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#### Introduction

New mining projects and major mine expansions frequently require the preparation of Environmental Impact Statements (EISs), as mandated by the National Environmental Policy Act (NEPA). In Nevada, the time to prepare an EIS, as measured from the publication of the Notice of Intent [NOI] to the Notice of Availability [NOA] for the Final EIS, has varied dramatically between mining projects, ranging from approximately 18 months to more than 7 years. Schedule delays can be attributed to factors controlled by the mining companies as well as the regulatory agencies. For example, delays can be caused by inadequate data or critical data gaps in the Plan of Operations (PoO) and the supporting documentation provided by mining companies that is needed for resource evaluation and analysis. Similarly, regulatory delays can be caused by lengthy NOI and NOA publication timeframes, evaluation of unanticipated action alternatives, and staffing issues; including staff turnover, understaffed companies and agencies, and assignment of inexperienced staff to key project positions. Delays can have crippling effects on projects and can result in significant schedule creep and increased project costs. All parties would greatly benefit from a resolution to abide by a highly structured procedural process with clearly defined data requirements identified as part of the regulatory application process.

This paper describes a pre-planning approach that uses both BLM pre-planning steps as well as pre-planning processes used by the Federal Energy Regulatory Commission (FERC) on FERC regulated projects. Adoption of a modified pre-planning approach would provide significant and tangible time- and cost-saving benefits; both to the mining companies and the lead federal agencies. This approach would establish application guidelines and checklists for preparing project-specific environmental reports for lead agency review prior to initiation of the NEPA process. This approach would: 1) provide companies with a better understanding of specific data needs and common data gaps early in the planning process, thereby reducing the possibility of unexpected delays; 2) allow companies to prepare and submit a more complete PoO, technical reports, and environmental reports that address the issues required within an EIS; 3) reduce project inefficiencies and costs by minimizing delays during the NEPA process; and 4) substantially reduce the EIS schedule to a more predictable 14- to 18-month timeframe.

This paper describes how the FERC's pre-planning approach can be modified and adopted for mining projects where federal agencies (other than the FERC) are the lead agencies for the EIS. Processes implemented by FERC, and modifications to that process described here, are well within accepted NEPA guidelines and the overall intent of the Act.

#### **NEPA Process**

The NEPA was passed by Congress in 1969 and signed into law in 1970. This legislation established a national environmental policy that i) promotes enhancement of environmental protection and ii) established the Council on Environmental Quality (CEQ). As described by the CEQ regulations, the NEPA is the "basic national charter for protection of the environment" (40 CFR 1500.1). The NEPA process "is intended to help public officials make decisions that are based on understanding of environmental

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consequences, and take actions that protect, restore, and enhance the environment" (40 CFR 1500.1(c)). Steps associated with the NEPA process for development of a typical EIS are outlined in **Table 1**.

Table 1. Major NEPA Milestones, EIS Process Checklist, and General Timelines

NEPA MILESTONE	LEGAL CITATION	RESPONSIBLE PARTY	SCHEDULE/TIMELINE
Publish Notice of Intent (NOI) to Prepare an EIS	40 CFR 1501.7; 40 CFR 1508.22	Prepared by the lead federal agency; published in the Federal Register	No statutory time limits, but typically 30 days are needed to prepare, sign, and publish the NOI.
Scoping and Public Scoping Meeting(s)	40 CFR 1501.7; 40 CFR 1506.6; 40 CFR 1501.7(a)(1)	Lead Federal agency with assistance from the third-party contractor	No statutory time limits, but generally the NOI identifies general timeframe of 30-60 days, although scoping comments may be received up to the release of the DEIS.
Prepare Draft EIS	40 CFR 1502.9(a)	Third-party contractor with direction and oversight from the lead Federal agency	No statutory time limits. Timeline will vary depending on the scope and intensity of significant issues, complexity of proposed action, range of alternatives, etc.
Publish Notice of Availability (NOA) of Draft EIS	40 CFR 1506.9 and 1506.10(a), and Notice provided to the public per 40 CFR 1506.6(b)	NOA prepared by the lead Federal agency; published in the Federal Register by EPA	No statutory time limits, but typically necessitates 30 days to prepare, sign and publish the NOA.
Public Review Period for Draft EIS	40 CFR 1506.10(c)	Third-party contractor with approval from the lead Federal agency	Minimum 45 to 60 days.
Public Meeting(s) or Hearing(s) (optional)	40 CFR 1506.6	Lead federal agency with assistance from the third-party contractor	Occurs during the 45-day public review period. The EIS must be made available to the public at least 15 days in advance of the hearing/meeting.
Prepare Final EIS	40 CFR Part 1503.4(c)	Third-party contractor with direction and oversight from the lead Federal agency	No statutory time limits. Timeline will vary depending on the extent of public

