Wyoming Mining Association
2018 NEPA White Paper
August 8, 2018

The Wyoming Mining Association (WMA) is a statewide trade organization that represents and advocates for 26 mining company members producing bentonite, coal, trona and uranium. WMA also represents 120 associate member companies, one railroad, one electricity co-op, and 200 individual members.

WMA greatly appreciates the opportunity to provide the following discussion regarding the federal leasing, mineral acquisition and permitting process generally and the National Environmental Policy Act (NEPA) process specifically. The NEPA process is intended to provide assurance that federal actions such as approval of federal mineral leases and permits are only issued after an appropriate evaluation of the environmental impacts of a proposed project. Unfortunately, the NEPA process has evolved into an extremely inefficient and untimely aspect of federal leasing and permitting decisions. The timeline for NEPA associated with mining projects is generally considered the longest part of the mining leasing and permitting process.

Protracted, costly, and uncertain mineral leasing and permitting processes thwart investment in the exploration and development of U.S. mineral resources. "Of all the developed nations, unexpected and often unnecessary delays in obtaining [mineral leases and] mining permits afflict the U.S. most severely. Despite being blessed with a vast reserve of mineral resources, the U.S. only accounts for 7 percent of world-wide spending on mineral exploration and production is currently reliant on a population of mature mining projects. The average remaining life of active mines in the U.S. and the share of projects in advance development have also fallen in recent years."[1] Meanwhile, society's demand for minerals to supply various industrial and infrastructure needs is rising.

By comparison, other countries such as Australia and Canada have efficient mine permitting processes in place which limit permitting processes to around two years. This is regardless of the fact that these countries have stringent environmental standards for their mining sectors that are similar to those in the U.S.

WMA believes that a review and update of the NEPA and associated mineral acquisition and mine permitting process must be part of the critical focus provided for in President Trump's Executive Order ("EO") 13777, "Enforcing the Regulatory Reform Agenda." EO 13777 establishes that it is the policy of the United States "to alleviate unnecessary regulatory burdens placed on the American People". Our nation's mineral wealth can and should be appropriately developed in order to provide the raw materials for infrastructure and reduce import reliance. As noted below, Wyoming's minerals are integral to our national security and modernizing and maintaining U.S. infrastructure.

Bentonite

Wyoming is the nation's leader in bentonite production with nearly 5 million tons of bentonite produced each year. Wyoming has 70 percent of the world's known supply of bentonite. Wyoming's bentonite has unique characteristics that are rarely found anywhere else. It can swell up to 16 times its original size and absorbs up to 10 times its own weight in water.

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[1] Fellows, Mark. *Permitting, Economic Value and Mining in the United States*. Executive Summary, 2015.

Bentonite has been called the mineral of 1,000 uses, which includes absorbents, animal feed, drilling fluids, foundry, iron ore pelletizing, and sealants. Bentonite is used in a variety of industries including the metal casting industry where it is used as a bonding material for molding processes. When mixed with certain types of molding sands, a bond is formed that can withstand very high temperatures. Bentonite is also used in the ceramic and building industries where it is mixed with clay and sand to form adhesive which is effective in sealing against water.

Coal

Wyoming leads the nation in coal production and provides about 40% of America's coal. Revenues from coal mining alone account for over $1 billion annually in taxes, royalties, fees and Abandoned Mine Lands funds. Among other things, these revenues fund public schools, the University of Wyoming and community colleges, highways, and cities and towns. In fact, coal taxes and fees provide about 1/3 of the total revenue for the State of Wyoming, while also providing millions of dollars to the federal government. In the past two decades bonus bids paid to the state by coal companies on federal coal lease sales, totaling over $2.6 billion since 1992, have built new schools in every county in Wyoming.

As policies are advanced to build and improve America's infrastructure, coal can play a central role in ensuring we have the energy and materials needed to power and build the Nation to its full potential. 30.4% of the Nation's electricity is generated from coal which is central to a diverse, affordable and resilient electricity supply. It also provides an essential feedstock for making steel. Coal is also widely used in U.S. industries and manufacturing plants to make chemicals, paper, and ceramics. A derivative of coal called "pitch" can be used to produce carbon fiber, an important infrastructure material.

By-products of coal-fueled electricity are used in concrete products, cement, road bases and railroad ballast as well as linoleum, medication, detergents, perfumes, food flavorings, fungicides, insecticides, solvents, and wood preservatives. Coal fly ash can be recycled to provide a source of rare earth elements which have been recognized as critical raw materials, used as components in high technology devices, clean energy and defense technologies.

Rare Earths

Northeast Wyoming is home to one of the highest grade rare earths deposits in North America, currently under development. Rare earth elements (REE) are naturally occurring materials with unique properties that make them essential to new technologies. REEs include 17 elements that share similar chemical properties, which give them the ability to discharge and accept electrons, making them an integral component of many modern day electronic, optical, magnetic, and catalytic uses.

These elements include: Scandium, Yttrium, Lanathanum, Cerium, Praseodymium, Neodymium, Promethium, Samarium, Europium, Gadolinium, Terbium, Holmium, Dysprosium, Erbium, Thulium, Ytterbium, and Lutetium.

Rare earth elements work best when they are added in small doses to composites and alloys. They have unique chemical and physical properties that allow them to interact with other elements and get results that neither element could get on its own.

