

CHAPTER I INTRODUCTION

In February 2006, Graymont Western US, Inc. (Graymont) submitted a proposal to the U.S. Department of the Interior, Bureau of Land Management (BLM) and the Montana Department of Environmental Quality (DEQ) to amend BLM Plan of Operations MTM 78300 and Montana Metal Mine Reclamation Act (MMRA) Operating Permit No. 00105 to include a life-of-mine expansion of limestone and dolomite mining operations at the Indian Creek Mine (Mine) located approximately 4 miles west of Townsend, Montana (**Figure I-1**). The proposed amendment would encompass approximately 1,940 acres of public land currently administered by BLM in the Limestone Hills Training Area (LHTA) used by the Montana Army National Guard (MTARNG) for military training (**Figure I-2**) and represents approximately 50 years of mine production, including 15 years of currently permitted mine life. Graymont (formerly Continental Lime, Inc.) produces calcium oxide (quicklime and lime), hydrated lime, and other lime, limestone, and dolomite products at the Mine.

The proposed mine expansion would result in a continuation of Graymont's existing operations in the Limestone Hills and includes development of mine pits, mine facilities, ore storage sites, soil salvage stockpiles, haul roads, and overburden disposal areas. The proposed expansion would also generate ore feed for the existing processing plant, thereby extending the life of the plant.

The Mine is currently permitted to disturb 757 acres including mine pits, plant and crusher sites, ore stockpiles, growth media storage sites, overburden disposal areas, haul roads, and a load-out facility. These facilities are located within the operating permit boundary which

encompasses 1,735 acres. The approved permits require concurrent reclamation of mined areas and final reclamation of the site.

BLM has determined that the proposed life-of-mine amendment may result in significant impacts to the human environment, and preparation of an Environmental Impact Statement (EIS) is necessary to ensure that BLM's decision regarding the amendment to the Plan of Operations is in conformance with 43 CFR 3809 regulations and the National Environmental Policy Act (NEPA). BLM is the federal co-lead agency for purposes of compilation of the EIS.

DEQ has jurisdiction over mining activities within the State of Montana and as such, Graymont must amend MMRA Operating Permit No. 00105. DEQ is the state co-lead for compilation of the EIS. DEQ must ensure that its decision regarding the proposed life-of-mine amendment conforms to requirements of the Metal Mine Reclamation Act and the Montana Environmental Policy Act (MEPA).

PURPOSE OF AND NEED FOR THE PROJECT

The purpose of the proposed amendment (Proposed Action) is to extend current limestone mining and begin dolomite mining operations at Graymont's Indian Creek Mine beyond currently permitted areas to access additional limestone and dolomite reserves. Extension of mining operations on public land would allow Graymont to continue to mine, provide limestone and dolomite products, employ its workforce, and contribute taxes to the federal, state, and local economies, and profit from sale of products.

The need for the Proposed Action is to produce limestone and dolomite products for use in a variety of commercial and industrial applications and meet market demand for these products. Industrial uses of limestone include quick lime and slaked lime, cement and mortar, neutralization of acid rock and soil, aggregate, glass making, toothpaste, and a source of dietary calcium. Dolomite is used as ornamental stone, concrete aggregate, and as a source of magnesium oxide. Dolomite is sometimes used as a flux for smelting of iron and steel.

AUTHORIZING ACTIONS

Bureau of Land Management

Graymont's proposed mine expansion facilities 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 BLM policies (*i.e.*, Resource Management Plan) require BLM to analyze proposed mining operations to ensure 1) adequate provisions are included to prevent unnecessary or undue 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 reasonably incident, and 4) proposed operations would comply with other applicable federal, state, and local statutes and regulations.

The BLM will prevent 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

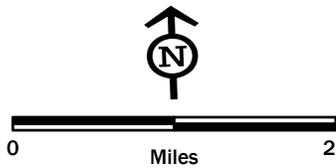
public land identified in the Proposed Action is reasonably incident to the Project in accordance with 43 CFR 3715 – Use and Occupancy under the Mining Laws. The mining and reclamation plans are designed to minimize the amount of land that would be disturbed to develop mine pits, dispose of overburden and reject material, process ore, and construct haul roads and other ancillary facilities to meet Project requirements and ensure that applicable safety standards are met.

BLM's decision regarding the proposed mine expansion can only be made after an environmental analysis is completed as required by NEPA. Included in Graymont's proposed amendment to their existing permit is a Plan of Operations for the mine expansion (Graymont 2007a). BLM decision options include approving Graymont's Plan of Operations as submitted, approving alternatives to the Plan of Operations to mitigate environmental impacts, approving the Plan of Operations with stipulations to mitigate environmental impacts, or denying the Plan of Operations.

