

*"Healthy environment, healthy people"*

Steve Bullock, Governor  
Tracy Stone-Manning, Director

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April 5, 2013

Interested Party List

RE: Draft Checklist EA for Holcim (US), Inc. Geysers Project for an Operating Permit

Dear Reader:

Enclosed for your review and comment is the Draft Checklist Environmental Assessment (CEA) for an operating permit requested by Holcim (US), Inc. (Holcim) located at Holcim Trident Plant, 40700 Trident Road, Three Forks, MT 59752. Holcim filed an application for an Operating Permit on December 7, 2012 from the Montana Department of Environmental Quality (DEQ), Environmental Management Bureau in Helena. The application was later revised on March 18, 2013.

Holcim has filed an application with the Department of Environmental Quality for an operating permit under Section 82-4-353(1), MCA, of the Metal Mine Reclamation Act. The operating permit would authorize Holcim to quarry gypsum on private land in Sections 3, 4, 9 and 10 in Township 16 North, Range 10 East. The site is approximately 6.5 miles southeast of Geysers, MT. Gypsum has historically been mined at the site.

The operating permit would cover a total of 48 acres. About 11 acres would be disturbed over the next five years, with about 29 acres being disturbed over the life of mine, which is estimated to be 18 years. Ground disturbance would range up to approximately 30 feet in depth. Holcim would use trucks and heavy equipment to remove the gypsum. Blasting would be required about once a year. The gypsum would be hauled to the Holcim plant located near Trident, MT. It is expected that there would be three to five truckloads per week day and occasional hauling on weekends for eight months of the year.

This Draft CEA evaluates the potential impacts from this proposed permit application. The DEQ must decide whether to approve the permit as proposed, deny the request for an operating permit, or approve the operating permit with modifications.

The Draft CEA addresses issues and concerns raised during public involvement and from agency scoping. The agency has decided to approve the permit application with no agency modifications. This is not a final decision. This conclusion may change based on comments received from the public on this Draft CEA, new information, or new analysis that may be needed in preparing the Final CEA.

Copies of the Draft CEA can be obtained by writing DEQ, Environmental Management Bureau, PO Box 200901, Helena, MT 59620, c/o Herb Rolfes, or calling (406) 444-3841; or sending email addressed to [hrolfes@mt.gov](mailto:hrolfes@mt.gov). The Draft CEA will also be posted on the DEQ web page: [www.deq.mt.gov](http://www.deq.mt.gov). Public comments concerning the adequacy and accuracy of the Draft CEA will be accepted until April 26, 2013.

Since the Final EA may only contain public comments and responses, and a list of changes to the Draft CEA, please keep this Draft CEA for future reference.

Warren D. McCullough  
Warren D. McCullough, Chief  
Environmental Management Bureau

4/5/13  
Date

## EXPANDED CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Holcim (US) Inc.

LOCATION: 6.4 miles southeast of Geysler, Montana

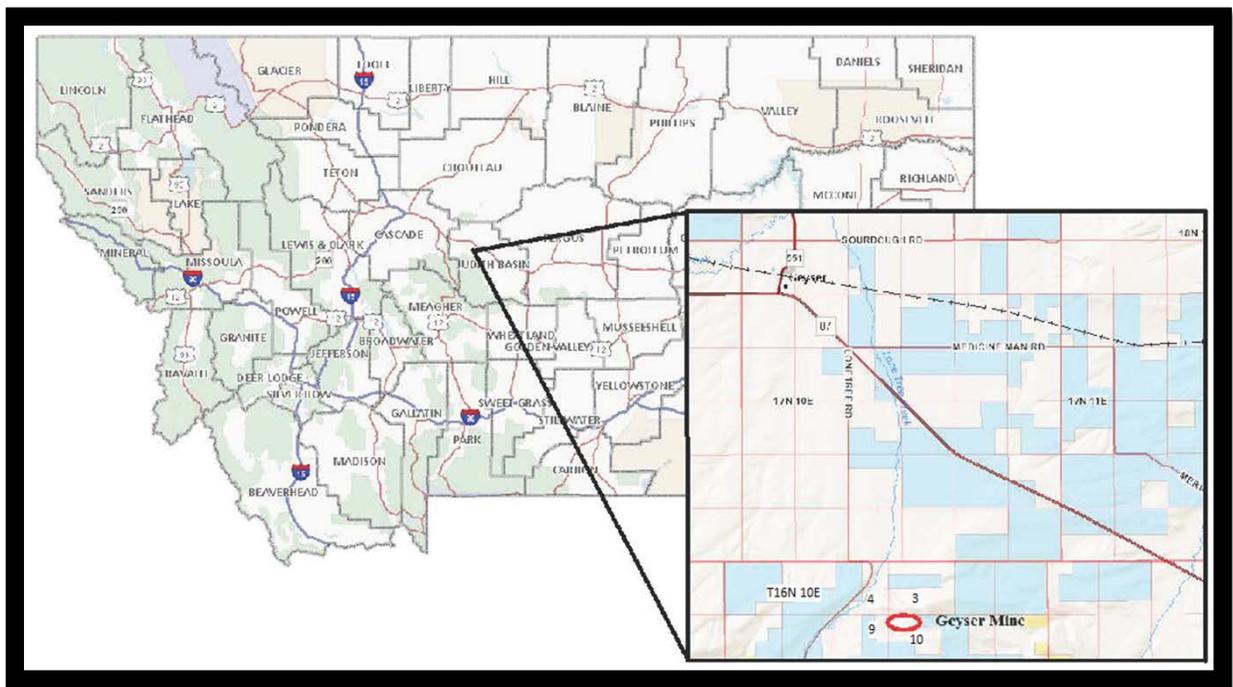
PROPERTY OWNERSHIP: [ ] Federal [ ] State [x] Private

