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PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: May 20, 2013

Name of Applicant: Graymont Western U.S., Inc.

Source: Limestone quarry and lime manufacturing plant

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 1554-17.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by June 4, 2013. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

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JM:EW
Enclosure

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
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DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Graymont Western U.S., Inc.
P.O. Box 550
Townsend, MT 59644

Montana Air Quality Permit (MAQP) Number: 1554-17

Preliminary Determination Issued: 5/20/13

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* The limestone quarry and lime manufacturing plant are located approximately 4½ miles west of Townsend on Indian Creek Road. The quarry is located in Section 33, Township 7 North, Range 1 East, in Broadwater County and the lime manufacturing facility is located in Section 28, Township 7 North, Range 1 East, in Broadwater County. The railroad loadout facility is located 1 mile north of Townsend in Section 25, Township 7 North, Range 1 East, in Broadwater County.

2. *Description of Project:* On April 11, 2013, the Montana Department of Environmental Quality (Department) received an MAQP application from Bison Engineering, Inc. (Bison) on behalf of Graymont for a hydrator project. The hydrator project involves the upgrading of the main pollution control device to the existing hydrator and the installation of a new truck and new railcar hydrate product loadout. This specific equipment involved with this project includes:
 - Upgrading the particulate matter (PM) control technology associated with the Cimprogetti hydrator from a wet scrubber to a fabric filter baghouse that would exhaust through the repurposed wet scrubber emissions stack
 - Seven (7) new fully enclosed screw conveyors
 - One (1) new screw pump and one (1) new flow diverter, all sealed with no emission points
 - One (1) new product recovery cyclone, which would be controlled by an existing dust collector. There would be no change in baghouse airflow and no change in emissions from the baghouse
 - One (1) new Roller Mill rated up to 10 tons per hour (TPH), controlled by an existing dust collector. The Roller Mill would be completely enclosed within the Hydrate Building. There would be no change in dust collector air flow and no change in emissions from the dust collector
 - A new hydrate truck loadout station which would include a 500-ton capacity storage silo and truck loading spouts controlled by a new 3,000 actual cubic feet per minute (acfm) dust collector. Hydrate would be offloaded to enclosed trucks for hauling via extendable vacuum-boot loadout spouts to ensure maximum control of dust emissions during product loading. Any recovered product from the dust collector is dropped back into the storage silo
 - A new hydrate rail loadout terminal which would include a 78-ton capacity storage silo and railcar loading spouts controlled by a new 3,000 acfm dust collector. The railcar loadout terminal is located about four miles east of the plant. Hydrate is transported to the railcar loadout terminal via enclosed trucks which is then transferred pneumatically via the truck blowers through completely enclosed piping to the new 78-ton hydrate storage silo. The hydrate

is offloaded from the silo to enclosed railcars via an extendable vacuum-boot loadout spout to ensure maximum control of dust emissions. Any recovered product from the dust collector is dropped back into the loadout spout piping.

- A new hydrate reject bin with associated transfer point. The reject bin is periodically collected and emptied onsite. The reject system would be completely enclosed within the Hydrate Building.

3. *Objectives of Project:* The objectives of this project are to allow Graymont to increase the utilization of the hydrator on a short term basis to keep pace with market demands.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Graymont demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a Best Available Control Technology (BACT) analysis, would be included in MAQP #1554-17.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
7. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

- A. Terrestrial and Aquatic Life and Habitats
- B. Water Quality, Quantity and Distribution
- C. Geology and Soil Quality, Stability and Moisture
- D. Vegetation Cover, Quantity, and Quality

The current permit action primarily affects a currently permitted process at Graymont and does not include any significant changes in the method of operation at the facility. The upgrade of the pollution control device on the hydrator from a wet scrubber to a fabric filter baghouse would result in a decrease in particulate emissions to the atmosphere from that process. There are particulate emissions from the new loadout terminals that represent “new” emissions from the facility. The associated small levels of emissions would only be expected to have a minor, if any, impact on the physical and biological effects listed above from pollutant deposition. Construction associated with the hydrator project is expected to have less than three (3) acres of land disturbance.

- E. Aesthetics

There would be some new construction included with the hydrator project, particularly the new truck and railcar hydrate product loadout terminals with associated storage silos. This new equipment would be visible; however, they would be located in areas that are already developed by Graymont and contain existing similar facilities that perform similar functions. The expected impact to the aesthetics would be minor.

- F. Air Quality

The current permit action would result in some new sources of particulate emissions from the facility. The associated small levels of emissions would only be expected to have a minor impact on air quality. MAQP #1554-17 would include conditions designed to protect air quality.

- G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana natural heritage Program, Natural Resource Information System (NRIS). In this case, the area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. The Department investigated the locations of the construction that would occur both at the main facility and at the new railcar loadout terminal located approximately four (4) miles to the west of the main facility. Search results for the main facility identified the following animal and plant species of concern that may be present within the search radius: Great Blue Heron (bird), Long-billed Curlew (bird), Clark’s Nutcracker (bird), Hoary Bat (mammal), and Sword Townsend-daisy (plant). Search results for the railcar loadout identified the following animal species: Great Blue Heron (bird), Bald Eagle (bird), Long-billed Curlew (bird), Clark’s Nutcracker (bird), Veery (bird), Yellowstone Cutthroat Trout (fish), Westslope Cutthroat Trout (fish), and Spring Snail (invertebrate). The Department determined that because the Graymont plant is an existing industrial source and the new railcar loadout terminal would be located alongside existing railcar loadout terminals, any effects on the local populations of these animal and plant species would be minor.