Trona

Trona is a sodium carbonate compound that is processed into soda ash or bicarbonate of soda. Wyoming has the world's largest deposit of trona, supplying about 90% of the nation's soda ash. Glassmaking

consumes about half of the soda ash, followed by the chemical industry, which uses about a quarter of the output. Soda ash is used to manufacture many chemicals used in industry including sodium bicarbonate, sodium chromates, sodium phosphates, sodium silicates, and sodium cyanide. It can also be added to adjust the pH of water and reduce acidity.

Cattle feed, swimming pool products, medicines, paper, textiles, and toothpaste all use soda ash. Other uses include soap, paper manufacturing, and water treatment, and all baking soda comes from soda ash.

Uranium

Wyoming is America's leader in uranium production with an estimated 2 million pounds produced in 2016. Uranium is critical for both civilian and military uses in the U.S and was formally recognized as a "critical mineral" pursuant to Executive Order 13817 to the Department of the Interior in 2018.

- Civilian
    - Nuclear Power
        - The U.S. is the largest producer of nuclear power
        - Nuclear power represents 20% of the nation's electricity generation (11% globally) with no greenhouse gases.
    - Ballasts to stabilize yachts and airplanes
    - Smoke Detectors
    - Target for x-ray machines
- Military
    - Armor for vehicles, such as tanks, is made from uranium plating
    - Used in shielding containers that store radioactive materials
    - Power source for submarines and ships
    - Depleted uranium is used to create high-density projectiles including those used to pierce armored targets.

"One Federal Decision" Approach for Mining-Related Projects

Specific leasing and permitting processes and timelines for Wyoming's various mining sectors is provided in Attachment A. Please note that it is not uncommon for mining-related leasing and permitting processes to take more than a decade to complete! The NEPA process, which is integral to the leasing and permitting process, accounts for the largest expenditure of time required to procure a lease or permit. This is very problematic for several reasons. One of the greatest concerns is that the economic basis for a project can change substantially over that extensive period of time. "Unexpected delays in the permitting process alone reduce a typical mining project's value by more than one-third. The higher costs and increased risk that often arise from a prolonged permitting process can cut the expected value of a mine in half before production even begins. The combined impact of unexpected, and open-ended, delays and higher costs and risks can lead to mining projects becoming financially unviable."[2] Changes in agency personnel, data "aging out" and the need to re-commission data collection efforts are just some of the issues that result in significant costs and timing inefficiencies.

WMA is pleased to note that this administration has taken steps to address these issues. The following list of Presidential Executive Orders all address portions of the issues the mining industry faces in attempting to receive a federal mineral lease and associated permits in a timely manner.

- Executive Order 13777 (EO 13777) – Enforcing the Regulatory Reform Agenda

[2] Fellows, Mark. *Permitting, Economic Value and Mining in the United States*. Executive Summary, 2015.

- Secretarial Order 3355 (SO 3355) – Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects
    - The following list of additional Guidance Memoranda recently issued by the Deputy Secretary of the Interior also address areas in need of improvement as regards the NEPA process:
        - NEPA Document Clearance Process – April 27, 2018.
          The process for obtaining official concurrence on draft documents related to the Environmental Impact Statement (EIS) process, such as Notices of Intent (NOI) and Notice of Availability (NOA), prior to their publication in the Federal Register has become overly burdensome. This concurrence process, known as "surnaming" has been known to take up to 6 months for just one of several concurrences required to complete the NEPA processes for a single mine lease or permit! This Memorandum replaces the EIS document surnaming process with a new briefing procedure and a streamlined approval process
        - Additional Direction for Implementing Secretary's Order 3355 – April 27, 2018
          This memorandum addresses the following:
            - EIS project schedule for outstanding NOIs published both before and after August 31, 2017.
            - Exemptions and waivers for projects with a Draft EIS in progress prior to the issuance of the memorandum.
            - EIS team and solicitor assignments
            - Page limit and timeline guidance
            - Contractor guidance
            - Utilizing Pre-NOI time effectively
            - NEPA Handbook updates
        - Compiling Contemporaneous Decision Files
          This memorandum provides direction regarding contemporaneous compilation of Decision Files to document Agency review and decision making pursuant to the NEPA.

The missing ingredient in these Executive Orders and Guidance Memoranda as specifically applied to mining is a focus on the overall process to guide agency review and coordination. The National Academy of Sciences (NAS)[3] concluded that it is often the lack of coordination by all relevant agencies that result in excessive delays. In its 1999 "Hardrock Mining on Federal Lands" report, the NAS found "the lack of early, consistent cooperation and participation by all the federal, state and local agencies involved in the NEPA process results in excessive costs, delays and inefficiencies." In that regard, WMA believes that the "One Federal Decision" process as required under President Trump's Executive Order 13807 ("EO 13807") for Major Infrastructure Projects should also be applied to mining-related projects. "One Federal Decision" requires the following:

- When one is required, develop a single Environmental Impact Statement (EIS) and Record of Decision (ROD) to document all required agency reviews for the proposed project.

[3] National Academy of Sciences Report, pg. 111.

- Issue all project approvals within 90 days of the issuance of the ROD, with the goal of completing the permitting process within two years of publication of the Notice of Intent (NOI).
- Establishing – and complying with – a coordinated permitting timetable with target deadlines for intermediate and final milestones that facilitate meeting the two-year target deadline for permit approvals
- Completing all required federal reviews concurrently rather than sequentially
- Elevating interagency disputes for quick resolution.