PROJECT: Geysler Mine

COUNTY: Judith Basin

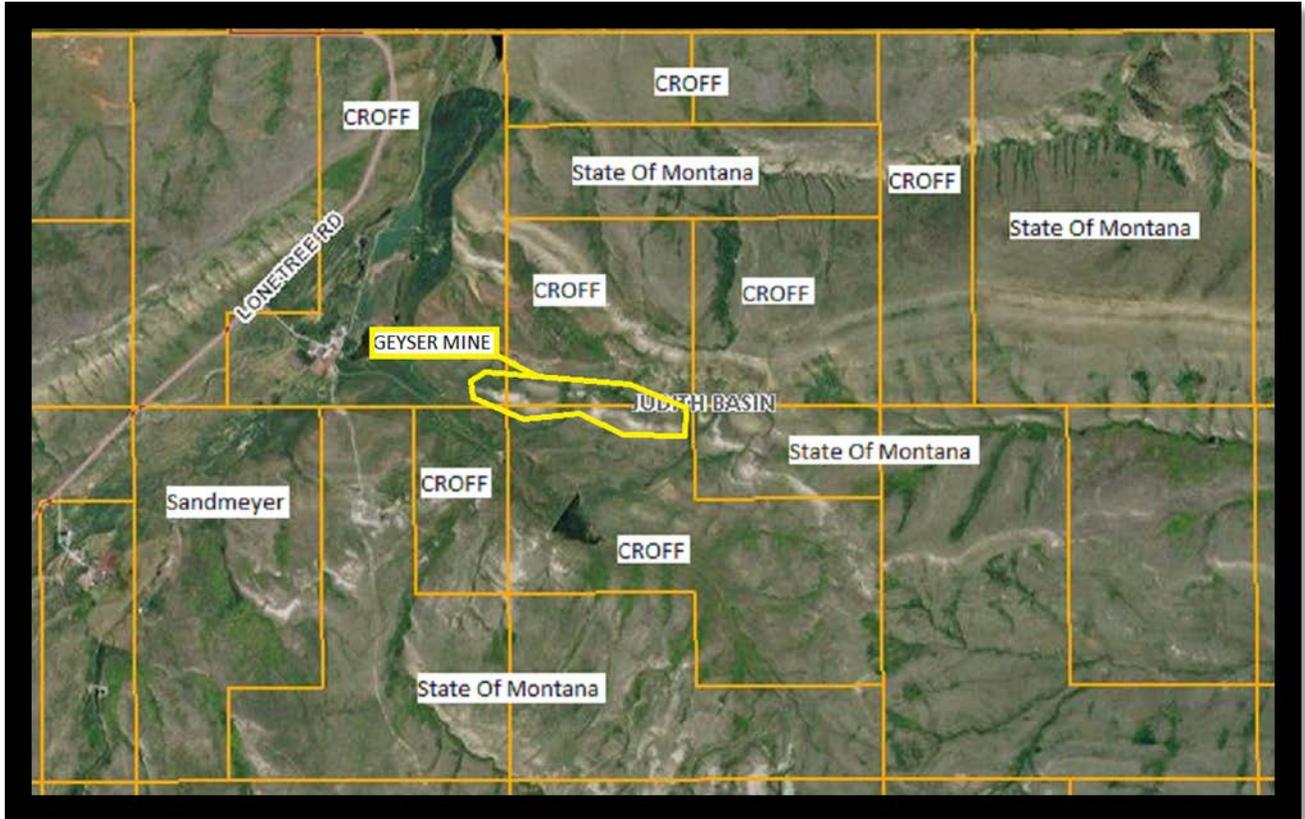
OPERATING PERMIT No. 00184

TYPE AND PURPOSE OF ACTION: On December 7, 2012 Holcim (US), Inc. (Holcim) submitted an application to the Montana Department of Environmental Quality (DEQ) for an operating permit for the Geysler Mine. The mine has been operating under an Exploration License while Holcim removes a 10,000 ton bulk sample for testing. The mine is located in Sections 3, 4, 9, and 10, Township 16 North, Range 10 East, in Judith Basin County, about 6.4 miles southeast of Geysler, Montana (Figure 1). Holcim would operate the mine to provide gypsum for its cement-making process at its Trident Plant near Trident, MT. The ore contains about 90 percent gypsum.



**Figure 1. General Location Map.**

The application is for a permit area of about 48 acres with 29.3 acres to be potentially disturbed over the 18-year mine life. A total disturbance of 11 acres is expected over the first five years. Some limited past mining disturbance on the site is believed to have occurred in the early 1900's. The Geysler Mine is located entirely on private land owned by the Croff family (Figure 2).



**Figure 2. Land ownership in the area of the proposed mine.**

Holcim (US) Inc. intends to expand the Geyser Mine from the 3.0 acres disturbed during the exploration program to a potential life-of-mine disturbance of 29.3 acres. The pit would be mined 17-30 feet below the surface (Exhibit B). The Geyser Mine would produce 20,000 tons of gypsum ore per season. The mining season would be 8 months per year. During operation, an expected 3-6 truckloads of ore per day would be hauled totaling 500-600 truckloads per year. Hours of operation would be mainly Monday through Friday from 7 am - 6pm. Occasionally there would be work on the weekends.

The plan is to mine the gypsum deposit from west to east (Exhibit B). Overburden and ore would be blasted if necessary and moved with heavy equipment. Blasting will follow state regulations (Administrative Rules of Montana (ARM) 17.24.159) and would be expected to occur once a year. No blasting materials would be stored on site.

