

# CHAPTER I

## INTRODUCTION

The Elko Field Office of the United States Department of the Interior (USDI) Bureau of Land Management (BLM) received a revised Plan of Operations from Newmont Mining Corporation (Newmont) in March 2007, proposing development and operation of an open pit mine and associated support facilities in the Emigrant Project (Project) area. The original Plan of Operations for the Emigrant Project was submitted to BLM in February 2004. The Project is located on public and private land in Elko County, Nevada, approximately ten miles southeast of Carlin, Nevada (**Figure I-1** and **Figure I-2**).

Proposed facilities in the Project area would be located in part on public land administered by BLM; consequently, review and approval of Newmont's Plan of Operations is required by BLM pursuant to Title 43, Code of Federal Regulations, Part 3809 (43 CFR 3809) Surface Management Regulations. BLM's decision regarding the proposed Project must also conform to requirements of the National Environmental Policy Act of 1969 (NEPA). Due to the potential for the proposed Project to result in significant environmental impacts, BLM determined that an Environmental Impact Statement (EIS) would be necessary under NEPA. A Notice of Intent to publish an EIS appeared in the Federal Register on May 25, 2004 (Vol. 69, No. 101, Page 29744-29745).

In March 2005, a Draft EIS was released for public review. In April 2007, BLM determined that results of additional geochemical testing completed by Newmont constituted new information relevant to the environmental concerns and bearing on the Proposed Action requiring re-issue of an EIS and associated

public comment period. In November 2008, a second Draft EIS was issued replacing (in its entirety) the previous Draft EIS issued in 2005.

The revised Plan of Operations (Newmont 2007a) superseded earlier plans and incorporated changes to the proposed Project based on comments received on the 2005 Draft EIS. Changes included modifications to the design of an in-pit engineered stream channel and revisions to the mining sequence to encapsulate a larger volume of potentially acid generating (PAG) rock that may be encountered during mining. The 2007 Plan of Operations is described as the *Proposed Action* in Chapter 2.

BLM is serving as lead agency in preparing this EIS in conjunction with the following cooperating agencies:

- Nevada Division of Environmental Protection (NDEP); and
- Nevada Department of Wildlife (NDOW).

## DOCUMENT ORGANIZATION

This document is compiled in accordance with regulations promulgated by the Council on Environmental Quality (CEQ) for implementing procedural provisions of NEPA (40 CFR 1500-1508) and BLM's NEPA Handbook (H-1790-1). This EIS describes environmental consequences of mining and waste rock disposal operations in the proposed Emigrant Project area. Chapter 1 describes the purpose of and need for action, the role of BLM, and identifies issues raised through public scoping. Chapter 2 provides a description of mineral exploration operations, the Proposed Action, and Alternatives to the

Proposed Action. Chapter 3 describes the affected environment in the Project area; environmental consequences including potential direct and indirect impacts associated with the Proposed Action and No Action alternative; and mitigation measures that may be selected to reduce or minimize impacts. Chapter 4 summarizes past, present, and reasonably foreseeable future activities in the Emigrant Project area and forms the basis for disclosing potential cumulative effects. Chapter 5 identifies the consultation and coordination with public, state, and federal agencies that occurred during preparation of this EIS and a list of preparers. Chapter 6 contains responses to comments received on the Draft EIS. Chapter 7 contains references cited throughout the EIS.

## **PURPOSE OF AND NEED FOR THE PROJECT**

The purpose of Newmont's proposal is to use its existing mining work force to conduct open pit mining on unpatented mining claims and fee land within the Project area to produce gold from ore reserves. The need for the proposed Project is to produce gold, which is an established commodity with international markets and demand. Uses include jewelry, investments, standard for monetary systems, electronics, and other industrial applications.

BLM is responsible for managing mineral rights and access on certain federal land as authorized under the General Mining Law of 1872, as amended. Under the law, persons are entitled to reasonable access to explore for and develop mineral deposits on public domain land that have not been withdrawn from mineral entry.