Montana Department of Environmental Quality

Under the Montana Metal Mine Reclamation Act (MMRA) (Title 82, Chapter 4, Part 3, Montana Code Annotated [MCA]) DEQ may deny an application for a permit or an application for an amendment to a permit for the following reasons:

- The Plan of Operations or Reclamation Plan conflicts with Title 75, Chapter 2, as amended (Air Quality); Title 75, Chapter 5, as amended (Water Quality); Title 75, Chapter 6, as amended (Public Water Supplies, Distribution, and Treatment); or, rules adopted pursuant to these laws.



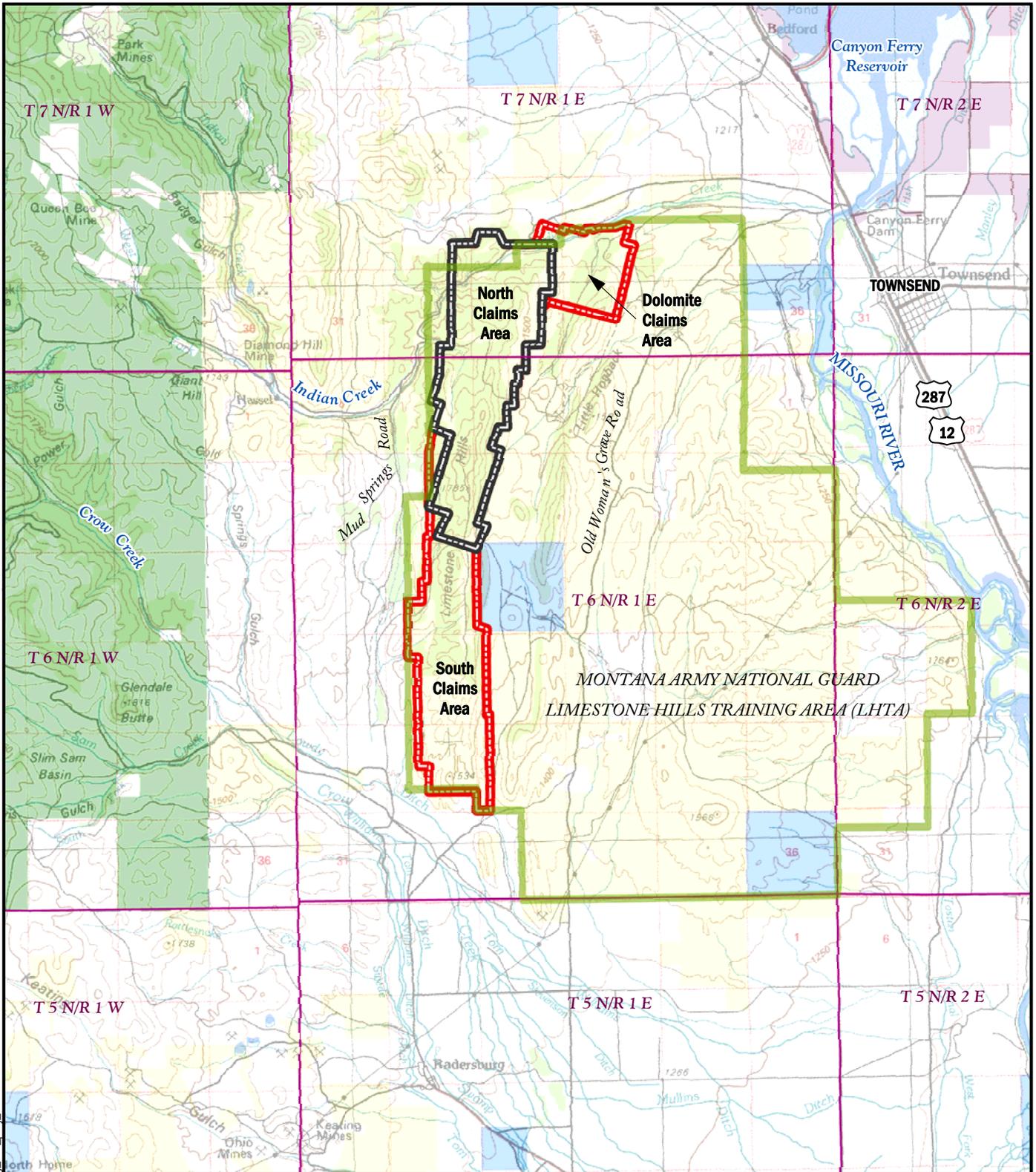
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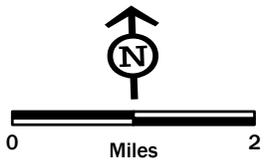
U.S. Department of the Interior
Bureau of Land Management
Butte Field Office
Butte, Montana