Soil and overburden would be salvaged and stockpiled separately to the north (Exhibit B). After each ore block is mined out, the overburden would be backfilled into the pit and reclaimed with soil and a seed mix approved by DEQ. Holcim commits to concurrent reclamation and to not disturb more than five ore blocks at any one time before reclamation is completed. All areas no longer used for mining activities and ready for reclamation would be reclaimed within 2 years.

DEQ must review the application and evaluate the potential impacts under the Montana Environmental Policy Act (75-1-101 through 315 Montana Code Annotated (MCA)), and decide if it complies with the Montana Metal Mine Reclamation Act (MMRA) (82-4-301 through 390 MCA) and the rules implementing the MMRA (ARM 17.24.101 through 189).

PROPOSED ACTION: The operator cannot stay under five acres of disturbance at any one time and therefore must obtain an operating permit from DEQ. The operating permit would allow Holcim to disturb up to 48 acres over the life of the mine.

Holcim intends to mine west to east following the ore blocks. These blocks are defined by the ore volume needed per year. These ore blocks do not represent the planned disturbance per year; disturbance of more than one block would be needed to access the ore for any given block. Ore stockpiles would be located in the active quarry area directly west of the active mining block.

The original access road was constructed in the early 1900's for gypsum mining. This road, with improvements, would be used as the main access road to the mine (Exhibit B) and would be left post mine to provide access to the area for the landowner.

Holcim would not use any water in the mining operation. Erosion control structures and other BMPs (rip-rap, slash filters, ditches, seeding) would be used to manage stormwater on the access road and mine area (Exhibit B). The mine would not intercept any groundwater or result in a pit that captures water. Sedimentation ponds or diversions would be employed to control stormwater. Areas where sediment control structures could be used are marked on Exhibit B. The access road to the Geyser Mine crosses Lone Tree Creek.