WMA further suggests that mining projects should be considered "major infrastructure projects" under EO 13807 since mining provides the raw materials and associated products at the front end of the supply chain to modernize and maintain the nation's infrastructure. At minimum, the "One Federal Decision" approach as defined in EO 13807 and the associated Memorandum of Understanding Implementing One Federal Decision under Executive Order 13807 should be used as the model approach for federal, state and local agencies involved in federal mineral leasing and permitting of mining projects.

Expand the Utilization of Current Efficient Practices and Procedures

WMA suggests that developing and implementing Generic Environmental Impact Statements (GEIS) for mineral leasing and permitting projects such as the one described below could provide a much more efficient, effective and timely environmental impact analysis.

Nuclear Regulatory Commission (NRC) – Generic Environmental Impact Statement – In-Situ Uranium Recovery (ISR)

The NRC staff prepared a GEIS at the direction of the Commission to fulfill the NRCs environmental protection regulations NEPA requirement in Code of Federal Regulations (CFR) Title 10, Part 51. The GEIS was prepared to assess the potential environmental impacts associated with each phase of in-situ recovery (construction, operation, restoration, and decommissioning) for four specified geographic regions. The intent of the GEIS was to determine which impacts would be the same for all ISR facilities and which impacts would require further site-specific information to determine the potential impacts. The GEIS provides a starting point for site-specific environmental reviews. For new license applications, the NRC staff prepares a supplemental EIS (SEIS) that updates or supplements the GEIS. During the preparation of the SEIS, the NRC staff evaluates site-specific data and information to determine whether the applicant's proposed activities and the site characteristics are consistent with those evaluated in the GEIS. NRC staff then determine which sections of the GEIS can be incorporated by reference, which impact conclusions can be adopted in the site-specific environmental review, and whether additional data or analysis is needed to determine the environmental impacts to a specific resource area. Ultimately, the goal of the GEIS is to increase the efficiency and consistency of the environmental review process for new ISR facilities.

Functional Equivalence Doctrine[4]

Generally, the approval of major mining permits with activities on federal lands falls under the overview and/or purview of the Office of Surface Mining (OSM), Bureau of Land Management (BLM) and the U.S. Forest Service (USFS). These federal permits assess environmental impacts, including air and water quality, wildlife and affected lands; similar to environmental assessments required under NEPA.

[4] Fellows, Mark. Permitting, Economic Value and Mining in the United States. p 25.2015

The NEPA functional equivalence doctrine assumes that as long as an agency's environmental assessment process required to obtain a permit satisfies the primary goal of NEPA, formal compliance with NEPA is not necessary. However, this is not being applied to the permitting decisions of the main federal agencies tasked with permitting mining operations on federal lands (e.g. BLM, USFS).

WMA suggests that increased recognition and expansion of the use of the NEPA functional equivalence doctrine, would eliminate duplication of efforts between agencies, saving time and resources.

Environmental Protection Agency's Role in Reviewing NEPA Documents:

On May 10, 2017, the Idaho Mining Association (IMA) filed comments on "Executive Order 13777 Regulatory Reform Request for Comments on Regulations that should be eliminated to Reduce Regulatory Burdens". WMA agrees with and has copied that portion of the IMA comments below for consideration in the context of the points of discussion advanced in this document:

> *"IMA recommends that EPA re-evaluate the way in which it views its role in reviewing NEPA documents prepared by other federal agencies in order to make it more collaborative and constructive. As currently administered, EPA's NEPA reviews are typically quite critical of proposed mining projects being evaluated in a Draft Environmental Impact Statement (DEIS) or Final Environmental Impact Statement (FEIS). It is not unusual for EPA to give these documents a low or even unsatisfactory ranking.*
>
> *The primary reason for these negative ratings is directly due to the EPA's NEPA review ranking system, which is designed to find fault. The ranking system does not recognize or encourage environmental stewardship or praise projects that provide substantial mitigation to minimize environmental impacts. As shown below, all of EPA's ranking criteria have a pejorative perspective[5]:*
>
> *Alphabetical Criteria:*
> *LO – Lack of Objections*
> *EC – Environmental Concerns*
> *EO – Environmental Objections EU – Environmentally Unsatisfactory*
>
> *Numerical Categories:*
> *1 – Adequate*
> *2 – Insufficient Information*
> *3 – Inadequate*
>
> *It is readily apparent from these ranking criteria that EPA's role in the NEPA document review process is designed to be critical and adversarial. Using this ranking system, EPA's focus is to object to projects and find fault with other agencies' NEPA documents – rather than working constructively with sister federal agencies and project proponents to find environmental and mitigation solutions or to recognize projects that go the extra mile to protect the environment.*

[5] https://www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria%23EC%20(Environmental%20Concerns

It is obvious why this perspective sets up an adversarial and controversial atmosphere between project proponents, the Federal Land Management Agencies (FLMAs) (i.e. Bureau of Land Management (BLM) and U.S. Forest Service (Forest Service), and EPA. Under this ranking system, EPA does not acknowledge a project proponent's or the FLMAs' efforts to protect the environment. Even worse, EPA's current review process does not focus on making meaningful suggestions for improving a project, which should be EPA's primary role in the NEPA document review process.

