

**UNITED STATES DEPARTMENT OF THE INTERIOR  
Bureau of Land Management – Butte Field Office**

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
Permitting & Compliance Division**

**RECORD OF DECISION**

for

Graymont Western, U.S., Inc.  
BLM Plan of Operations MTM 78300  
State Operating Permit 00105  
Broadwater County, Montana

**I. Introduction and Background**

Graymont Western U.S., Inc. (Graymont) has operated the Indian Creek Mine, an open pit limestone quarry west of Townsend, Montana, in the Limestone Hills, since 1981. Graymont operates the mine under Operating Permit No. 00105 (Operating Permit) issued by the Montana Department of Environmental Quality (DEQ) and Plan of Operations No. MTM78300 (Plan of Operations) issued by the Bureau of Land Management (BLM).

In February 2006, Graymont applied to amend the Operating Permit and the Plan of Operations to expand the mine. The proposed mine expansion includes development of mine pits, mine facilities, ore storage facilities, soil salvage stockpiles, haul roads, and overburden disposal areas. The proposed expansion would also generate ore feed for the existing processing plant, extending the life of the plant. The proposed amendment represents about 50 years of mine production, including approximately seven to twelve years of currently permitted mine life.

**II. Decision**

The BLM and DEQ have decided to approve the amendment (Amendment No. 012) and have selected the Modified Pit Backfill Alternative that was identified as the preferred alternative in the draft and final environmental impact statements. The Modified Pit Backfill Alternative as documented in this Record of Decision (ROD) is approved for implementation as described in this record. The Modified Pit Backfill Alternative is described in detail in Chapter 2 of the Final EIS.

Mitigation measures (Stipulations) to prevent unnecessary or undue degradation, to reduce environmental impacts, and to improve the potential for long-term reclamation success will be required as conditions of the approval to amend the Operating Permit and the Plan of Operations.

This approval is made by BLM under the Surface Management Regulations, 43 CFR 3809, and by DEQ under the provisions of the Metal Mine Reclamation Act, Section 82-4-301, *et seq.*, MCA

### **III. Stipulations**

The following Stipulations will be attached to the Operating Permit and to the Plan of Operations. All other stipulations previously attached to the Operating Permit and the Plan of Operations remain in full force and effect unless specifically modified in this section of this ROD. Graymont is required to comply with the Stipulations as the Stipulations are enforceable provisions of the Operating Permit and Plan of Operations.

As explained in the EIS, these Stipulations mitigate specific impacts identified in Chapter 3 of the EIS. Following each Stipulation is a brief rationale for its adoption.

#### **Mine Pit**

##### Stipulation 1

*Graymont shall consult with BLM and DEQ on final pit designs during development of the mine expansion as mine pits are depleted to determine optimal locations for application of modified pit backfill methods. Several methods will be used to place overburden in selected areas of mine pits and/or treat highwalls where access and conditions are safe for equipment and operators:*

- *Graymont shall place overburden, limestone rejects, and/or growth medium near the rim of selected mine pit highwalls and doze the material over the rim onto two to three benches to form a slope at angle of repose (approximately 1.25H:1.0V).*
- *Graymont shall doze highwall benches downward to create an angle of repose or shallower slope (1.25H:1.0V to 2.0H:1.0V or less).*
- *Graymont shall haul, dump, and doze overburden into slope configurations ranging from 2.0H:1.0V to 3.0H:1.0V in pit bottoms and bench areas.*
- *Graymont shall cast blast selected slopes and highwall benches where equipment operation would be limited to produce angle of repose slopes.*

Rationale: This measure will create diverse terrain with varied slope steepness and convex slope configurations to simulate and blend in with adjacent topographic features.

##### Stipulation 2

*Graymont shall place 2 inches of soil or limestone rejects in selected areas of backfill to support seeding and/or planting browse species. Run-of-mine overburden combined with reject rock fragments (sand to boulder size) will form a growth medium for plantings or seeding of mountain mahogany and other browse shrubs. On steeper slopes, pods*

*of soil or limestone rejects will be used to provide growth media and reduce visual impacts.*

**Rationale:** This measure will provide for successful revegetation with mountain mahogany to establish mule deer and bighorn sheep habitat and reduce visual impacts.

