BEFORE THE ENVIRONMENTAL QUALITY COUNCIL STATE OF WYOMING

N THE MATTER OF OBJECTION TO)	
THE MINING PERMIT APPLICATION)	
OF MOUNTAIN CEMENT COMPANY)	DOCKET NO. 07-4804
PERMIT NO. 298C. TFN 4 2/220)	

MOUNTAIN CEMENT COMPANY'S RESPONSE

Mountain Cement Company (MCC) submits this Response in a good faith attempt to resolve this matter. In the event that Mr. Watikus agrees to withdraw his objections, MCC will agree as follows:

1. Revision to Mine Plan pages MPVIII-6 through MPVIII-8

MCC offers to change Section MPVIII 4.4 (Blasting) of its Mine Plan to conform to the same blasting requirements which were approved by DEQ/LQD as part of MCC's permit 298C-A5. Attached as *Exhibit A* are draft revised pages MPVIII-6 through MPVIII-8, which will accomplish this offer.

2. Revision to Mine Plan page MPVIII-14

MCC offers to change Section MPVIII 4.8.9 (Surface Water and Ground Water Monitoring During Mining) of its Mine Plan, page MPVIII-14, to include a sentence stating that the monitoring will be done on a quarterly basis. MCC also offers to change Section MPVIII 4.9 (Public Nuisance and Safety) to include a requirement that MCC will avoid shining stationary lights on homes to the north and northwest. Attached as *Exhibit B* is proposed revised page MPVIII-14, which will accomplish this offer.

3. Revision to Reclamation Plan page RPVIII-11

MCC offers to change Section RPVIII 6.0 (Reclamation Schedule) of the Reclamation Plan, page RPVIII-11, to remove the errant reference to "RP-3 block." Attached as *Exhibit C* is proposed revised page RPVIII-11, which will accomplish this offer.

4. Revision to Appendix DVIII6 (Hydrology), pages DVIII6-1 and DVIII6-6

MCC offers to change Section DVIII6.1 (Introduction) of the Hydrology Appendix, page DVIII6-1, to clarify the location of ephemeral drainages (E9 and E12) in relationship to the mining areas in Area C. MCC also offers to change Section DVIII 6.3 (Surface Water), page DVIII6-6, to correct the "E10" typographical error to correctly state "E12". Attached as *Exhibit D* are proposed revised pages DVIII6-1 and DVIII6-6, which will accomplish this offer.

5. Stipulated Resolution to Objections, dated October 16, 2006, as it applies to Area C, to be made a condition to Permit 298c-A7

MCC offers to clarify that the *Stipulated Resolution to Objections*, Permit 298C-A5, TFN 4 4/296, dated October 16, 2006, between MCC and Mr. Waitkus, as the *Stipulated Resolution to Objections* as applicable to Area C, is part of MCC's permit 298C-A7. Attached as *Exhibit E* is the *Stipulated Resolution to Objections*.

DATED October 22, 2007

Mountain Cement Company

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Attorneys for Mountain Cement Company

CERTIFICATE OF SERVICE

I, Mitchell H. Edwards, certify that the foregoing was served by U.S. Mail, postage prepaid, and by e-mail to the following people on the 22nd day of October, 2007:

Mr. Brian R. Waitkus 80 Eagle Nest Lane Laramie, Wyoming 82070 wildphotol@juno.com Objector

John S. Burbridge Senior Assistant Attorney General Wyoming Attorney General's Office 123 Capitol Building Cheyenne, Wyoming 82001 307-777-7823 JBURB1@state.wy.us Wyoming DEQ-LQD

Mitchell H. Edwards

Mathe March



MPVIII-4.4 Blasting

Mountain Cement Company must use blasting methods to economically mine limestone. There are homes within one-half mile of the Area C quarry site. When blasting, Mountain Cement Company agrees to comply with the following conditions, as applicable.

A. General Requirements for all Blasting.

The following procedures will be followed for all blasting within the entire permit area:

- 1. Mountain Cement Company agrees to use blasting methods and techniques as described in <u>Rock</u> Blasting & Explosives Engineering handbook, Per-Anders Persson, Roger Holmberg, and Jaimin Lee, 1994.
- 2. The coal surface mine blasting limitations for peak particle velocity and PSI over pressure contained in Chapter 6 of the Rules and Regulations enforced by the Department of Environmental Quality, Land Quality Division, will be applicable to this quarry operation. Blasting contractors will be advised by MCC of the location of nearby structures and they will adjust their detonation design appropriately. (See MPVIII 4.5 and MPVIII 4.6).
- 3. Mountain Cement Company will maintain records of its blasting operations which will be made available to the Administrator or the Land Quality Division upon request. The records will be available for three years following any blast.

