. For example, in Wyoming last year 577 people were employed performing consulting and construction services. For Wyoming, 577 jobs is significant. Due to the nature of the work and the skills required, those are relatively high-paying jobs. In addition, there are secondary economic benefits from these contractors, from purchasing materials, fuel, lodging, food and
more. It needs to be noted that the 577 people are not necessarily full time, year-round employees. Contractors will employ people during the life of their projects. Even so, these represent jobs that otherwise would not be available. AML provides a stable source of work that contractors can rely on.

Wyoming AML acknowledges that some high priority non-coal projects are being funded above lower priority coal reclamation. There are numerous high priority non-coal projects that have, or still need, AML reclamation. The Day Loma surface uranium mine complex in the Gas Hills area is a classic example of one such project. The complex covers slightly over 1,000 acres with four pits and over 9,600 feet of dangerous highwalls. One such highwall was over 400 feet high. The mine area is located on BLM land that has been experiencing significant increases in recreational usage. Wyoming AML continues to work to mitigate the associated hazards. More importantly, the decision to fund high priority non-coal reclamation projects has not prevented Wyoming AML from addressing newly-discovered coal reclamation projects in a timely manner.

Wyoming AML had $20 million of the 2019 distribution committed to public facilities primarily in coal impacted communities. Funding public facility projects is allowed under SMCRA Section 411, provided that all known coal and non-coal reclamation needs have been funded. The 2019 distribution was in excess what was remaining in our inventory at the time of distribution. After funding the known reclamation, the remainder was committed to public facilities. [We are only now summarizing the 2019 field inventory work which will result in adding new coal reclamation sites into the AML inventory]. This is how SMCRA dictates funds be utilized. OSMRE has been and will continue to be directly involved in approving new project entries into e-AMLIS and must issue Authorizations to Proceed (ATP) before project expenditures can occur. It is unknown when or if that funding will be available again for public facilities anytime in the foreseeable future.

Wyoming AML works very closely with our federal partners, most notably the Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Bureau of Land Management (BLM). OSMRE is directly engaged in every step in the AML process of prioritization and approval for project funding. In general, those steps are in the following order:
• Wyoming AML conducts a site investigation and prepares an eligibility package of information.

• All sites are reviewed by the Wyoming Attorney General’s office to verify eligibility. That determination is in writing and included in the record.

• Sites are submitted to OSMRE for final decision on eligibility as part of the data entry process in e-AMLIS.

• When a project design is complete and the project is ready to proceed to reclamation, Wyoming AML requests Authorization to Proceed (ATP) from OSMRE. Reclamation does not proceed for either coal or non-coal projects until an ATP has been received from OSMRE.

• When projects are completed, a completion notice and completion data for those sites are entered into e-AMLIS.

• In addition to the above, Wyoming AML and OSMRE staff meet at least twice a year to discuss projects completed, projects underway and project planning and scheduling for the future.

• OSMRE staff perform annual field inspections at AML project sites to evaluate AML’s progress and success as part of an annual review process.

As noted above, OSMRE is involved in every step of the process and exercises their statutory responsibility at each step.

Considerable reclamation occurs on lands managed by the BLM. AML has developed a strong partnership with them to maximize the efficiency of the process and continually improve project outcomes. Over many years, Wyoming AML has worked to increase the success of our re-vegetation and habitat restoration programs associated with reclamation. AML has worked closely with BLM and other landowners to refine our seed mix requirements to further enhance re-vegetation success. The successful re-vegetation and habitat restoration more closely resembles pre-mining habitat and surrounding undisturbed habitat. As a result, habitat is being restored in areas previously heavily impacted by historic mining resulting in benefits to wildlife such as deer and antelope. The restored habitat also benefits Greater Sage-grouse that are extremely important to the State.
BLM relies on the expertise that AML has developed regarding reclamation. Rather than developing a parallel program within BLM to conduct BLM AML reclamation, they rely on Wyoming AML for assistance. BLM even provides some funding for AML reclamation on BLM lands under an existing cooperative agreement. This in turn results in reducing any duplication of effort between AML and our federal partners.

The perception still appears to exist in some circles that there is a divide between AML programs nationally. The perception is that there is a divide between east and west and between certified and uncertified programs. That is not the case. There are, of course, differences between programs. For instance, there is significant differences between Appalachian states and Wyoming such as topography, geology and rainfall which pose different challenges for achieving effective reclamation. Pennsylvania, for example, faces extensive acid mine drainage challenges while Wyoming is fortunate to not be faced with that problem. In the end, though, all programs have a lot in common:

- The desire to be effective stewards of the funding and be financially responsible.
- Comply with all requirements of SMCRA.
- Achieve the most effective reclamation possible to eliminate hazards to public health and safety.
- Improve the effectiveness of reclamation through the development and application of new technology and approaches to reclamation.
- Sharing experiences and new ideas between all AML programs.
- Take pride in the economic benefit that results from reclamation.

AML programs nationally have recognized that it is important to develop mechanisms to share experiences and to inform those in the public who desire to know more about the program. Two years ago the Wyoming and Pennsylvania programs worked together to develop an educational/informational portal to demonstrate what AML programs have accomplished. As a result of those efforts a new website was created to share that information: Our Works Not Done. [https://ourworksnotdone.org](https://ourworksnotdone.org) To date, 22 programs have signed on to the website and routinely post new information. All AML programs are dedicated to successful reclamation.
Wyoming Governor Mark Gordon cautiously supports this proposed legislation and appreciates that it is simple and straightforward. Everyone engaged in AML work is very familiar with the current structure and, in our view, it works well. We know, though, that there will be interest to make changes as the bill advances, some of which may be significant. Wyoming will track the progress of the legislation. One concern is in regards to the fee. In the fiscal year ending September 30, 2018, the fee collection in Wyoming represented 54 percent of the total national AML fee collection. Coal production in Wyoming, though, decreased by 9 percent last year and 35 percent over the last 10 years. This directly affects revenues, and will be seen in reduced funding available to AML programs for reclamation activities. Coal production in Wyoming faces serious challenges. Any proposal to increase the fee would add to those challenges potentially resulting in further reducing coal production resulting in reduced AML fee collections.

The Wyoming AML program provides recognized benefits to the state including the mitigation of hazards, creation and support of jobs and associated economic benefits for communities near AML sites. Wyoming would be concerned about any consideration of reducing the AML funding that is returned to the state.

In summary, Wyoming AML takes its reclamation and fiduciary responsibilities for implementing the AML Program seriously and with great pride. Since the inception of the State’s AML Program, Wyoming AML has adhered to the requirements of SMCRA and has maintained a solid relationship with the regional OSMRE office.

Thank you for the opportunity to provide Wyoming’s perspective on these important matters. I am happy to answer any questions that you may have.