## **Water**

### **Stipulation 3**

*If the National Guard Well (water right no. 411-30000180) is affected by mine pit development, Graymont shall replace this source of water under 82-4-355, MCA.*

**Rationale:** This mitigation would be required if groundwater drawdown during development of the Dolomite Claims north mine pit affects this well.

### **Stipulation 4**

*Graymont shall monitor groundwater in the overburden placed as backfill in the north mine pit for potential contamination by nitrates from blasting residue. If nitrate contamination is detected, wells installed around the north mine pit in the Dolomite Claims Area will be used to draw the groundwater level down below the pit bottom.*

**Rationale:** In the unlikely event that groundwater becomes contaminated with nitrates in blasting residue, this measure will ensure that contaminated groundwater will not spread.

## **Vegetation**

### **Stipulation 5**

*Graymont shall monitor the population of lesser rushy milkvetch every 5 years to ensure that weed control activities or mine construction activities have not disturbed the population.*

**Rationale:** This measure will protect this BLM sensitive plant species and state species of concern.

## **Wildlife**

### **Stipulation 6**

*Graymont shall conduct nesting bird surveys by qualified personnel prior to disturbing undeveloped ground or removing vegetation. If active nests are found, Graymont shall not disturb the area between May 1 and August 30 unless appropriate mitigation*

*measures are developed in consultation with the U.S. Fish and Wildlife Service and approved by the BLM and DEQ.*

Rationale: This measure will prevent violations of the Migratory Bird Treaty Act.

## **Cultural**

### Stipulation 7

*Prior to any mining-related disturbance, Graymont shall cooperate with BLM, in accordance with the provisions of the National Historic Preservation Act, to determine the eligibility of unresolved or undetermined properties. Sites determined as eligible will be mitigated prior to any mining disturbance. In the event new sites are discovered during mining operations, Graymont shall notify the BLM authorized officer. Activities that could occur after notification include cessation of mining activity in the area of discovery, verification and preliminary inspection of discovery, and development/implementation of plans to avoid or mitigate the site. Mitigation measures will be developed with BLM and SHPO representatives and may include archival recordation of the site(s).*

Rationale: This measure will ensure that sites eligible for listing on the National Register of Historic Places will be protected or properly mitigated.

## **LAND USES**

### Stipulation 8

*As provided for in the 2005 Memorandum of Agreement (MOA) between the Montana Army National Guard, Graymont Western US, Inc., and the Bureau of Land Management regarding compatible use at Limestone Hills, the MOA will be reviewed and renewed by the three parties. It is expected this can be accomplished within 60 days of the signing of this Record of Decision.*

Rationale: This will update and maintain the agreement regarding compatible uses at Limestone Hills which has proven to be effective in coordinating activities and ensuring safe operations.

## **IV. Implementation**

This decision is effective upon signing this ROD. Graymont may implement surface disturbing activities associated with this amendment only after submitting the reclamation bond to DEQ and BLM in the amount established by DEQ and BLM **and** receiving approval of the Plan of Operations by BLM and the operating permit amendment approval form issued by DEQ.

## **A. Other Rights and Permits**

Approval of the permit amendment does not convey or create any real property rights or use rights.

Graymont's Storm Water Pollution Prevention Plan was approved under the General Permit for Storm Water Discharge Associated with Mining and Oil and Gas Activities. No changes in this permit result from this decision.

Graymont holds Air Quality Permit #1554 and must continue to comply with its requirements. No modifications to this permit have resulted from the decision.

Graymont is responsible for obtaining any property rights, easements, mineral rights, or water rights necessary to implement the selected alternative. Graymont is responsible for obtaining any other local, state, or federal permits, licenses, or reviews that might be necessary to implement the selected alternative.

During implementation of this decision, Graymont may propose waivers, exceptions, or modifications to the mining and reclamation plans and associated stipulations or conditions. Such changes could be appropriate to allow the use of alternate mitigation methods that might be developed in the future or to respond to an improved understanding of site conditions gained through operational experience.