Holcim would take appropriate measures to protect surface water from deterioration of quality and quantity that could be caused by mining and reclamation activities. Holcim would report to the DEQ any fuel or oil spill that reaches state waters or that is greater than 25 gallons. Holcim would keep all equipment, facilities, and disturbances at least 100 feet from typical high water marks of drainage ways, except at approved crossings.

If required in the future, fuel tanks would be double walled or have 110 percent leak-proof containment around them. Single walled tanks would be bermed and an impermeable liner would be placed underneath with fine gravel over the top to contain any spills. Solvents used to clean trucks would be stored and used offsite. Any accidental spills from equipment operating at the site would be contained with spill kits that would be onsite and available in equipment.

Dust control is achieved by spraying water and/or water mixtures containing dust abatement compounds.

Solid waste disposal would not occur at the Geyser Mine. All waste would be hauled to an appropriate licensed disposal location. There is no septic system on the permit area. Portable toilets would be available for employees on site.

The Geyser Mine site is located on private land that is signed as "Private Land/No Trespassing". The mine area has an average annual precipitation of 18.2 inches a year. The elevation of the mining disturbance would be between 4,700 feet and 4,880 feet.

Mining and truck noise would be noticeable at the closest residence which is owned and occupied by the landowner. The hours of operation coincide with normal ranch and agricultural operations and do not represent an adverse impact.

The post mine topography is shown on Exhibit C. Holcim intends to practice concurrent reclamation. As each gypsum block is mined out it would be backfilled and reclaimed. Slopes would be no greater than 2.5 horizontal to 1 vertical slope (2.5:1). All reclamation would be blended into the surrounding topography and no water capturing areas would be created in the post-mine topography, thereby preventing the accumulation of stagnant water.

Compacted areas would be ripped prior to seeding to reduce compaction. Any stockpiles would be graded to match the surrounding terrain before final reclamation. All mine equipment would be removed from the permit area post-mine.

All soil material would be stripped 10 feet ahead of any disturbance. Soil material (A and B horizon) would be salvaged and stockpiled separately from any overburden (E horizon or soil containing more than 40 percent coarse rock fragments). Soil depths on site range from 9-26 inches across the area. An average soil salvage depth of 17 inches is expected. Roughly 38,347 cubic yards of soil would be salvaged and replaced. Reclaimed mine areas would receive an average of 17 inches of soil.

**Material Balance Table**

	<b>0-6 Ore Blocks</b>	<b>7-11 Ore Blocks</b>	<b>12-18 Ore Blocks</b>	<b>TOTAL</b>
<b>Area of soil and Overburden Salvage</b>	5 acres	3.7 acres	5.2 acres	<b>13.9 acres</b>
<b>Overburden Stockpiled @ 7 foot average</b>	56,467 y <sup>3</sup>	41,785 y <sup>3</sup>	58,725 y <sup>3</sup>	<b>156,977 y<sup>3</sup></b>
<b>Soil Stockpiled @ 17 inch average</b>	13,794 y <sup>3</sup>	10,208 y <sup>3</sup>	14,345 y <sup>3</sup>	<b>38,347 y<sup>3</sup></b>

Reclaimed areas will be seeded with the approved seed mix. Seedbed preparation will include broadcast seeding in the spring or fall with the seed being harrowed/dragged/raked/tracked into the ground immediately after seeding.

**Disturbance Areas and Reclamation Method Table**

<b>Disturbance Areas</b>	<b>Acres</b>	<b>Reclamation Method</b>
<b>Ore Blocks</b>	13.9	Stockpiled overburden would be backfilled into the quarry and topped with soil from stockpiles directly north of the disturbed area being reclaimed. The area would be graded to match surrounding terrain (Exhibit C). There would be a change in post-mine contours compared to pre-mine contours.

<b>Soil/Overburden Stockpiles</b>	9.1	The area would be ripped and seeded. No soil or overburden replacement would be necessary. There would be no change from pre- mine contours.
<b>Haul Road</b>	0.2	MSHA safety berms would be constructed from topsoil. The compacted roadbed would be ripped prior to the soil berms being pulled back over the road area and seeded.
<b>Sediment Control Structures</b>	1.3	The structures would be graded to pre-existing contours and topped with soil and seeded.
<b>Parking Area</b>	1	The area would be ripped and seeded.
<b>All other compacted areas</b>	≤3.8	The area would be ripped and seeded.
<b>Total</b>	29.3	All disturbances would be reclaimed

Some land disturbed in the permit area was used to mine gravel and rock; areas undisturbed in the proposed permit area provide wildlife habitat and grazing. Nearby land is presently used for grazing and wildlife habitat. Public access to the mine area is limited due to location and surrounding private lands. All lands disturbed by mining would be reclaimed to grassland habitat suitable for wildlife or domestic grazing. The access road (Exhibit B) would be left for post mine use as desired by the landowner. All other mining disturbances would be reclaimed. Seedbed preparation would include broadcast seeding in the spring or fall with the seed being harrowed/dragged/raked/tracked into the ground immediately after seeding.