In order to use public land managed by the BLM Elko District Office, Newmont must comply with BLM Surface Management Regulations (43 CFR 3809) and other applicable statutes, including the Mining and Mineral Policy Act of

1970 (as amended) and Federal Land Policy and Management Act of 1976. BLM must review Newmont's plans to ensure the following:

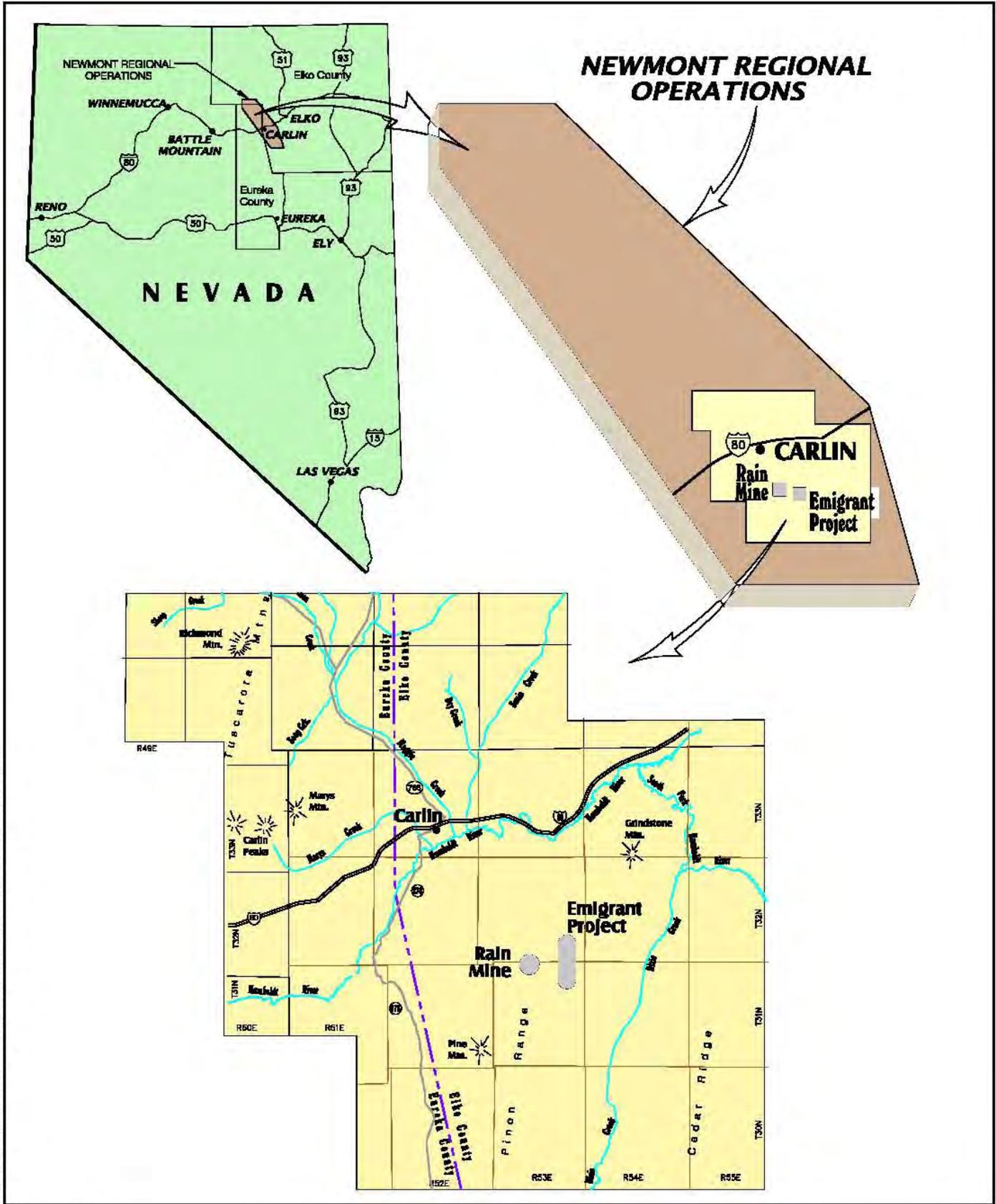
- Adequate provisions are included to prevent unnecessary or undue degradation of public land and to protect non-mineral resources;
- Measures are included to provide for reclamation of disturbed areas; and
- Compliance with applicable state and federal laws is achieved.