This ranking system also fails to properly acknowledge the effectiveness of BLM's and the Forest Service's environmental protection regulations that govern hardrock mining. BLM's 43 CFR 3809 regulations require project proponents to prevent unnecessary or undue degradation to BLM-administered lands pursuant. Similarly, the Forest Service's 36 CFR Part 228 Subpart A regulations require mines to be designed and operated to minimize adverse environmental impacts on National Forest System lands. Both BLM's and the Forest Service's regulations recognize project proponents' rights under the U.S. Mining Law (30 U.S.C. §§ 22 et seq.) to develop mineral resources on lands open to location but require mining activities to be conducted in a way to minimize and mitigate environmental impacts.

IMA suggests that EPA needs to make substantial changes in the focus of its NEPA document review process. The first place to start would be to modify the ranking criteria used for this process. The criteria need to be expanded to include criteria that acknowledge the efforts of project proponents and the FLMAs to avoid, minimize, and mitigate impacts. Rather than almost always giving documents, agencies, and projects failing grades – or at best finding them "adequate" and "lack of objections" – the expanded criteria should provide EPA with a broader range of options that include favorable and highly favorable criteria.

The recommended expansion of the ranking criteria would be an important first step in a much-needed change in the culture and mission of EPA. In performing NEPA document reviews, EPA currently takes the role of project critic – and even opponent. Obviously EPA's best achievable ranking, "lack of objections," implies the Agency views its mission is to routinely object to projects – that's its job. IMA respectfully asks, "Why should EPA's job be to object to projects?" Ideally the agency's culture should shift away from these unconstructive and combative roles and become an agency whose primary mission is to find environmental solutions rather than to delay and even obstruct projects"

Attachment A
Bentonite Mining Sector
Mineral Acquisition, Permitting Process and Timeline

The Wyoming bentonite mining industry typically takes the following steps prior to engaging in the NEPA process:

- Acquisition of rights by posting a notice, marking claim boundaries, and filing a claim;
- Recording the mining claim by filing a location certificate with the Bureau of Land Management (BLM) state office and recording pursuant to county requirements;
- Maintain the claim through assessment work or annual maintenance fees;
- Companies submit a notice of intent to do exploratory drilling;
    - If administratively complete, a drilling notice approved/accepted is 15 days

Through the exploration process, a project proponent evaluates the mineral resource and determines if it is marketable and minable. Once the resource has been verified via exploration, baseline environmental data (wildlife, vegetation, cultural, etc.) is collected and assembled to develop an application package along with mine and reclamation plans.

- An application package includes required information on property control, geology, mine plans, mining methods, current land use, known visual, cultural, archaeological features, wetlands, and known fish and wildlife habitat to meet state permitting and federal NEPA assessment requirements.
- The application package is submitted to both Wyoming Department of Environmental Quality and BLM for concurrent review.
- Bentonite plans fall under BLM's 3809 review process. The first step is a completeness review. BLM commits to 30 days to conduct the review. This is the only firm review time commitment by the BLM for the application package. Once a plan is determined complete, BLM initiates the NEPA review.
    - State review is 60 days for completeness review and 60 days for response review
- Typically, a bentonite permitting process qualifies for NEPA analysis via an Environmental Assessment (EA). Depending on the field office and any unique project-specific considerations, the BLM NEPA process takes anywhere from 1-5 years to complete for an EA and arrive at a Finding of No Significant Impact (FONSI) and Record of Decision (ROD).
- The Wyoming Department of Environmental Quality technical review includes 150 days with an additional 30 days allowed for technical responses
    - Public notice period – 4 weeks
    - 30-day public comment period
- Once a ROD has been signed, a bentonite project proponent must post a reclamation bond that is acceptable to BLM and the state of Wyoming.
- **TOTAL TIME REQUIRED**
    - **State authorization – 1 to 1.5 years on average**
    - **BLM NEPA – 2-4 years on average**

Bentonite
Positive Practices and Opportunities for Improvement

NEPA timelines

- Flexibility in changing permit priorities
    - First in line policy can create delays

At times agencies have been willing to allow project proponents to adjust permitting priorities as needs arise for individual companies. While industry appreciates agency flexibility in adjusting to changing priorities, some field offices have established first in line review, which is a concern. For example, the agency field office will prioritize permitting reviews for bentonite producers and not work on new bentonite NEPA projects, or lower priority bentonite projects, until the first in line project is completed. Obviously, this can create significant delays in project reviews and a log jam type situation for review and/or approvals.

- Excessively slow permit approval times

NEPA permitting timelines have been excessively slow for some field offices. For example, one field office averaged 385 days for EAs from 2009-2011. From 2012-2017 the same office averaged 1080 days for EAs. While each project area has unique issues, EAs shouldn't take 3-4 years to complete. The SOI executive order is a breath of fresh air, however industry needs a long term solution to NEPA review timelines.

- Open communication
    - Agencies have been supportive of pre-project meetings with agency resource teams to identify issues ahead of time

Agencies have been willing and encouraging pre-project/NEPA meetings, which have helped identify potential issues prior to submission and improve NEPA reviews. Moreover, when issues have the potential to impact industry (i.e. proposed mineral withdrawals for recreation areas), some agencies have contacted industry to get input and comment before making a decision.

- Consistency between agency field offices (ex. BLM Cody vs BLM Casper vs BLM Billings)

It is understood project areas can have unique challenges and each agency office sometimes have different staffing issues which can potentially influence project reviews, however project proponents have observed inconsistency between offices on review and approval times for similar projects. In addition, project proponents with operations in different states have observed significant differences in NEPA reviews and approvals. For example, a gold mine in Nevada can get an approved ROD/EIS in under 1.5 years, but a bentonite mine in Wyoming takes 3 years for an EA/FONSI.