All areas to be reclaimed would be seeded with the following mixture. The mixture may be modified as approved by the DEQ. All disturbances would be seeded within 48 hours of soil manipulation with 25.7 lbs. per acre of pure live seed using the following species proportions.

#### Final Seed Mix

<b><i>Agropyron dasystachyum</i> / 'Critana' thickspike wheatgrass</b>	8.5
<b><i>(Agropyron riparium / 'Sodar' streambank wheatgrass)</i></b>	(8.4)
<b><i>Agropyron spicatum</i> / 'Secar' bluebunch wheatgrass</b>	9.3
<b><i>Agropyron trachycaulum</i> / 'Pryor, Revenue' slender wheatgrass</b>	5.5
<b><i>Lolium multiflorum</i> / annual ryegrass</b>	1.9
<b><i>Poa ampla</i> / 'Sherman' big bluegrass</b>	0.5
<b>Total</b>	25.7 lbs/acre

('Sodar')-can be used as a replacement for 'Critana'

Seed would be drilled or broadcast. Seed broadcast on slopes of 2.5:1 or steeper would be tracked into the ground by a dozer which would reduce erosion potential. Where drill seeding is not possible the pounds per acre rate would be doubled. Reclaimed areas would be evaluated for weed infestations.

Several different strategies may be used to effectively control any weed infestations. Integrated pest management strategies that may be used on state and county listed noxious weed species can include: herbicide applications, grazing, cutting, burning, pulling, and bio-controls. Holcim would follow its approved Judith Basin County weed control plan.

All reclamation would be monitored annually for success. Reclaimed areas which do not reestablish at least 15 percent vegetation canopy cover within 2 years of seeding would be reevaluated for reseeding, additional soil application, or soil amendments. One or all three treatments would be applied if necessary. Areas which do not show adequate growth may be sampled to determine soil amendment recommendations. No continuous monitoring of soil quality to determine soil amendment requirements is planned.

Because of the absence of ground and surface water in the mine area, it is not anticipated that there would be any surface water runoff problems. There are no water resources on or within the permit area and no acid rock drainage has been historically associated with this type of mining.

No water impounding structures exist at the mine. Little offsite flow can occur and no offsite flow has been observed. If excessive erosion or stormwater runoff does occur, stormwater retention ponds or diversion ditches would be constructed and equipped with spillways to handle a 100-year flood. No sediment, erosion, or other water quality problems are anticipated. Locations for possible sediment control structures are marked on Exhibit B.

All reclamation would be monitored annually for excessive runoff and erosion. Any excessive erosion would be contained on site through the use of sedimentation ponds and diversion ditches. Excessive erosion that has potential to damage the reclamation (i.e., slope failures, deep rilling, etc.) would be repaired using appropriate equipment and BMPs. There are no water resources on the mine. The mine site has not experienced significant erosion in the past.

All operations have and would be conducted to avoid range and forest fires, and spontaneous combustion. An emergency action plan is in place at the mine site to prevent and extinguish fires. Fire extinguishers are readily available in mobile equipment onsite.

No excessive wind erosion has occurred at the mine to date. Road and mine areas are monitored for potential airborne dust. Dust would be controlled by spraying water and/or water mixtures containing dust abatement compounds from a water/tanker truck.

Exhibit B shows the current soil stockpile and volume. There are no facilities or permanent structures located at the Geyser Mine. There are no mill tailings or other ore processing waste associated with this mining. Any ore stockpiles remaining at the end of mine life would be graded to contour before final reclamation. All waste materials would be hauled offsite for appropriate disposal. The volumes for all soil salvaged, stockpiled, or utilized for reclamation would be reported in the annual report. Volumes of overburden and other stockpiled material would be reported in the annual report.

There are no stream channels located in the permit area. No streams would be impacted by the proposed operation. Weed control and vegetation monitoring would be performed until bond is fully released by the DEQ.

CHECKLIST ENVIRONMENTAL ASSESSMENT

Environmental Assessment (EA) Legend:

N = Not present or No Impact will occur.