## **AUTHORIZING ACTIONS**

A proposal submitted to BLM may be approved only after an environmental analysis is completed and disclosed to the public as required by NEPA. BLM decision options include approving Newmont's Plan of Operations for the Emigrant Project as submitted, approve an alternative(s) to the Plan of Operations to mitigate environmental impacts, approve the Plan of Operations with stipulations to mitigate environmental impacts, or deny the Plan of Operations (No Action). If BLM denies the Plan of Operations, the applicant may modify and resubmit the Plan of Operations to address issues or concerns identified by BLM on the original Plan of Operations.

A portion of Newmont's proposed Emigrant Project facilities would be located on public land administered by BLM; such operations must comply with BLM regulations for mining on public land (43 CFR 3809, Surface Management Regulations); Use and Occupancy under the Mining Laws (43 CFR 3715); the Mining and Mineral Policy Act of 1970; and the Federal Land Policy and Management Act of 1976. These laws recognize the statutory right of mining claim holders to develop federal mineral resources under the General Mining Law of 1872. These laws, in combination with other

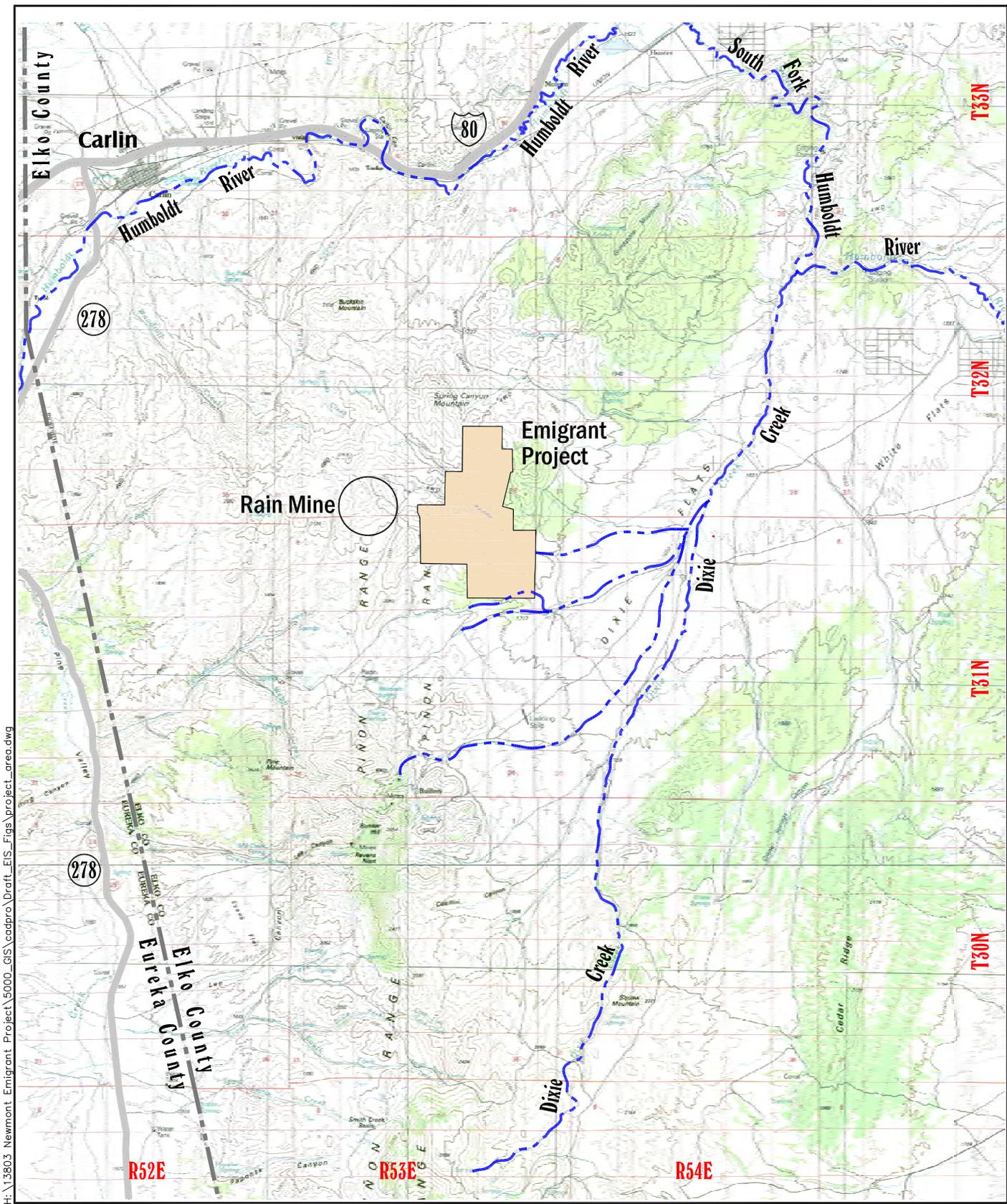
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U.S. Department of the Interior  
Bureau of Land Management  
Elko District Office  
Elko, Nevada