H. Demands on Environmental Resource of Water, Air and Energy

The proposed project would result in periods of increased utilization of the lime hydrator on a short term basis; however, no increase in annual hydrate production would occur because annual limits for hydrate production would remain unchanged and in place. Therefore, there would be no expected increases in demands on environmental resources of water, air, and energy from this project on an annual basis. However, during those periods of short term increased utilization of the hydrator to meet market demands there may be increased truck traffic and decreased downtime of the hydrator equipment. These short term periods may require increased demand of these environmental resources in the form of water used for dust control on haul roads, particulate emissions to the air, and fuel and electricity required to run the vehicles and equipment. The Department expects that the impacts from these activities would be minor because they would occur on a short term basis and the long term impacts are expected to be unaffected because annual production limitations remain unchanged and in place.

I. Historical and Archaeological Sites

The Department contacted the Montana State Historic Preservation Office (SHPO) to conduct a cultural resource file search for the locations of the project. According to SHPO records indicate that there have been a few previously recorded sites within the designated search locales and also a few previously conducted cultural resource inventories done in the area. SHPO indicated that as long as there would be no disturbance or alteration to structures over fifty years of age there is a low likelihood that cultural properties would be impacted. No cultural resource inventory was recommended at this time. If any structures are to be altered that are over fifty years old or if cultural materials are inadvertently discovered, Graymont should contact SHPO so the site can be investigated. The Department has determined that since the proposed project would take place within previously disturbed industrial sites and as a whole the project is expected to require the disturbance of less than three (3) acres of land, there is no expected impact to historical and archaeological sites.

J. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project would result in minor impacts to the physical and biological environment due to the small net increase in particulate emissions and small impact from construction within existing industrial sites. Air pollution from the facility would be controlled by enforceable conditions in MAQP #1554-17. The Department believes that this facility could be expected to operate in compliance with all applicable rules, regulations, and conditions of MAQP #1554-17.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue				X		Yes
D	Agricultural or Industrial Production				X		Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities				X		Yes

		Major	Moderate	Minor	None	Unknown	Comments Included
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

- A. Social Structures and Mores
- B. Cultural Uniqueness and Diversity

The current permit action affects a currently permitted process at Graymont and does not include any significant changes in the size or scope of the facility. The new construction will consist of upgrades and additions to existing portions of the facility. Construction associated with the hydrator project is expected to have less than three (3) acres of land disturbance. These activities are not expected to have any impact on either the social structures and mores or cultural uniqueness and diversity of the local community.

- C. Local and State Tax Base and Tax Revenue

While the hydrator project is expected to allow for Graymont to have increased utilization of the lime hydrate production process on a short term basis, no changes to facility lime capacity or annual hydrate production would occur. No other permits or approvals are expected to be required for the project and no additional employees would be hired as a result of the project. No modifications to existing utilities are expected. Therefore, there is not expected to be any impacts on the local and state tax base and tax revenue.

- D. Agricultural or Industrial Production

The proposed project would take place within existing facility boundaries. While the hydrator project is expected to allow for Graymont to have increased utilization of the lime hydrate production process on a short term basis, no changes to facility lime capacity or annual hydrate production would occur. Therefore, there is no impact expected to local agricultural or industrial production.

- E. Human Health

While the hydrator project would have no impact on Graymont's annual production capacities, the new equipment would result in potential emissions of particulate from the facility. MAQP #1554-17 would incorporate conditions designed to ensure that the operations would maintain compliance with all applicable rules and ambient air quality standards. These rules and standards are designed to be protective of human health. Any impact to human health from the proposed project would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would take place within existing facility boundaries and is expected to disturb no more than three (3) acres of land during construction. The hydrator project represents an upgrade to an existing process at Graymont and the new hydrate lime terminals would be located alongside existing loadout terminals that perform similar functions. Therefore, ambient noise levels are not expected to change from their current levels as a result of the project. There are no expected changes to the access to and quality of recreational and wilderness activities as a result of the proposed project.

G. Quantity and Distribution of Employment

H. Distribution of Population

Graymont does not expect a need to hire any additional employees as a result of the hydrator project. The scope, capacity, and size of the Graymont facility would be unaffected. No impacts to quantity and distribution of employment are expected as a result of this permit action, nor are there any expected impacts to the distribution of local population.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits from government agencies. These demands for government services are expected to be minor.

J. Industrial and Commercial Activity

Graymont would not have any change in its production capacity; therefore, there would be no long term changes to industrial and commercial activity as a result of this project. The project would involve some construction which would include some short term increase in truck traffic and equipment usage. These short term impacts on industrial and commercial activity are expected to be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be impacted by the proposed permit action.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in only minor impacts to the economic and social environment in the immediate area. The proposed project would not result in any change to the Graymont personnel and would not result in any increase in hydrate production capacity on an annual basis. The Department believes that Graymont could be expected to operate in compliance with all applicable rules and regulations as outlined in MAQP #1554-17.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the upgrading of the pollution control device for the hydrator and the construction and operation of new truck and railcar hydrate loadout terminals. MAQP #1554-17 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Ed Warner
Date: May 10, 2013