			comments received, issues raised, and if additional data or analysis is required to respond to substantive issues that are identified.
Publish NOA of Final EIS	40 CFR 1506.10(a).	NOA prepared by the lead federal agency; published in the Federal Register by EPA	No statutory time limits, but typically takes up to 30 days to prepare, sign and publish the NOA.
Circulate Final EIS	40 CFR 1506.10(b)	Third-party contractor with approval from the lead Federal agency	30 days.
Prepare and Issue Record of Decision (ROD)	40 CFR 1506.10(b)	Lead federal agency with assistance from the third-party contractor	By law, ROD cannot be signed until 90 days after publication of the Draft EIS or 30 days after the NOA.

Whether for an EIS or EA, federal agencies are required to integrate the NEPA process with other planning at the earliest possible time to ensure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts (40 CFR 1501.2). NEPA document preparation should begin as soon as possible after the lead federal agency receives a complete proposal. The lead federal agency must prepare a NEPA document early enough so as to contribute to the decision-making process, and not to use the document to rationalize or justify decisions already made (40 CFR 1502.5).

## **BLM Pre-Planning and NEPA Approach**

The Bureau of Land Management (BLM) has developed a guidance document "National Environmental Policy Act Handbook" (H-1790-1) (BLM 2008) to assist BLM staff with compliance with the NEPA, the Council on Environmental Quality's (CEQ) and NEPA regulations (40 CFR Parts 1500 – 1508).

Since the enactment of the NEPA and development of the BLM's NEPA Handbook (H-1790-1), the BLM in Nevada has taken steps to improve state-wide consistency, effectiveness, efficiency, and defensibility associated with processing and permitting mine plans through the publication of Instruction Memoranda (IM) such as "Guidance for Permitting 3809 Plans of Operations" (aka "3809 Guidance", NV-2011-004 and NV-2014-019) and "Nevada Bureau of Land Management Rock Characterization and Water Resources Analysis Guidance for Mining Activities" (NV-2010-014). The BLM also entered into a Memorandum of Understanding with the Nevada Division of Environmental Protection (NDEP) and the U.S. Forest Service (USFS) to improve coordination and expedite the administration process. The 3809 Guidance document provides procedures to improve the BLM's processing of an applicant's PoO through a "Pre-Plan of Operations" phase. The process sequence for the Pre-Plan of Operations phase includes the following steps.



<u>Step 1- Company contacts the BLM</u>. The company contacts the Field Office as soon as their decision has been made to pursue the development of a mine PoO or an amendment to an existing PoO and is able to provide conceptual drawings and maps. In many cases, this notification can be one or more years before an actual submittal of a proposed PoO to the BLM.

<u>Step 2- Initial Project Presentation</u>. The company, along with any technical contractors, conducts a proposed PoO presentation to the BLM. The Nevada Division of Environmental Protection – Bureau of Mining Regulation and Reclamation (BMRR) will be informed of the presentation and may choose to attend. The BLM managers and interdisciplinary team are initially introduced to the project and can begin to formulate and identify issues, concerns, and probable information needs. The BLM will convey to the company recommendations for baseline studies appropriate for a complete PoO submittal.

<u>Step 3- Pre-Plan of Operations Kick-Off Meeting</u>. Soon after the initial presentation, the company, the BLM and the BMRR meet to review the project proposal, review the BLM and the BMRR permitting requirements and recommend use of the Voluntary Plan of Operations Outline/Format, determine information needs for the permitting and environmental analysis, and review the applicable agency policies and requirements for mine permitting.

<u>Step 4- Documentation of Information Needs</u>. The BLM provides the company a documented summary of the relevant known resource issues that are present as well as the baseline studies required per 3809.401 (b) to be completed in support of the future PoO submittal and subsequent environmental analysis.

<u>Step 5- Pre-Plan of Operations Project Schedule</u>. The company is encouraged to develop a project schedule in coordination with the BLM and the BMRR for the submittal and review of the baseline reports and applications for State permits and submission of the PoO to the BLM.

<u>Step 6- Development of the Plan of Operations</u>. Experienced BLM mining engineers, geologists and hydrologists may offer advice to the company to improve the PoO submittal; potentially minimizing the number of disparities later on and reduce the review times.