General Location Map  
Emigrant Project  
Elko County, Nevada  
FIGURE 1-1

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U.S. Department of the Interior  
 Bureau of Land Management  
 Elko District Office  
 Elko, Nevada

Project Area  
 Emigrant Project  
 Elko County, Nevada  
 FIGURE 1-2

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BLM policies (i.e., the Resource Management Plan) also require BLM to analyze proposed mining operations to ensure: 1) adequate provisions are included to prevent undue or unnecessary degradation of public land, 2) measures are included to provide reasonable reclamation of disturbed areas, 3) use and occupancy of public land for development of locatable mineral deposits is limited to that which is incident, and 4) proposed operations would comply with other applicable federal, state, and local statutes and regulations.

The BLM is charged with preventing abuse of public land while recognizing valid rights and uses under the Mining Law of 1872 (30 U.S.C. 22 *et seq.*) and related laws governing public land. BLM has determined that the use and occupancy of public land identified in the Proposed Action is reasonably incident to the Project in accordance with 43 CFR 3715 – Use and Occupancy under the Mining Laws. The mining and reclamation plans are designed to minimize the amount of land that would be disturbed to develop mine pits, dispose of overburden, process ore, and construct haul roads and other ancillary facilities to meet Project requirements and ensure that applicable safety standards are met.

In addition to BLM, other federal, state, and local agencies have jurisdiction over certain aspects of the Proposed Action. A list of agencies and their respective permitting/authorizing responsibilities is shown in **Table I-1**. In addition to securing authorization from BLM, the primary permits to be obtained by Newmont include a reclamation permit, water pollution control permit, industrial artificial pond permit, air quality operating permit, and a storm water discharge permit.

The Nevada Division of Environmental Protection (NDEP) bonding requirements for mine reclamation in Nevada are outlined in Nevada Administrative Code (NAC)/Nevada Revised Statute (NRS) 519A Regulations. Surface Management Regulations (43 CFR 3809) establish BLM's bonding policy relating to mining and mineral development. In 2002, BLM and NDEP updated an existing Memorandum of Understanding (MOU) to coordinate evaluation and approval of reclamation plans, and determine bond amounts for mining and exploration operations. The MOU allows submittal of one bond by an operator to satisfy reclamation bond requirements for both agencies.