- Duplication of efforts…i.e. wildlife review

Some NEPA lead agencies have MOUs with the state on review of resources, like wildlife. However, BLM wildlife specialists will often duplicate the review of the state wildlife agencies, which ignores the MOU and duplicates NEPA analysis unnecessarily.

- Archeology/Section 106/SHPO timelines

The Section 106 and consultation process has influenced NEPA timelines negatively. Project NEPA reviews have completely stalled or been delayed waiting for consultation to be completed. Industry recommends that agencies have a timeframe of 4 months to complete the Section 106 process and start consultation with tribes once Administrative Completeness is reached to help streamline the NEPA process.

Attachment A
Coal Mining Sector
NEPA Process at Coal Mines

The NEPA process for coal mines in Wyoming is most often encountered when applying for a new coal leases or lease modification, and then pursuing the leasing process and subsequent federal and state permitting processes. The final step prior to mining federal coal is often considered the Federal Mine Plan approval by the Assistant Secretary for Minerals in the Department of Interior. But in fact, additional federal approvals may be required for Special Use Permits from federal land managing agencies such as U.S. Forest Service. The main federal actions (issue a lease, Mine Plan approval, Special Use permits) require some level of NEPA analysis prior to taking action.

Generally we find the NEPA process involves these seven major steps:

- Notice of Intent
    - Providing notice to the public that an application for a permit/lease/authorization has been received and the agency is preparing to conduct some level of NEPA analysis.
    - May take several weeks to a month depending upon the internal agency processes.

- Scoping
    - Involves providing notice to the interested public that some level of scoping is to be conducted for a proposed project. May request public input (or internal agency input), provides a period of time to develop comments on what needs to be considered in the NEPA analysis.
    - Analysis of scoping. With some agencies this has evolved into a scoping report compiled by the lead agency to identify what comments were made and whether they will address the comments or not in the NEPA analysis.
    - May take several weeks to several months depending on project and size of the NEPA analysis, and internal agency processes.

- Administrative Actions
    - May be development of Memorandum of Understanding (MOU) between project proponent and agency, addressing cost recovery, third party contractors, etc.
        - Experience ranges from a month or more to several months to acquire all signatures so that work can actually begin.
    - May include "briefing papers" to be passed upward in the agency to ensure that all levels up to, and including Washington DC, agree with the approach proposed by locals.
    - Timing of briefing seems to ignore how many times an identical or similar action has been taken. May take a month or more depending upon availability of required personnel and the level to which it must rise.
    - Project proponents have not been allowed to see briefing papers, and we are not aware that local decisions have ever been altered or denied.

- Data collection and assembly
    - This has become a major effort. For coal leasing we collect data on areas and on topics that have been studied and restudied for the past four decades. We believe the Powder River Basin of Wyoming has more studies of Threatened and Endangered flora and fauna; air quality, visibility, and other air quality related values (AQRV); vegetation communities; and the economics of coal mining than perhaps any place on earth.
    - This is a duplicative effort for federal permitting activities which are "downstream" of the federal coal leasing process. Some agencies have differing interpretations of cultural

resource requirements, AQRV, and lists of flora and fauna that go beyond threatened and endangered to include species of special concern to the agencies.
    - The Act (NEPA) and implementing regulations do not require data collection, except in certain circumstances, and especially when there is existing data that can be used.
    - We often spend two or three years (field seasons) collecting data for a NEPA analysis.

- Draft EIS development.
    - Writing the document is often done by third party consultants for leasing projects, but may be done by agency personnel for Special Use Permits, for example. This apparently improves the timeframe for project completion because agency personnel can administer several projects instead of implementing one at a time.
    - Timing is difficult to assess because writing proceeds as data is collected and submitted. A conservative estimate is that writing, editing and revising for an initial draft EIS may take four to six months beyond the data collection period.
    - The project proponent is prohibited from seeing what goes into the draft EA or EIS until it is released to the public. This often means the project proponent is not involved in characterizing the project, for which they are most knowledgeable.
        - We have had instances where the timing of our project was significantly mischaracterized by the agency, but we were not aware of that until the draft EIS was published. By then it was too late to alter the established process of public review and comment, analysis of comments, and finally revision of the draft EIS. 4-5 months were wasted. This created many problems for the agency in sorting through all comments related to the schedule and determining how to address them given that the original schedule was incorrect.
        - Because this project had gone to public review before the error was known, we (the project proponent) had to submit written comments, to get the error on the record. Then we had to wait for the agency to analyze all comments and prepare responses, and finally revise the draft EIS and publish a final document.

- Final EIS development
    - This step can include preparing revisions, responding to comments, collecting additional data as may be deemed necessary, circulating for final internal review, and then publishing.
    - May also include the development of findings documents to be simultaneously published.
    - Some agencies take extra time to also include authorizing documents like Records of Decision in a simultaneous publication, thus mixing the NEPA process with the agency's permitting or authorizing processes.
    - Timing is difficult to assess depending upon the need for and extent of revisions, difficulty of addressing comments, etc. We have seen this take 4-6 months from the time the draft EIS or EA was published.