<u>Step 7- Submittal of the Plan of Operations</u>. The company submits a PoO to the BLM with all baseline reports and information. The BLM determines if the PoO is complete. At that point, the BLM's regulatory policy and NEPA guidance will govern the remainder of the PoO review and approval process. Coordination with the BLM, the BMRR and any other appropriate agencies throughout this process is essential.

### **FERC Pre-filing Process**

The FERC is the lead federal agency responsible for the NEPA evaluation of liquefied natural gas terminals and interstate natural gas pipelines, as well as licensing hydropower projects. The FERC's regulatory process for interstate gas pipeline certification consists of several principal steps depending on whether the company opts to enter into a voluntary pre-filing process. For the purposes of this paper, we will focus only on those steps that are pertinent to developing a streamlined NEPA approach for other federal agencies that may want to improve on their existing processes.

The FERC EIS process is highly structured, providing clear data requirements for companies, and results in EIS preparation times typically within 14 to 18 months after acceptance of company-prepared



materials, while maintaining the integrity and intent of the NEPA. Many FERC lead EIS's have also been coauthored by other federal agencies including the BLM and U.S. Forest Service (USFS), Bureau of Reclamation (BOR), and U.S. Army Corp of Engineers (USACE), so the acceptance of the FERC process by other agencies is well documented.

Prior to applying for a FERC Certificate to develop a project, an company files a request with the FERC to use the commission's pre-filing procedures (18 CFR 157.21), typically within eight months prior to the company submitting a Certificate application to the FERC. The pre-filing process involves a set of specific activities by the company including i) project feasibility analysis; ii) study of potential site locations; iii) stakeholder identification and meetings; and iv) request to the FERC for pre-filing. Once these steps are completed, the FERC will issue a pre-filing docket number for the proposed project. The company then conducts the necessary technical (e.g., pipeline route studies) and baseline studies necessary to be included in the FERC Certificate application for the project. Concurrent with the company's pre-filing activities, FERC staff attends the company's public open house meetings, prepares the NOI for publication in the Federal Register (40 CFR §1508.22), and conducts public scoping meetings.

As part of the FERC Certificate application, the company must provide a description of the proposed pipeline, construction plans, schedule, a list of other statutory and regulatory requirements, and a thorough environmental analysis, including consultation with appropriate regulatory agencies, data reviews and field surveys. Information obtained through this review is compiled into a document called an "Environmental Report," (ER) which the company prepares as part of the FERC Certificate application. The ER includes 13 specific Resources Reports, as specified in 18 CFR 157.14(a)(6-a), 380.3 and 380.12. Resource Reports specific to these types of projects include:

- Resource Report 1 General Project Description
- Resource Report 2 Water Use and Quality
- Resource Report 3 Fish, Wildlife, and Vegetation
- Resource Report 4 Cultural Resources
- Resource Report 5 Socioeconomics
- Resource Report 6 Geological Resources
- Resource Report 7 Soils
- Resource Report 8 Land Use, Recreation and Aesthetics
- Resource Report 9 Air and Noise Quality
- Resource Report 10 Alternatives
- Resource Report 11 Reliability and Safety
- Resource Report 12 PCB Contamination
- Resource Report 13 Engineering and Design Material

As part of the FERC Certificate application instruction, each Resource Report should address:

- Existing conditions or resources that may be directly or indirectly affected by the project or that may affect the project;
- ✓ Effects on the resource as a result of construction, operation (including maintenance and malfunctions), or abandonment of the project, as well as cumulative effects that may result from the combination of the project and existing or reasonably foreseeable projects;
- ✓ All proposed measures to enhance the environment or avoid, minimize, mitigate, or compensate for anticipated adverse effects;



- √ A list of data sources (publications, reports, other literature and communications, including agency contacts) that were used in the preparation of the Resource Reports; and
- √ Evidence of agency consultation used to identify concerns and mitigation measures.

Each resource report should include the minimum reporting requirements identified in each resource report checklist, or identify the reason why the topic is not addressed or not applicable.

The company must also:

- Provide all necessary or relevant information to the FERC;
- Conduct any studies that the FERC staff considers necessary or relevant to determine the impact of the proposal on the human environment and natural resources;
- Consult with appropriate Federal, regional, State, and local agencies during the planning stages
  of the proposed action to ensure that all potential substantive environmental impacts are
  identified; and
- Submit applications for all Federal and State approvals as early as possible in the planning process.

Once the company submits the Certificate application to the FERC, the FERC reviews the Certificate application for the project. If applicable, the FERC will hire a third-party contractor to review the project information and prepare a draft NEPA document.

#### Benefits of FERC's Pre-filing Review Process

The FERC's pre-filing environmental review process offers a number of potentially significant benefits as outlined below.