Operators must provide a reclamation cost estimate when submitting a Plan of Operations to BLM. The reclamation cost estimate must be calculated as if third party contractors would perform reclamation after the site has been vacated by the operator. The bond amount must be sufficient to cover 100 percent of the cost of reclaiming the proposed disturbance.

## **RELATIONSHIP TO BLM POLICIES, PLANS, AND PROGRAMS**

The Emigrant Project Plan of Operations (Newmont 2007a) has been reviewed for compliance with BLM policies, plans, and programs. The proposal is in conformance with the minerals decisions in the Record of Decision, Elko Resource Area - Resource Management Plan, approved in March 1987.

<b>Authorizing Action</b>	<b>Regulatory Agency</b>
Plan of Operations/Rights of Way	Bureau of Land Management (BLM)
National Environmental Policy Act	BLM
National Historic Preservation Act	BLM; Nevada Division of Historic Preservation & Archaeology
Native American Graves Protection & Repatriation Act	BLM
American Indian Religious Freedom Act	BLM
Clean Water Act (Section 404)	United States Army Corps of Engineers (USACE)
High Explosive License/Permit	United States Bureau of Alcohol, Tobacco, & Firearms
Hydrocarbon Permit	Nevada Division of Environmental Protection (NDEP). Bureau of Mining Regulation and Reclamation
Storm Water Permit	NDEP, Bureau of Water Pollution Control
Air Quality Permit	NDEP, Bureau of Air Pollution Control
Water Pollution Control Permit	NDEP, Bureau of Mining Regulation & Reclamation
Industrial Artificial Pond Permit	Nevada Department of Wildlife (NDOW)
Mine Reclamation Permit/Bonding	NDEP, Bureau of Mining Regulation & Reclamation/BLM
Solid Waste Disposal Permit	NDEP, Bureau of Waste Management
Potable Water	Nevada Division of Health (NDH), Department of Human Resources
Sewer System Approvals	NDH, NDEP, Bureau of Water Pollution Control
Safety Plan	Mine Safety & Health Administration (MSHA)
Water Rights	Nevada Division of Water Resources
Water Appropriation Permit	Nevada State Engineer
Endangered Species Act of 1973	United States Fish & Wildlife Service (USFWS)
Migratory Bird Treaty Act	USFWS
Bald and Golden Eagle Protection Act	USFWS

## **SUMMARY OF ISSUES ADDRESSED**

Public and agency scoping comments concerning the Proposed Action and comments received on the 2005 Draft EIS are shown in **Table I-2**. BLM determined that scoping conducted for the

2005 Draft EIS will suffice for establishing the scope of the 2008 Draft EIS. **Table I-2** also provides references to sections of this Final EIS in which responses to each issue raised during public scoping are provided.

<b>TABLE 1-2 Scoping Summary Emigrant Project</b>	
<b>Issue</b>	<b>Response</b>
<b>Mining and Reclamation</b>	
Discuss proposed topsoil salvage efforts in the EIS.	Chapter 2 – Proposed Action Chapter 3 - Soil Resources
Describe reclamation plans with regard to erosion control and proposed post mine vegetation communities in the EIS.	Chapter 2 – Proposed Action
Reclamation seed mixes should include species that will provide forage and cover attributes similar to pre-mine condition.	Chapter 2 – Proposed Action
Backfill mine pits to blend with surrounding topography.	Chapter 2 – Proposed Action
Discuss proposed seedbed preparation activities in the EIS.	Chapter 2 – Proposed Action
Describe post mine topography of backfilled material in pits and establishment of vegetation with regard to livestock and wildlife habitat in the EIS	Chapter 2 – Proposed Action
The operation should be properly bonded.	Chapter 1– Introduction
The EIS must follow U.S. mining law and BLM is mandated to follow the Mining and Minerals Policy Act of 1970.	Chapter 1 – Introduction
Discuss potential for acid generation from waste rock.	Chapter 2 – Proposed Action Chapter 3 – Geology and Minerals
<b>Water Quantity and Quality</b>	
Describe impacts to livestock and wildlife water sources and mitigation measures.	Chapter 3 - Water Quantity and Quality
Describe impacts to Emigrant Spring, Cherry Spring, and springs and water sources on west side of Corfett Mountain Range and Upper Scott Ranch and mitigation measures.	Chapter 3 - Water Quantity and Quality
Stock water developments have to be installed and operating before any rangeland is closed for mining to mitigate for stock water losses.	Chapter 3 - Water Quantity and Quality
Existing water rights permits should be examined to ensure the Emigrant operation is encompassed within the existing permitted place of use and the diversion points are appropriately located.	Chapter 3 - Water Quantity and Quality
Notification of the Nevada Division of Water Resources must be done in the case of installation of any new water management or storage structures.	Chapter 3 - Water Quantity and Quality
<b>Wildlife and Vegetation</b>	
Effect of Project on wetland and riparian habitat in general and Emigrant Springs area in particular should be evaluated in the EIS	Chapter 3 - Fisheries and Aquatic Resources Chapter 3 - Water Quantity and Quality
Potential impacts from the Emigrant Project on destruction or alteration of breeding, nesting, cover, and foraging habitat for bats and non-game birds should be described.	Chapter 3 – Terrestrial Wildlife