GENERAL LOCATION
Indian Creek Mine Expansion - Environmental Impact Statement
Broadwater County, Montana

FIGURE
1-1



Base Data Source: Montana NRIS GIS Data



- | | |
|------------------------------------|---------------------------|
| Existing LHTA Boundary | State of Montana |
| Existing Operating Permit Boundary | Bureau of Land Management |
| Proposed Operating Permit Boundary | Bureau of Reclamation |
| | Forest Service |

U.S. Department of the Interior
Bureau of Land Management
Butte Field Office
Butte, Montana

PROJECT LOCATION
Indian Creek Mine Expansion - Environmental Impact Statement
Broadwater County, Montana

FIGURE
1-2

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- The Reclamation Plan does not provide an acceptable method for accomplishment of reclamation as required by the MMRA.

DEQ's decision regarding the proposed mine expansion can only be made after the agency complies with requirements of the Montana Environmental Policy Act (MEPA). DEQ's decision options include approval of the Proposed Action; approval of alternatives that would reduce or eliminate potential impacts associated with the Proposed Action; approval of the Proposed Action with mitigation measures; or selection of the No Action Alternative.

If BLM and/or DEQ deny the Plan of Operations, including the Reclamation Plan, the applicant can modify and resubmit the Plan of Operations to address issues or concerns identified by BLM and/or DEQ.

MMRA provides for reclamation of land disturbed by mining. DEQ bonding requirements for mine reclamation are outlined in MMRA. Bonding policy relating to mining and mineral development on public land is contained in BLM Surface Management Regulations (43 CFR 3809). BLM and DEQ have entered into a Memorandum of Understanding that states BLM will defer to DEQ for establishing bond levels and retention of the reclamation bond. DEQ currently holds a reclamation bond for the existing Graymont operation of \$3.6 million for 305 acres of disturbance. Bonds are reviewed by DEQ annually. Comprehensive review of the bond level occurs every five years, as required under MMRA.

Pursuant to 75-1-201(1)(b)(iv)(D) MCA, DEQ has determined that the proposed mine expansion (Proposed Action) and alternatives to the Proposed Action, will not impact private property rights in the Project area.

Montana Army National Guard

Most of the proposed mine expansion property is located within the boundaries of the Limestone Hills Training Area (LHTA), a military training facility operated by the Montana Army National Guard (MTARNG) under a right-of-way issued by BLM (**Figure I-2**). A Memorandum of Agreement between MTARNG, Graymont, and BLM sets forth the policies and procedures agreed to by MTARNG regarding military training exercises; removal of unexploded ordnance (UXO); exploration, mining, and reclamation activities conducted by Graymont; and administration of public land by BLM to allow joint and compatible use of the LHTA (MTARNG, Graymont, BLM 2005).

BLM and MTARNG distributed a Draft Legislative EIS in August 2007 regarding the proposed withdrawal of the LHTA from BLM administration to U. S. Army Corps of Engineers (ACOE) on behalf of the MTARNG. The proposed land withdrawal must be reviewed and approved by the U.S. Congress. If approved, the ACOE may serve as the surface management agent for the MTARNG or directly lease this area to the MTARNG via the Department of the Army. BLM would continue to manage mineral rights on the property.

Unexploded Ordnance (UXO)

The MTARNG, Department of the Army, ACOE, and the Department of Defense are responsible for identifying and clearing UXO in the LHTA. The proposed mine expansion area lies west of Old Woman's Grave Road within a portion of the LHTA that has been closed to public access by BLM. Site-specific information on the amount of UXO and ordnance fragmentation contamination in the South Claims Area is unknown.

In addition to BLM and DEQ, other federal, state, and local agencies have jurisdiction over certain aspects of the Proposed Action. **Table**

I-1 provides a comprehensive listing of agencies and their respective permit/authorizing responsibilities.