- It establishes a framework for early constructive discussion among companies, the federal lead agency, and interested stakeholders.
- It allows the company and interested stakeholders to identify issues, and attempt to resolve those issues at the "grassroots" level of the project.
- It commences the scoping of issues early and while plans are more flexible.

These activities, when started early, enhance the NEPA process by facilitating issue identification, study needs, and proposed issue resolution prior to the submittal of the formal application. For companies that provide a detailed project description and related resource reports substantially before filing the certificate application, a draft EIS may be released within 2 to 3 months after a complete application is filed. Assuming a reasonable number of comments that do not require extensive data collection or additional surveys or modeling, the FEIS frequently can be issued in an additional 2 to 3 months, with the entire EIS preparation process consisting of 6 to 7 months after the application is filed.

## **Modified Pre-Planning Approach for Mining Projects**

This section describes a pre-planning approach that uses both BLM pre-planning steps as well as preplanning processes used by the Federal Energy Regulatory Commission (FERC). Adoption of this modified pre-planning approach would provide significant and tangible time- and cost-saving benefits both to the mining companies and the lead federal agencies. This approach would:



- 1. provide companies with a better understanding of data needs and data gaps early in the planning process thereby reducing the possibility of unexpected delays;
- 2. allow companies to prepare and submit a more complete PoO, technical reports, and environmental reports that address all issues that are required within an EIS;
- 3. reduce project inefficiencies and costs by minimizing delays during the NEPA process by resolving major issues during the pre-planning process; and
- 4. substantially reduce the EIS schedule to an estimated 14- to 18-month timeframe.

**Table 2** presents the framework for a modified preplanning approach that incorporates both BLM preplanning guidance and pre-filing steps used by the FERC to facilitate the pre-planning and NEPA process.

**Table 2 Modified Pre-Planning Approach** 

Line No.	Pre-Planning Process	Description	Federal Agency Planning Process
1	Company Contacts the BLM about the Proposed Project	The company contacts the BLM Field Office as soon as a decision has been made to pursue the development of a mine PoO or PoO amendment.  Company provides conceptual drawings and maps to the BLM for review.	BLM IM NV-2014-019 - Step 1
2	Company Provides Proposed PoO Presentation to the BLM	The company provides a presentation of the proposed PoO to the BLM. The BLM begin to formulate and identify issues, concerns, and probable information needs.	BLM IM NV-2014-019 - Step 2
3	Pre-PoO Kick-off Meeting	The company, the BLM and the Bureau of Mining Regulation and Reclamation (BMRR) meet to review the project proposal, review the BLM and the BMRR permitting requirements, determine information needs for permitting and environmental analysis, review the applicable agency policies, and voluntary PoO format.	BLM IM NV-2014-019 - Step 3
4	Identify and Coordinate with Stakeholders	The company and BLM identify and coordinate with stakeholders to obtain preliminary issues and concerns.	FERC Pre-Filing Process (Early Coordination)
5	Documentation of Information Needs	The BLM provides a documented summary of the relevant known resource issues and baseline studies required per 3809.401 (b) to be completed in support of the PoO and subsequent environmental analysis.	BLM IM NV-2014-019 - Step 4

6	Development of Project Schedule	The company develops project schedule in coordination with the BLM and the BMRR for the submittal and review of the baseline reports and applications for State permits and submission of the PoO to the BLM.	BLM IM NV-2014-019 - Step 5
7	Preparation of the PoO	Company prepares project PoO based on early coordination with the BLM and stakeholders.  Experienced BLM mining engineers, geologists and hydrologists may offer advice to the company to improve the PoO submittal; potentially minimizing the number of disparities later on and reduce the review times.	BLM IM NV-2014-019 - Step 6
8	Public Open-House for the Proposed Project	This open-house is intended to be a company managed event to obtain early public opinion and potential issues to formulate preliminary alternatives to the proposed action.	FERC Pre-Filing Process (Early Coordination)
9	Determine Supplemental Authorities and Resources to be Considered	The BLM provides a list of Supplemental Authorities and Resources to be analyzed for the proposed project.	FERC Pre-Filing Process (Early Coordination)
10	Identification of Cumulative Effects Study Areas (CESAs); and Past, Present, and Reasonably Foreseeable Future Actions (RFFAs)	Company works with BLM to develop resource-specific CESAs and Past, Present, and RFFAs for cumulative effects analysis.	FERC Pre-Filing Process (Early Coordination)
11	Development of Environmental Report Check-list	Company and BLM develop a check-list of items to be addressed for each resource and Supplemental Authority	FERC Pre-Filing Process (Early Coordination)
12	Company Conducts Necessary Baseline Studies	Company conducts baseline studies based on early coordination with the BLM and stakeholders.	Company Baseline Preparation
13	Company Prepares Environmental Report	Company prepares environmental report that addresses existing conditions of each resource and supplemental authority, effects on the resource (including cumulative effects), company-committed environmental protection measures, and applicable references.	FERC Pre-Filing Process (Early Coordination)