<b>TABLE I-2 Scoping Summary Emigrant Project</b>	
<b>Issue</b>	<b>Response</b>
Potential impacts resulting from mine development to raptor nest sites, migration routes, winter and summer range for deer and antelope, roosting habitat for bats, and sage grouse habitat including leks, and other sensitive habitat should be evaluated in the EIS.	Chapter 3 – Terrestrial Wildlife
Occurrence of Lahontan cutthroat trout in Dixie Creek above the Project area should be evaluated in the EIS.	Chapter 3 - Fisheries and Aquatic Resources
All land clearing activities should occur outside of the avian breeding season to protect nests.	Chapter 3 – Terrestrial Wildlife
Impacts to federally listed species and species of concern should be evaluated.	Chapter 3 – Terrestrial Wildlife
<b>Land Use and Access</b>	
Describe fencing, gates, and cattle guard types, materials, and maintenance responsibility and mitigation plans to deal with reduced public access, livestock crossing, recreational access from the Carlin side of the Project, and grazing access as a result of closing roads in the Project area.	Chapter 2 – Proposed Action Chapter 3 – Access and Land Use
Fences should enclose only the minimum area required for operations, expanding as necessary as the footprint increases, minimizing impact to grazing land.	Chapter 2 – Proposed Action
Discuss potential mitigation of livestock forage losses by improvement of forage in areas not impacted by mine development.	Chapter 3 – Access and Land Use
<b>Social and Economic Resources</b>	
Alternatives should have economic impacts quantified so that public can evaluate potential economic effects of each on the community.	Chapter 3 - Social and Economic Resources
Discuss mitigation of economic losses to ranchers for livestock forage reduction due to mine development.	Chapter 3 - Social and Economic Resources
<b>South Fork Band Environmental Department Issues*</b>	
Will pit intersect groundwater?	Chapter 3 - Water Quantity and Quality
Is diversion channel sufficient size to accommodate a 24-hour/100- year storm event?	Chapter 2 – Proposed Action (Diversion Channel)
Will operator be required to follow all laws and regulations?	Chapter 1 - Introduction
Will waste rock be tested to determine if it will mobilize contaminants?	Chapter 3 – Geology and Minerals
What are parameters used to measure reclamation?	Chapter 2 – Proposed Action
Waste rock and ore need to be characterized by meteoric water mobility tests and acid base accounting for potential to generate acid and mobilize metals.	Chapter 3 – Geology and Minerals
Cultural artifacts must be protected under Archaeological Resources Protection Act (16 USC 1701), Native American Graves Protection and Repatriation Act, section (3)(d)(1).	Chapter 1 – Introduction Chapter 3 - Cultural Resources Chapter 3 - Native American Concerns

\* These comments were received by BLM staff from the South Fork Band Environmental Department during Native American coordination and communication efforts.