- Administrative Record
    - Most agencies now maintain an administrative record that can be more voluminous than the EIS.
    - Included are copies of all data reports and correspondence developed during the NEPA and the administrative process.
    - We have been required to rewrite scientific studies that were conducted for an area that included (but was larger than) a proposed federal coal lease. The agency insisted the study needed to be rewritten to reflect only those acres in the federal lease. This was done for all studies on geology, wildlife, soils, vegetation, surface water, groundwater, water rights, land use, Threatened & Endangered species evaluations, etc. The BLM did

not use this information except to put into a file drawer in case a member of the public wanted to review the base study.
    - This was done concurrent with development of the draft EIS, so extra time was not an issue but additional cost was significant.
- We have also experienced instances (although not recently) when the agency prepared very little in the way of an administrative record. We are blissfully unaware if these if these cases were challenged, but we can only imagine the delays that may have been encountered if they had been, with little or no administrative record.

Examples

1. U.S. Forest Service NEPA for expanding a mineral material contract for scoria. The contract is on private surface lands which have been leased by BLM for mining of federal coal. The expansion is on private lands adjacent to a federal coal lease and have been disturbed in support of mining that federal coal. Discussions were held with the agency for a period of three months prior to submittal of an application to expand the lease. During the discussions the proponent prepared and provided appropriate maps, ownership information, status of the lands in the surface mining operation including photographs to demonstrate that existing conditions as completely as possible. In order to expand the existing contract area, the agency scoped the project to reach the determination that a categorical exclusion was appropriate. This took approximately one month after submittal of the application. Processing the categorical exclusion took another five months, including nearly two months to have signatures applied and the final contract expansion issued.

On one level, determining that a categorical exclusion was appropriate was considered a victory by the project proponent. This represents a case when the process seems to have worked properly.

On the other hand the agency took a full six months after three months of discussions, despite having full knowledge that the expansion area was adjacent to a federal lease for which a full EIS had been conducted; and was within an area fully permitted for surface coal mining by the State of Wyoming. The categorical exclusion is supposed to be a shortened process but has become so burdened it takes more than six months to navigate. Is this really the quickest our agencies can function?

2. OSM NEPA for Federal Mine Plan Approval. This action is more of a warehousing action than an authorizing action. Is NEPA really required when OSM is making no decision? The Assistant Secretary of Interior is obliged to issue the Federal Mine Plan Approval by 30 CFR Part 746. But this can only occur after numerous federal permits and authorizations have already been issued with their respective NEPA actions.

The action by OSM is to gather information demonstrating that all federal and state (as appropriate) actions have taken place, and assembling an authorizing memorandum for the Assistant Secretary of Interior for Minerals. The memorandum gives final approval for removal of federal coal from a lease for which:

- exploration has been authorized and conducted (with associated NEPA),
- leasing has been authorized and implemented (with associated NEPA),
- resource recovery protection plans have been developed and submitted,
- U.S. Fish and Wildlife Service consultation has occurred,
- cultural resource clearance has been given for exploration, leasing, and various permitting activities, and
- state mining permits have been issued

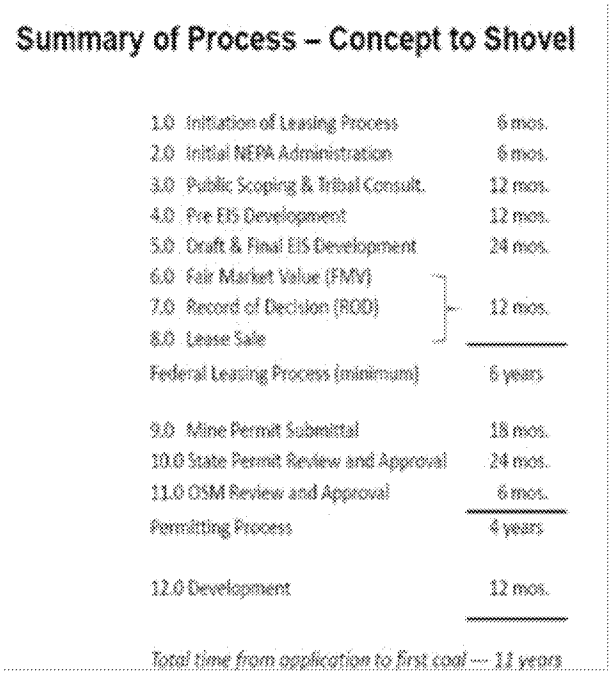
This action by OSM is interpreted to require an additional NEPA action. It is often performed five to six years after the original NEPA on the leasing, with a variety of reasons given, including claims that the data is stale, agency personnel and policies have changed, and so forth.

3. BLM NEPA for Federal Coal Leasing. Air data analysis has become an easy way to delay a project. EIS requirements for leasing of federal coal in Wyoming have always been handled as though coal lease development is a PSD source. The applicant has had to evaluate visibility, increment consumption, air quality related values, class I area protection, etc. This has been done even though in Wyoming, most coal mines are minor sources under both the PSD and Title V programs. The mines are minor sources because of intense and effective emission controls on all point sources.

BLM recently suggested the scope of an EIS for a leasing action would ignore years of studies, models and demonstrations. They proposed to treat the lease as though it was a new and untested activities. The proposal would involve hundreds of thousands of dollars of air analyses alone, in an area that is already one of the most (if not the most) heavily studied areas in the world. See Coal Positive Practices and Opportunities for Improvement of the NEPA Process - NEPA Process from Start to Finish Section 4.0 below for further details.