14	Submittal of PoO; Environmental and Technical Reports; and Environmental Report	The company submits PoO, environmental report, and environmental and technical reports to the BLM for review and approval.	BLM IM NV-2014-019 - Step 7; FERC Pre-Filing Process
15	Publication of NOI	The BLM submits NOI for publication	NEPA Steps
16	Selection of Third-Party	The BLM selects third-party contractor	NEPA Steps
	Contractor	to prepare EIS.	
17	Public Scoping Meeting	The BLM holds Public Scoping Meeting	NEPA Steps
18	Publication of Draft EIS	The Draft EIS published in Federal Register	NEPA Steps
19	Public Meeting	The BLM holds Public Meeting	NEPA Steps
20	Respond to Comments	The BLM responds to comments on the Draft EIS	NEPA Steps
21	Publication of Final EIS and ROD	The Final EIS published in Federal Register	NEPA Steps
22	Publication of ROD	The ROD is published in Federal Register	NEPA Steps

<sup>\*</sup>shaded rows indicate key components of the modified pre-planning approach to expedite the NEPA process.

This modified pre-planning process will result in substantial time savings during the NEPA process when the federal lead agency begins preparation of the NEPA document. As indicated in Table 2, most of the steps in this process should be very familiar to both the BLM and company with the exception of some fundamental changes, modification and additions.

- <u>Line item 4</u> Initiate early coordination with potential stakeholders to assist in the identification of potential issues or concerns regarding the proposed project.
- <u>Line items 8</u> During the pre-planning phase and following the initiation of PoO preparation, the company conducts an open-house(s) to obtain initial public opinion on the proposed project. This step will provide early insight to potential issues that could result in early project modifications and alternatives to be addressed in the EIS.
- <u>Line items 9</u> The company coordinates with the BLM to determine Supplemental Authorities and Resources to be analyzed in the NEPA process.
- <u>Line item 10</u> The company coordinates with the BLM to determine cumulative effects study areas for resources; and past, present, and reasonably foreseeable future actions to be analyzed in the NEPA process.
- <u>Line item 11</u> Company coordinates with the BLM to develop a checklist for resources and Supplemental Authority's to be addressed in the company-prepared environmental report.
- <u>Line item 13</u> A company-prepared environmental report is prepared by the company that includes existing conditions (including biological survey results) and effects on the resources and affected supplemental authorities (including cumulative effects) that were established during pre-planning meeting with the BLM. The environmental report will be developed based on a pre-determined check-



list of items for each resource and supplemental authority that may be affected by the proposed project.

• <u>Line item 14</u> – The company submits the proposed project PoO, environmental and technical reports, and environmental report to the BLM for review and use during the NEPA process.

Working closely with the BLM or other federal lead agency, and through the early identification of public opinion, and development of critical NEPA framework guidance (e.g., identification of resources and Supplemental Authorities; CESA boundaries; and past, present and RFFAs), the company will have the ability to make significant progress in preparation for NEPA review and analysis.

#### Implementation Requirements for the Modified Pre-Planning Approach

#### Federal Lead Agency

- 1. The federal lead must be willing to enter into an MOU (i.e., cost recovery) with the company early in the pre-planning process.
- 2. The federal lead agency must be willing to work with the company to develop a list of Supplemental Authorities and resources to be analyzed, and applicable CESA boundaries early in the pre-planning process.
- 3. The federal lead agency must be willing to work with the company to develop past, present, and RFFAs early in the pre-planning process.
- 4. The federal lead agency must be willing to work with the company to develop the parameters of the environmental report.
- 5. The federal lead agency must be willing to review and accept the environmental report as part of a deliverable for the proposed project.

#### **Company**

- 1. The company must be willing to enter into a MOU (i.e., cost recovery) with the federal lead agency early in the pre-planning process.
- 2. The company must be willing to incur additional up-front costs for pre-planning and development of an environmental report for the project.
- 3. The company must use experienced staff that is well-versed in NEPA document preparation.
- 4. The company must be willing to produce a complete and unbiased environmental report for submittal to the federal lead agency.