Y = Impacts may occur (explain under Potential Impacts).

NA = Not Applicable

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	<p>[Y] <i>Proposed Action:</i> The ore to be mined is 90 percent gypsum (calcium sulfate), a light-colored, sedimentary mineral. Sedimentary gypsum is formed by precipitation from saturated brines that are high in the elements calcium and sulfur. It is found in layers that were formed under salt water millions of years ago. The water evaporated and left the minerals. It is used to keep cement from hardening too fast. The gypsum being mined under the exploration license is being excavated in blocks up to four feet across.</p> <p>The deposit was mapped in 1954 as part of the Heath Shale of the Mississippian Big Snowy Group rather than as part of the Otter Formation. The ore body is about 10-20 feet thick and dips up to 15 degrees to the north. The ore body is exposed on the south side of the mine area. Gypsum is basic, non-acid producing, and has minimal potential to contain asbestiform minerals. There are no unusual or unstable geologic features in the area. Almost 29.3 acres of land would be disturbed by mining. The loss of the gypsum would be an irretrievable loss of the resource as a result of permitting the mine.</p> <p>Soils that developed since the last ice age could be disturbed over the life of the mine. Salvageable soil in the area ranges from 9-26 inches over rocky subsoils and bedrock. Soil and overburden would be salvaged from all facility and mine areas. The overburden, which is weathered shale and sandstone, would be broken up in the removal process. The overburden would be backfilled into the pit and then covered with 17 inches of soil. The reclamation process would increase the overall productivity of the site. The hard gypsum outcrop that existed in the area before mining would be removed. Overburden and soil replacement would increase the rooting depth of reclamation plant species, increasing overall productivity of the site for the post mine land use-grazing and wildlife habitat.</p> <p>The soils present are not fragile, unstable, or overly erosive. The shale subsoils and overburden are susceptible to compaction. Holcim</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	<p>has committed to rip compacted surfaces before seeding. This would minimize compaction, increase infiltration, and limit erosion.</p> <p>Salvaged soil replacement would minimize the loss of soil development which has occurred. Decades of time would be needed to reproduce new soil horizons, structure, organic matter content, and other soil and chemical soil properties lost as a result of the disturbance. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] <i>Proposed Action:</i> There are no surface or groundwater resources present on the site that would be disturbed. Best Management Practices (BMPs), such as small settling basins, rock check dams, and soil berms would be used to control runoff from precipitation events. No stormwater would exit the permit area.</p> <p>The nearest well is located over 1,000 feet away. There would be minimal potential for nitrate residues from blasting to reach the water table.</p> <p>A tanker truck would bring water to the site for road maintenance and dust control.</p> <p>The estimated depth of mining would be less than 30 feet. The estimated high water table is greater than fifty feet below the surface of the quarry floor. There is minimum potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality.</p> <p>No important surface or groundwater resources are present in the area to be impacted by the mine or access road. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality</p>	<p>[N] <i>Proposed Action:</i> The project location is not near any area influenced by air quality regulations or zones such as a Class I airshed. The winds in the area would limit any potential for dust or fumes to</p>

**IMPACTS ON THE PHYSICAL ENVIRONMENT**

regulations or zones (Class I airshed)?

accumulate on site to any degree. The rocky soil and subsoil would limit blowing dust. An air quality permit would not be required for the site as no on site crushing is proposed. Dust control would consist of spraying water during mining and hauling operations.

Fugitive dust control BMPs would reduce emissions associated with traffic on access roads in the project area. Air emission pollutants and particulates would be produced but they would be below any regulatory requirement. No modifications to the Proposed Action have been identified.

*No Action:* If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.

4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?

[Y] *Proposed Action:* The existing vegetation is mostly native range/grassland dominated by cool season grasses. Native vegetation communities would be disturbed as a result if the mine is permitted. This would result in an irretrievable local loss of many native species.

Some noxious weeds, mostly leafy spurge, exist on the site. The landowner has been spraying the weeds with excellent results (Jim Croff, *personal communication* to Patrick Plantenberg, February 26, 2013). Holcim commits to spray the mine area twice a year for all weeds listed in the Judith Basin Noxious Weed Management Plan or to hire the landowner to conduct the weed spraying and to seed disturbed areas to limit weeds. It is expected that Holcim and its contractors would inevitably introduce other noxious weeds on the site over the life of the mine. Aggressive weed control and seeding along access roads would limit weed spread.