Example Coal Project Timeline

The following example summarizes a typical process and timeline for a new coal project. The time required to complete the NEPA analysis is 45% (4.5 years) of the total time required to lease reserves and permit a new coal project.



Summary of Process – Concept to Shovel

1.0 Initiation of Leasing Process	6 mos.
2.0 Initial NEPA Administration	6 mos.
3.0 Public Scoping & Tribal Consult.	12 mos.
4.0 Pre EIS Development	12 mos.
5.0 Draft & Final EIS Development	24 mos.
6.0 Fair Market Value (FMV)	
7.0 Record of Decision (ROD)	12 mos.
8.0 Lease Sale	
Federal Leasing Process (minimum)	6 years
9.0 Mine Permit Submittal	18 mos.
10.0 State Permit Review and Approval	24 mos.
11.0 OSM Review and Approval	6 mos.
Permitting Process	4 years
12.0 Development	12 mos.
Total time from application to first coal — 11 years	

Coal
Positive Practices and Opportunities for Improvement of the NEPA Process

Secretarial Order 3355 provides the BLM, coal companies and Non-Government Organizations (NGOs) with an opportunity to make meaningful changes to the broken NEPA process associated with coal projects. Recommendations for improvement, as well as specific NEPA-related experiences and improvement applications are included below.

Summary of Opportunities for Improvements:

1. Establish clear documented procedures and follow them consistently from one action to the next, between BLM field offices and from State to State.
2. Consider the Scoping Meeting as the appropriate opportunity for public comment. The Powder River Regional Coal Team Meeting public comment opportunity is redundant with the scoping meeting public comment.
3. Provide transparency and streamlining of the Federal Register notices review (surnaming process) in Washington DC.
4. Cooperating Agencies should include all federal agencies that will have some permitting, authorizing or approval obligation for activities associated with a particular coal project. They should be required to participate (not given an option), ensure that their NEPA needs are addressed by the EIS and follow through with their appropriate public notices during the BLM's NEPA process, in order to eliminate duplication of NEPA assessment of a coal project.
5. Provide adequate staffing for the enormous amount of work needed from the BLM to keep the EIS process moving forward in a timely manner.
6. Limit the amount of new resource data collection and scope of the review to a more reasonable, and yet effective, level.

The NEPA Process from Start to Finish

The following information walks through the NEPA process, and recent experiences with this process, highlighted both effective and ineffective examples of how certain stages were handled, as well as opportunities for improvement.

1.0 Initiation of the Process

The following steps associated with the initial phase of the NEPA process can be improved:

- The BLM should review the Resource Management Plan, as soon as the application is approved to verify that all proposed leasing areas fall within the Resource Management Plan (RMP) approved coal leasing area. An ineffective experience was the amount of time it took from the submittal of the Spring Creek Coal (SCC) Lease Modification Application (LMA) until it was discovered that a small portion of the proposed LMA fell outside of the RMP approved coal leasing area (over 4 years). SCC continues to wait on an RMP Land Use Plan Amendment. **(Improvement #1)**

2.0 Initial NEPA Administration

This step includes establishing cost recovery, preparing a Memorandum of Understanding (MOU) and EIS Preparation Plan (Prep Plan), identifying potential cooperating agencies and getting those that want to participate to sign off on the MOU, preparing and publishing the Notice of Intent (NOI) and mailing letters to interested parties. Two of these steps could be improved:

- The BLM identifies cooperating agencies and those that want to participate should review and sign off on the MOU and Preparation Plan. An effective example – the Montana BLM worked very hard to bring all agencies to the table for the SCC Lease by Application (LBA) and LMA EIS in an effort to streamline and shorten the process. Unfortunately, it is difficult and complex

to encourage the Cooperating Agencies to engage and provide meaningful participation during the BLM NEPA process. But, if there was a well laid out process to make this work, this could significantly shorten the time from application submittal to approval to mine. **(Improvement #4)**

- The BLM prepares and publishes the Notice of Intent. An ineffective example – the time it took between the submittal of the SCC LMA and LBA and receiving approval from the DC Solicitor's office to publish the NOI (almost 4 years). Granted that the SO 3338 (Federal Coal Leasing Moratorium and Programmatic Review) was in place at the time, however, SO 3338 indicated that both these actions may proceed with NEPA and other related analyses at the applicant's request during the programmatic review, up to a decision record, which the applicant did in fact request. **(Improvement #1)** An effective example was that once the SCC NOI was approved for publication, the regional office established the scoping dates and published the NOI immediately.

Based on conversations with the BLM EIS Lead for the Antelope Coal (AC) West Antelope 3 LBA, the Federal Register tracking software contains a list of persons that are required to review the documents and check off a box. Generally, the list goes up the chain of command and includes this Lead and their supervisor, the District Office of Communications, the District Assistant Manager, and the District Manager, then moves to the State level, including the State Office of Communications. The BLM EIS Lead can see where the FR notice approval is residing, all the way through State approvals. However, once the NOI gets to the Federal level, the BLM EIS Lead can no longer see where the approval is residing. Knowing where the review of the FR notice is at any given time should be transparent from beginning to end of the process, so that the BLM EIS Lead can help manage the process more efficiently. In addition, the number of approvals required through this process is cumbersome and time consuming – especially at the Federal level, where knowledge of the project is limited. **(Improvement #3)**