Any proposed change to the operating procedures, schedule, reclamation design, or mitigation measures will be reviewed by the agencies and accepted if the change would provide resource protection equal to or greater than the original requirement and would not result in significant impacts not identified in the EIS. Proposed changes that would not achieve the same level of resource protection, or would result in previously undisclosed significant impacts would require supplemental analysis under NEPA and MEPA prior to determining their acceptability.

## **B. Reclamation Financial Guarantee**

Graymont is required to post and maintain a reclamation bond in an amount that would enable the agencies to implement the reclamation and other plans as stipulated above and in prior amendments should Graymont be unable or unwilling to do so

Within 60 days of the date of this decision, DEQ and BLM will request Graymont to submit a bond reflecting any change in the cost to ensure compliance with the Montana Clean Air and Water Quality Acts, the MMRA, administrative rules adopted under the MMRA, and BLM regulations that results from selection of the Modified Pit Backfill Alternative and the Stipulations set forth in this decision.

The bond calculations and supporting details will be on file and available at DEQ and BLM upon request.

## **V. Issues and Alternatives**

### **A. Scoping and Comment**

A Notice of Intent (NOI) to prepare the EIS was published in the Federal Register on May 18, 2007. Scoping meetings were held in Helena and Townsend June 6 and 7, 2007.

The Draft EIS was released on December 19, 2008, with the publication of the Notice of Availability in the Federal Register. The principal concern, developed through scoping meetings and agency review, was potential loss of mule deer and bighorn sheep habitat and winter browse vegetation, principally mountain mahogany.

About 50 copies of the Draft EIS were distributed to the public and other state and federal agencies with an invitation to comment. The Draft EIS was also posted on the DEQ and BLM web sites. The Draft EIS presented three alternatives, including the No Action Alternative, the Proposed Action (Graymont's proposal), and the Modified Pit Backfill Alternative, which was identified as the agencies' preferred alternative. The Draft EIS disclosed the affected environment and the environmental consequences of each alternative. Comments were received during the public review period for the Draft EIS between January 2 and March 2, 2009.

The Final EIS addresses issues and concerns raised during the scoping period as well as comments received during the review period for the Draft EIS between January 2 and March 2, 2009.

All written and oral comments were reviewed and considered during preparation of the Final EIS. Comments that presented new data, questioned facts or analysis, or raised questions or issues bearing directly on the alternatives or environmental analysis received a response in the Final EIS. Comments expressing personal opinions were considered but received no response.

### **B. Alternatives Considered in Detail**

Chapter 2 of the Final EIS describes the alternatives analyzed. The alternatives listed below were analyzed in detail in Chapter 4 of the Final EIS:

- The No Action Alternative
- The Proposed Action Alternative
- The Modified Pit Backfill Alternative

The No Action Alternative would limit mine disturbance to the currently permitted 735 acres of disturbance, and the mine would continue to operate until it reached the permitted limits, probably in seven to twelve years.

The Proposed Action Alternative would allow for an additional 1,313 acres of disturbance and allow mining and processing operations to continue for 35 to 50 years.

The Modified Pit Backfill Alternative modifies reclamation at the site to provide for more diverse topography and soils that favor winter browse species, but does not change the proposed disturbance acreage or years of future operations.

### **C. Environmentally Preferred Alternative**

The No Action Alternative is the environmentally preferred alternative because it would result in less disturbed land and wildlife habitat.

## **VI. Rationale for the Decision**

### **A. Rationale for the Selected Alternative**

The agencies have selected the Modified Pit Backfill Alternative after considering Graymont's federal statutory right to develop the mineral deposits and the potential environmental impacts of all of the alternatives. The agencies recognize that none of the action alternatives, including the selected alternative, completely avoids environmental impact.

The Modified Pit Backfill Alternative prevents unnecessary or undue degradation of the federal land by improving the proposed reclamation to provide for more diverse topography and soils that favor winter browse species and improve the long-term reestablishment of winter browse species for mule deer and bighorn sheep.