Holcim has proposed a mostly native seed mix for the site. The landowner would develop a seed mix for the site with the help of the local Natural Resources and Conservation Office personnel (Jim Croff, *personal communication* to Patrick Plantenberg, February 26, 2013). The landowner can use any seed mix approved by DEQ.

There are no known endangered or sensitive plant species in the proposed disturbance area. Native vegetation communities would be impacted but the total disturbance of the existing vegetation communities on the site would be minor. No rare plants or cover types are present on the site. No modifications to the Proposed Action have been identified.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	<i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds, or fish?	<p>[Y] <i>Proposed Action:</i> Wildlife habitat would be disturbed over the life of the mine. There is no substantial use of the area by important wildlife, birds, or fish. Mule and whitetail deer, pronghorn antelope, and sharptail grouse are found in the area. No impacts to terrestrial, avian, and aquatic life and habitats are expected. There are no known endangered or sensitive wildlife species in the proposed disturbance area.</p> <p>A sensitive reptile has been observed in a riparian habitat over a mile southwest of the permit area. No riparian habitats would be disturbed by the proposed mine area. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	<p>[N] <i>Proposed Action:</i> The mine disturbance would not cause impacts to any federally threatened, endangered, or sensitive species or habitats. A review by the Montana Natural Heritage Program revealed one reptile species of special concern that exists near the area, but not within the proposed permit boundary. The quarry offers potential habitat (sandy/gravelly soils) for the greater short-horned lizard. These habitat types are readily available in the Geyser Mine area. No wetlands would be disturbed. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.</p>
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?	<p>[N] <i>Proposed Action:</i> There are no known historical, archaeological, or paleontological resources present on the site. The Heath Shale is known to contain some fossils. A records search by the State Historic Preservation Office indicated that there are no known cultural areas of concern in the proposed permit area. The operator would provide protection for archaeological and historical sites if they are discovered. No modifications to the Proposed Action have been identified.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	<i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	<p>[N] <i>Proposed Action:</i> The project is not on a prominent topographic feature visible from any major highway or the town of Geysers. The mine would not be visible from populated or scenic areas. There would not be excessive noise or light.</p> <p>The area is a small historic quarry site, in a remote area, with disturbances going back to the early 1900's. The area has been quarried for the last six months under an exploration license. Disturbed areas would be regraded to 2.5:1 or less, soiled, and seeded. No highwalls would be left. Overburden and soil would be spread and seeded.</p> <p>Work at the quarry and hauling from the site would occur during daylight hours, normally from 6 am to 7 pm, Monday through Saturday, campaign style.</p> <p>Noise would be generated as material is removed, sized, and loaded into haul trucks. The site, and all the land around it for a distance of more than one-half mile, is owned by one landowner. The nearest neighbor is over one mile away. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no impacts other than those previously disclosed under the exploration plan environmental review.</p>
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR, OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	<p>[N] <i>Proposed Action:</i> The project would not use resources that are limited in the area. There are no other activities nearby that would affect the project. Water would need to be brought to the site for dust control. Water would be hauled by a tanker truck to the site. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no further disturbance than that approved under the exploration plan.</p>
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	<p>[N] <i>Proposed Action:</i> There are no other activities in the area that would affect this project. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT

further disturbance than that approved under the exploration plan.

IMPACTS ON THE HUMAN POPULATION

11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?

[N] *Proposed Action:* The project would not add to health and safety risks in the area. The project would use existing roads. No comments were received after the public notice of the application for an operating permit was published. Holcim has graveled some portions of the haul road during the exploration program. No additional impacts from what currently exist are expected with approval of this operating permit. The Mine Health and Safety Administration would regulate mine safety during operations. No modifications to the Proposed Action have been identified.

*No Action:* If the No Action Alternative is selected, there would be no additions to health and safety risks in the area.

12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?

[Y] *Proposed Action:* The Holcim Trident plant has been bringing in gypsum from Wyoming. The project would add mining jobs and truck driving jobs to the Montana economy. Wyoming would lose the economic benefits. The proposed project would have minimal impacts on the landowner's ranching operations. No modifications to the Proposed Action have been identified.

*No Action:* If the No Action Alternative is selected, there would be no changes in industrial, commercial, and agricultural production in the area.

13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.

[Y] *Proposed Action:* The project would create and move seasonal jobs in Montana and eliminate jobs in Wyoming as explained above under #12. Up to eight equipment operators and truck drivers would be employed as a result of the proposed mine. No modifications to the Proposed Action have been identified.