3.0 Public Scoping and Tribal Consultation

- The BLM conducts Public Scoping and Tribal Consultation. An effective example – Public Scoping for both the SCC EIS and AC EIS were timely and smooth, once approval was received to publish the NOI. An effective example – the Montana field office was successful at engaging the tribes for the SCC EIS. They brought the tribes together for a 2 day overview meeting and were able to bring them back together for a 9 day field interpretation. However, handling of the BLM Tribal Consultation process is not consistent from one State to the next, and it can be a long drawn out process. In addition, while Federal agencies must consult with Indian Tribes, the regulations do not address how Federal agencies conduct consultation. The BLM has to make the difficult determination, for those tribes that do not want to engage, at what point a "good faith effort" has been made to bring them into the process. Provide more consistency and direction to this process. **(Improvement #1)**

4.0 Pre-EIS Development Work

This step begins with the applicant providing the BLM with their drill hole data, and the BLM creating a geologic model. The geologic model helps the BLM to complete tract delineation and identify the formal NEPA study area. Once the study area is set, the applicant hires specialists to complete each individual resource data report, some of which require fieldwork, and the reports are submitted to the BLM. The BLM resource specialists review the data reports for adequacy and either approves them or requests additional information. Once the resource data reports are approved, they are transmitted to the Third Party Contractor for use in preparation of the EIS document. There are several areas for improvement on this particular step:

- Creation of the geologic model. An ineffective example is the amount of time it took for the SCC LBA and LMA geologic model to be completed. This appeared to be mainly due to the lack of resources and experience with this process, as well as conflicting field office priorities. This also impacts the time taken to finalize the formal NEPA study area and tract delineation. The formal

NEPA study area determination is needed by the applicant in order to conduct the baseline resource data collection in the appropriate area. Ensure appropriate resources are available and processes are clear and followed consistently. **(Improvements #1 & 5)**

- Identification of the formal NEPA study area. An effective example – for the AC LBA, the field office made a timely review of the as-submitted LBA, and identified the formal NEPA study area within 10 months of LBA submittal. An ineffective example is discussed in the previous bullet, where it took about 3 years to finalize the tract delineation and study area for the SCC LBA and LMA. **(Improvements #1 & 5)**
- Submittal of the resource data to the BLM and BLM resource specialists review of the data reports. Effective example – for the AC LBA, each written data report was submitted separately, and field office resource specialists reviewed each data report when it was submitted. Typically within a month or so, AC knew if the resource data report was adequate or if additional work was needed. Ineffective example – the work on the SCC EIS data reports has taken much longer for various reasons, mainly due to wanting all of the resource specialists to review the data reports at the same time, and a strict requirement to provide GIS data with their very specific metadata requirement. Consistency between district/field offices in how the data reports are reviewed and how the information is presented would be beneficial. **(Improvements # 1 & 5)**.

Additional ineffective example – the SCC LMA and LBA were delayed due to changes in the Amended Resource Management Plan (ARMP), whereby SCC was required to go back and collect some of the vegetation data using an alternate method. Originally an ocular method was used, and the BLM now required a transect method under their Habitat Assessment, Inventory, and Monitoring (AIM) Requirement. Again, consistency and reasonableness of data collection requirements would beneficial. **(Improvement #6)**

Additional ineffective example – the Air Specialist for the AC EIS was proposing work that would add an additional $350,000 to the air resource evaluation. While this evaluation requirement has yet to be resolved, industry should be pushing back on evaluating information that is not considered a significant issue of the proposed project. **(Improvement #6)**

5.0 Draft and Final EIS Development

We have yet to get to this step for either of our pending EIS's, however; this is where SO 3355 could have its biggest impact. The BLM should be willing to bring in other stakeholders to help develop an alternate issue-based approach to the NEPA document, including clear guidelines on assessment of global climate change impacts.

Attachment A
Uranium Mining/Extraction Sector
Mineral Acquisition, Permitting Process and Timeline

Wyoming is in the process of becoming an Agreement State. By becoming an Agreement State the Uranium Recovery Program (URP) within the Department of Environmental Quality, Land Quality Division will assume regulatory authority from the Nuclear Regulatory Commission (NRC) for uranium and thorium milling activities and the management and disposal of the resulting byproduct material as defined in Section 11e.(2) of the Atomic Energy Act of 1954, as amended. Based on this, unless the uranium is on federal land, there will not be a NEPA requirement.

Uranium is either obtained as lode claims (Federal) or State leases that have to be maintained.

- Exploration lasts approximately 2 years.
- 1-yr of baseline data is required for applications

Applications submitted to Wyoming Department of Environmental Quality – Land Quality Division (WDEQ-LQD) (URP)

- 60-day Completeness review (WS 35-11-406(e))
- Public Notice of Filing (WS 35-11-406(g))
- 150-day Technical review (WS 35-11-406(h))
- WDEQ-LQD (URP) issues comments (could be multiple rounds of comments)
- Response to WDEQ-LQD comments by applicant (no time limit)
- 30-day Comment review for each round of comments (WS 35-11-406(h))
- Public Notice (WS 35-11-406(j): 4 weeks public notice)
- 30-day Public comment period (WS 35-11-406(k))

WDEQ-WQD submits aquifer exemption request to EPA

- EPA makes final determination

Permit is issued (WS 35-11-406(p): Director shall render a decision within 30 days after completion of public notice period if no informal conference or hearing is requested

TOTAL TIME - 1 to 2 years (From application submittal to permit issuance)