Under the Modified Pit Backfill Alternative, no highwall failure that would threaten public safety or the environment would occur and wildlife habitat would be provided. With the mitigation measures set forth in Stipulations 1 and 2, post-reclamation visual contrasts between the reclaimed mine features and adjacent lands would be mitigated. Offsite impacts would be mitigated or prevented.

### **B. Selected Alternative Compliance with Legal and Policy Mandates**

This section explains how the selected alternative satisfies the agencies' statutory, regulatory, and policy mandates.

#### **B1: Federal Legal and Policy Mandates**

##### **National Mineral Policy Conformance**

The Mining and Minerals Policy Act of 1970, the Federal Land Policy and Management Act of 1976 (FLPMA), and the Natural Materials and Minerals Policy, Research and Development Act of 1980 direct that the public lands be managed in a manner that recognizes the Nation's need for domestic sources of mineral production. Under the Mining Law of 1872, claimants have a statutory right to develop their mineral deposits consistent with applicable environmental laws.

The Modified Pit Backfill Alternative provides for continued domestic mineral production of limestone from the Indian Creek Mine. The Modified Pit Backfill Alternative allows mining claim holders to develop their mineral deposits consistent with the environmental laws of the State of Montana and the United States.

### Prevention of Unnecessary or Undue Degradation

Section 302(b) of FLPMA amended the Mining Law of 1872 and directed the Secretary of the Interior to: "prevent unnecessary or undue degradation of the lands." 43 USC § 1732 (b). Unnecessary or undue degradation was not defined in FLPMA, but was defined in the implementing regulations at 43 CFR 3809.5 as: conditions, activities, or practices that: Fail to comply with one or more of the following: the performance standards in §3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources;

The expanded mining and reclamation plans for the Indian Creek Mine in the selected alternative will not result in unnecessary or undue degradation of federal lands, either on or off site. The Modified Pit Backfill Alternative prevents unnecessary or undue degradation of the federal land by improving the proposed reclamation to provide for more diverse topography and soils that favor winter browse species and improve the long-term reestablishment of winter browse species for mule deer and bighorn sheep.

The selected alternative therefore satisfies the requirements of the Federal Land Policy Management Act.

### Land Use Plan Conformance

The majority of public lands in the Butte Field Office area are open to operation of the Mining Law in conformance with the Butte Resource Management Plan EIS. Approval of a Plan of Operations by BLM on lands open to mineral entry is nondiscretionary (i.e., BLM must approve such a plan) if it will not cause unnecessary or undue degradation.

Since the Modified Pit Backfill Alternative does not result in unnecessary or undue degradation, it has been selected for implementation and the Modified Plan of Operations approved. This alternative is consistent with the Hardrock Mineral Section of the Butte Resource Management Plan EIS approved in April 2009.

### Executive Order 12898 on Environmental Justice

On February 11, 1994, President Clinton signed Executive Order 12898 that requires federal agencies to address issues of Environmental Justice when implementing their respective programs.

Scoping and public participation throughout the EIS process involving the geographic area and local population impacted by the proposed action did not reveal any issues related to Environmental Justice. The agencies have considered all input from persons or groups regardless of age, race, income status, or other social/economic characteristics. Graymont's expansion was evaluated using the appropriate Environmental Justice criteria and no disproportionately high or adverse human health or environmental effects were identified for minority or low-income populations.

### American Indian Religious Freedom Act

The American Indian Religious Freedom Act was passed as a joint resolution of Congress. The resolution states that it shall be the policy of the United States to protect and preserve for the American Indian the inherent right of freedom to believe, express and exercise their traditional religions, to use sacred objects, and to worship through ceremonies and ritual. BLM complies with this act by consulting with and considering the views of Native Americans when a proposed land use might conflict with traditional Native American religious beliefs or practices. The act does not require that land uses that conflict with Native American religious beliefs or practices be denied.

There have been no conflicts with Native American religious beliefs or practices identified through the public participation process. Graymont's expansion will not impact traditional religious beliefs or practices.