*No Action:* If the No Action Alternative is selected, there would be no changes in employment in the area.

14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?

[Y] *Proposed Action:* The project would create tax revenue. No modifications to the Proposed Action have been identified.

*No Action:* If the No Action Alternative is selected, there would be no changes in tax revenue.

**IMPACTS ON THE HUMAN POPULATION**

<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>[N] <i>Proposed Action:</i> The mine would not impact government services. Three to six truckloads of rock would be hauled per day during the operating season. Other additional services (fire protection, police, schools, etc.) would not be needed. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no changes in traffic or services.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N] <i>Proposed Action:</i> There are no local zoning or management plans in effect in the area. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no changes in zoning or management plans.</p>
<p>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>[N] <i>Proposed Action:</i> The Proposed Action would not impact any wilderness or recreational areas. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no changes in access or recreational potential.</p>
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N] <i>Proposed Action:</i> The Proposed Action would not cause impacts to the density and distribution of population and housing. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no changes in population and housing.</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N] <i>Proposed Action:</i> Approval of the operating permit is not expected to disrupt native or traditional lifestyles or communities. No modifications to the Proposed Action have been identified.</p> <p><i>No Action:</i> If the No Action Alternative is selected, there would be no disruption of native or traditional lifestyles or communities.</p>
<p>20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>[N] <i>Proposed Action:</i> Approval of the operating permit is not expected to cause impacts to cultural uniqueness and diversity. No modifications to the Proposed Action have been identified.</p>

IMPACTS ON THE HUMAN POPULATION	
	<i>No Action:</i> If the No Action Alternative is selected, there would be no shift in some unique quality of the area.
21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N] <i>Proposed Action:</i> The Proposed Action would not restrict private property use. No modifications to the Proposed Action have been identified.  <i>No Action:</i> If the No Action Alternative is selected, there would be no Restrictions on use of private property.
22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	[N] <i>Proposed Action:</i> The proposed regulatory action does not restrict the use of the regulated person's private property. No modifications to the Proposed Action have been identified.  <i>No Action:</i> If the No Action Alternative is selected, there would be no Restrictions on use of private property
23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.	[Y] <i>Proposed Action:</i> The agency has legal discretion to impose or not impose a proposed restriction or discretion as to how the restriction will be imposed. No restrictions are proposed. No further analysis is required. No modifications to the Proposed Action have been identified. The agency has determined that there are no alternatives needed that would reduce, minimize, or eliminate the restriction on the use of private property.
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	None.

25. ALTERNATIVES CONSIDERED: NO-ACTION ALTERNATIVE (DENY THE APPLICANT'S PROPOSED ACTION): The No-Action Alternative would not allow implementation of the Proposed Action. This means that the mine could not expand beyond the disturbance allowed under the exploration license. Holcim would have to reclaim the site.

26. APPROVE THE APPLICANT'S PROPOSED ACTION: The Proposed Action would allow additional disturbance beyond the disturbance allowed by the exploration license.
27. APPROVE THE AGENCY MODIFIED PLAN: No mitigations are proposed.
28. PUBLIC INVOLVEMENT: Legal notices of the receipt of an application for an operating permit were sent to the Great Falls Tribune and Lewistown News-Argus on December 12, 2012 to be published three weeks in a row followed by a public news release. No comments were received that expressed concern about the Proposed Action. A public news release will be issued along with this EA. A legal notice concerning the application and availability of this EA will be published, and a public comment period provided.
29. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION: None.
30. MAGNITUDE AND SIGNIFICANCE OF POTENTIAL IMPACTS: There would be no significant environmental impacts associated with this proposal. As noted, there would be impacts to soil and vegetation on the disturbed acres. These acres would be reclaimed at closure.
31. CUMULATIVE EFFECTS: There are no other proposals in the area that would add to the cumulative effects from this proposal.

**RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS:** The agencies have concluded that impacts from the proposed action would be minimal.

EIS     More Detailed EA     No Further Analysis.

The DEQ has selected the Approve the Applicant's Proposed Action as the preferred alternative.

**EA Checklist Prepared By:**

Patrick Plantenberg, DEQ Reclamation Specialist

**This EA was reviewed by:**

Herb Rolfes, DEQ Operating Permits Section Supervisor

Warren McCullough, DEQ, Environmental Management Bureau, Chief

**Approved By:**

Warren D. McCullough  
Signature

4/5/13  
Date

Warren D. McCullough, Chief, Environmental Management Bureau, DEQ