Plan of Operations MTM 78300/Rights-of-Way	Bureau of Land Management (BLM)
National Environmental Policy Act	BLM
National Historic Preservation Act	BLM; State Historic Preservation Office (SHPO)
Native American Graves Protection & Repatriation Act	BLM
American Indian Religious Freedom Act	BLM
Clean Water Act (Section 404)	U.S. Army Corps of Engineers (ACOE)
High Explosive License/Permit	U.S. Bureau of Alcohol, Tobacco, & Firearms
Storm Water Permit	Montana Department of Environmental Quality (DEQ)
Air Quality Permit – Clean Air Act	DEQ Air Resources Management Bureau
Montana Pollutant Discharge Elimination System Permit – Water Quality Act	DEQ Water Protection Bureau
Metal Mine Reclamation Operating Permit	DEQ Environmental Management Bureau
Safety Plan	Mine Safety & Health Administration (MSHA)
Endangered Species Act of 1973	U.S. Fish and Wildlife Service (USFWS)
Montana Environmental Policy Act	DEQ

RELATIONSHIP TO BLM AND NON-BLM POLICIES, PLANS, AND PROGRAMS

The proposed amendment to Graymont's Plan of Operations (*i.e.*, Proposed Action) has been reviewed for compliance with BLM policies, plans, and programs. The proposal conforms to the Minerals Decision in the Record of Decision, Headwaters Resource Management Plan, approved in 1984.

DEQ has reviewed the proposed mine expansion amendment and determined it to be in conformance with the MMRA (DEQ 2007a). Specifically, Graymont's amendment application is in compliance with provisions contained in Title 82, Chapter 4, Part 3, MCA.

BLM and the State of Montana have determined that the proposed Graymont amendment would be in conformance with existing land use restrictions and other State of Montana regulations.

PUBLIC SCOPING

To allow a process for determining the scope of issues and concerns related to the Proposed Action (40 CFR 1501.7 and ARM 17.4.615), a public scoping period was provided by BLM and DEQ. A Notice of Intent to prepare the EIS was published in the Federal Register on May 18, 2007 (72 Federal Register 96, pp 28067-28068). Publication of this notice in the Federal Register initiated a 30-day public scoping period for the Proposed Action from May 18, 2007, to June 18, 2007.

BLM and DEQ mailed a scoping package that included a project summary and maps to individuals and organizations listed on the Butte Field Office and DEQ mailing lists. In addition, the scoping package was distributed at public scoping meetings held by BLM and DEQ on June 6, 2007, in Helena, and June 7, 2007, in Townsend. Members of the public attended both scoping meetings. No comments were

received on the proposed amendment. Written comments concerning the permit application were received from four individuals and the following agencies.

Broadwater Development Corporation
 Montana Army National Guard
 Montana Fish, Wildlife and Parks
 U.S. Environmental Protection Agency

Public and agency comments concerning the Proposed Action are shown in **Table I-2**. This table also provides references to sections of this Draft EIS which respond to each issue raised in the comments.

TABLE I-2 Scoping Summary Life-of-Mine Expansion Indian Creek Mine	
Issue Raised	Location of Response
Need to discuss current status of mule deer, bighorn sheep, and pronghorn in the proposed mine expansion area.	Chapter 3 – Terrestrial Wildlife
Vegetation on reclaimed areas is neither the quality nor quantity of pre-mining vegetation for wildlife forage.	Chapter 3 & 4 - Vegetation
Shrub densities on reclaimed land should strive to meet densities that existed prior to mining.	Chapter 3 & 4 - Vegetation
Cultural resources have not been adequately addressed in the permit application.	Chapter 3 – Cultural Resources
Loss of mule deer habitat due to mine expansion.	Chapter 4 – Terrestrial Wildlife
Impacts to air and water quality and wildlife habitat	Chapter 4 – Air Quality Chapter 4 - Water Quantity and Quality Chapter 4 - Terrestrial Wildlife
Proposed mine expansion may interfere with Montana Army National Guard training activities in portions of the Limestone Hills Training Area.	Chapter 1 – Introduction
Specify purpose and need for the mine expansion, reasonable alternatives to the proposed mine expansion, and mitigation and monitoring plans to reduce or eliminate adverse effects of the mine expansion.	Chapter 1 – Purpose and Need Chapter 2 – Alternatives Chapter 4 – Mitigation and Monitoring Measures (see respective resource section)
Describe environmental impacts of mine construction, operation, closure, and reclamation alternatives.	Chapter 2 – Proposed Action Chapter 3 – Consequences of Proposed Action and Alternatives Chapter 4 – Cumulative Effects
Provide an analysis of cumulative effects resulting from the incremental impact of the mine expansion when added to other past, present, and reasonably foreseeable future actions.	Chapter 4 – Cumulative Effects
Describe and characterize current status and trends of resources, ecosystems, and human communities in the affected area including air, water, soil, vegetation, wildlife, fisheries, aquatic, cultural, social and economic resources.	Chapter 3 – Affected Environment
Describe road network needed for mine access and management.	Chapter 2 – Proposed Action
Discuss chemicals that may spill during mine operation or transportation	Chapter 2 – Proposed Action