### National Historic Preservation Act

BLM has completed the process for considering the effect of the undertaking on Historic Properties as required by Section 106 of the National Historic Preservation Act. Cultural sites have been recorded and submitted to SHPO. Consultation with Native American groups has been conducted. All adverse impacts have been avoided or mitigated through protective measures and/or project design.

## **B2: State of Montana Legal Mandates**

### Metal Mine Reclamation Act

In enacting the Metal Mine Reclamation Act, the Montana Legislature found that it is not practical to extract minerals without disturbing the surface of the earth and without producing waste material and that the very character of many types of mining precluded complete restoration of the land to its original condition. The Montana Legislature found

that the reclamation standards set forth in the Metal Mine Reclamation Act allow for exploration and mining of valuable materials while adequately providing for the subsequent beneficial use of the lands to be reclaimed.

In regard to the reclamation of open pits and rock faces, the Montana Legislature has enacted the following reclamation standards set forth in Section 82-4-336, MCA:

(9)(b) With regard to open pits and rock faces, the reclamation plan must provide sufficient measures for reclamation to a condition:

(i) of stability structurally competent to withstand geologic and climatic conditions without significant failure that would be a threat to public safety or the environment;

(ii) that affords some utility to humans or the environment;

(iii) that mitigates postreclamation visual contrasts between reclamation lands and adjacent lands; and

(iv) that mitigates or prevents undesirable offsite environmental impacts.

(c) The use of backfilling as a reclamation measure is neither required nor prohibited in all cases. A department decision to require any backfill measure must be based on whether and to what extent the backfilling is appropriate under the site-specific circumstances and conditions in order to achieve the standards described in subsection (9)(b).

Under the Modified Pit Backfill Alternative, the reclamation plan for pit backfill would be similar to that approved under the current mine plan. Up to 50 percent of run-of-mine overburden would be used as backfill resulting in portions of selected mine pits being backfilled in various configurations, including partial fill of the bottom of a pit, partial fill of a pit including some highwall areas, and/or fill being placed in a pit area resulting in a surface that approximates the original grade of the area.

Growth media would be placed on areas in depths ranging from 2 to 9 inches, based on the type of revegetation approved for the area. The types of revegetation include mountain mahogany/juniper, Douglas-fir, grassland, and rock outcrop. In addition to the approved seed mixture, various species of tree and shrub seedlings would also be planted. The 2-inch growth media depth was specifically designed to facilitate the establishment of mountain mahogany, an important browse species for mule deer and bighorn sheep, achieving the designated post-closure land use of wildlife habitat.

Modified pit backfill would reduce the visual effect of highwalls and/or establish varied slope angles to create post-mining landscape areas more natural in appearance. Use of visually compatible growth media would be emphasized in areas visible from public

roads. Establishment of vegetation in areas would contribute to establishing a mosaic of color and texture blending with surrounding areas.

Undesirable offsite environmental impacts would be mitigated or prevented.

The extent of backfill required under the Modified Pit Backfill Alternative achieves the standards described in Section 82-4-336(9)(b), MCA, and therefore, is appropriate under Section 82-4-336(9)(c), MCA.

#### Montana Water Quality Act

The selected alternative will comply with requirements developed for Graymont.

#### Montana Pollutant Discharge Elimination System

An MPDES Permit is required for all discharges to surface water or groundwater. Graymont holds General Permit for Storm Water Discharge Associated with Mining and Oil and Gas Activities MTR 000090 issued September, 2006. Graymont also has an approved Storm Water Pollution Prevention Plan.

#### Clean Air Act of Montana

Graymont holds Montana Air Quality Permit #1554-16. Emissions from mining activity and kiln operation have been within ambient air quality standards. Since the level of mining activity and kiln operation will not change under the selected alternative, predicted emission levels will continue to be within ambient air quality standards.

#### Montana Hard Rock Impact Act

The Indian Creek Mine was originally permitted before passage of the Hard Rock Mining Impact Act. Thus, Graymont is not required to have a Hard Rock Mining Impact Plan.

#### MEPA/NEPA Cumulative Effects Assessments

Chapter 4 of the Final EIS provides a cumulative effects analysis. There are no related future actions under concurrent consideration, and no reasonably foreseeable future actions, that, when considered in conjunction with past and present actions, are likely to result in additional significant impacts. Should future actions be proposed that have or may have cumulative effects, additional analysis pursuant to the applicable requirements of MEPA and NEPA would be conducted by the agencies.

#### Private Property Assessment Act

Imposition of the Preferred Alternative and the stipulations described above does not have taking or damaging implications.

## **VII. Monitoring and Compliance**

This section summarizes the project monitoring that will be conducted. The purpose of monitoring is to ensure compliance with the terms and conditions of the approved mining and reclamation plans, to detect problems early, and to provide a basis for directing remediation of unanticipated problems.

### **A. Agency Monitoring**

Agency staff will continue to conduct compliance inspections at least three times a year under the authority of MMRA and FLPMA. These inspections will be comprehensive mine-wide inspections. Inspections may consist of examination of disturbed areas, verification sampling at water quality monitoring points, and sampling of construction materials, and reclamation materials. Revegetation will be examined annually. More frequent inspections could be conducted during periods of intense activity in particular areas of the mine, or when compliance problems have been noted and corrective measures are being implemented. Additional inspections for compliance with the Montana Water Quality Act and the Clean Air Act of Montana will also be conducted. The results of these inspections will be available in agency files.

### **B. Operator Monitoring Reports**

The following monitoring reports are required from Graymont under the selected alternative and/or the existing permit. All reports are to be submitted to the agencies and will be available in the agencies' files.

#### Wildlife Mortality

Reports on wildlife mortality at the mine are required. These reports identify species, number, cause of death, and proposed changes to prevent reoccurrence. Summary reports are submitted annually.

#### Annual Water Resources Monitoring Report

This report is submitted yearly and includes the results of all water resources monitoring specified in the operating plan for the entire year. This report also includes a summary of past annual monitoring results and trend analysis.

#### Annual Operating and Reclamation Status Report

This is the annual report required by MMRA. The annual report describes overall mining and reclamation status. This report will include Graymont's tracking of the status and progress in complying with the agency-imposed stipulations.

## **VIII. Appeals**

## A. BLM

The decisions in this ROD may be appealed under certain conditions.

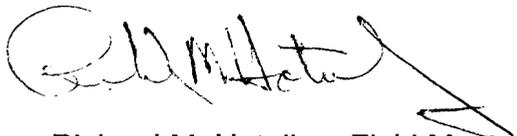
The authority of the BLM to approve the Plan of Operations subject to the above listed stipulations is limited to the BLM-administered lands in the project area. These decisions may be appealed by either Graymont or by the public. The following appeals processes apply:

Within 30 days of receipt, any party adversely affected by the decision of BLM may request a State Director review of the decision or may bypass State Director review and appeal directly to the Interior Board of Land Appeals (IBLA), Office of Hearings and Appeals, in accordance with the appeals procedures at 43 CFR 3809.800. Appeals to IBLA must be filed within 30 days with the BLM Butte Field Office, 106 North Parkmont, Butte, Montana, 59701. Requests for BLM State Director review must be sent to the BLM Montana State Office, 5001 Southgate Drive, Billings MT 59101. The appellant has the burden of showing that the decision appealed is in error.

Under the regulations at 43 CFR 3809.803, this decision is in effect immediately and remains in effect while appeals are pending before IBLA unless IBLA grants a stay under 43 CFR 4.21(b). Similarly, under 43 CFR 3809.808, the decision remains in effect while the State Director review is pending, unless the State Director stays the decision during the pendency of the review.

## B. DEQ

Under Montana state law, this record is subject to court appeal by the applicant and other parties for 90 days after issuance of the operating permit amendment. An action alleging failure to comply with the Montana Environmental Policy Act must be brought within 60 days after issuance of the operating permit amendment. An applicant for a permit amendment may request an administrative hearing on a denial of the application within 30 days of written notice of the denial. Notice of permit amendment issuance will be published in the *Townsend Star*, *Helena Independent Record*, and the *Butte Montana Standard*.



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