The records shall include the following information:

- a. Name of permittee, operator, or other person conducting the blast;
- b. Location, date and time of blast;
- c. Name, signature, and certification number of blaster conducting blast;
- d. Identification, direction and distance, in feet from the nearest blast hole to the nearest dwelling, outside the amendment area;
- e. Type of material blasted;
- f. Diameter and depth of holes;
- g. Types and amounts of explosives used;
- h. Number of holes loaded and detonated;
- i. Number of delays and number of holes per delay detonated;
- j. Maximum weight of explosion detonated within any 8 millisecond period;
- k. Initiation systems;
- 1. Type and length of stemming;
- m. Direction of prevailing wind and weather conditions at time of blast.
- n. Burden and spacing distances with hole diameter and depth;
- o. Total weight of explosives per hole; and
- p. A shot diagram will be attached to the report.

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- 4. Mountain Cement Company will follow the requirements of Wyoming Statutes § 30-2-501 to 503, Article 5. Shot-Firers, which require that blasting be done under the supervision of a State certified shot-firer.
- 5. Mountain Cement Company will attempt to limit blasting to once per week. This will be increased if there is a limestone shortage, quality control problems or overburden to be blasted.
- 6. Mountain Cement will make every effort to avoid blasting when the wind is toward any residence or residential area. If a blast is prepared when the wind is not toward a residence or residential area, the blaster may nonetheless detonate the blast.
 - 7. No blasting will take place prior to sunrise or after sunset.

B. <u>Additional Requirements when Blasting in the Proximity of Homes.</u>

When Mountain Cement Company blasts within 500 feet of its permit boundary in the proximity of homes, the following additional procedures will be followed:

- a. The shot pattern will be decreased to an 8 X 8 pattern;
- b. The diameter of the holes will be decreased to no more than 3 ½ inches;
- c. Mountain Cement Company will use adequate stemming to reduce flyrock; and
- d. All other procedures will be followed as previously described.

C. Additional Requirements when Blasting Downwind from Homes.

When blasting occurs in the permit area the following additional procedures will be followed:

- a. Mountain Cement will use its best efforts to prevent blasting between the hours of 12:00 AM to 1:00 PM, and after 3:00 PM;
- b. Mountain Cement will use its best efforts to avoid blasting when there is low cloud cover or a temperature inversion;
- c. Mountain Cement will use its best efforts to avoid blasting when the wind is blowing in the direction of nearby residences; and
- d. In the event that Mountain Cement is required to set off a blast when the wind is in the direction of nearby homes, or when there is a temperature inversion, the Company will call (i) any nearby neighbors expected to be affected by the blast, and (ii) DEQ-LQD prior to settin off any such blast.

Because there may be times when the foregoing conditions may come into conflict, it shall be understood that the foregoing conditions are listed in order of priority, with the first being the most important, and the last being the least important. Once holes are loaded with blasting material it is understood that the blast will take place during that same day for the safety of all persons.

MPVIII-4.5 <u>Air Blast Limitations</u>

Airblast at any dwelling, public building, school, church and community or institutional building located outside of the permit area shall not exceed the values specified below unless the building is owned by the operator and is not leased to another, or, if leased to another, the lessee has signed a waiver relieving the operator from meeting the airblast values. If necessary to prevent damage the Administrator shall specify lower maximum

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Lower frequency limit of measuring system, Hz (+/-3dB)	Maximum level in dB
0.1 Hz or lower-flat response*	134 peak
2 Hz or lower-flat response	133 peak
6 Hz or lower-flat response	129 peak
C-weighted, slow response*	105 peak dBC

^{*}Only if approved by the Administrator.

At the request of the Administrator, the operator shall conduct periodic monitoring to ensure compliance with the airblast standards. The Administrator may request copies of complaints when blasting in sensitive areas, and in areas where there is reason to believe airblast limits may be exceeded. The measuring systems shall have a upper-end flat frequency response of at least 200 Hz.

MPVIII-4.6 <u>Peak Particle Velocity Limitations</u>

Maximum peak particle velocity applicable when seismograph records are provided for each blast:

Distance (D) from the Blasting Site in Feet	¹ Maximum allowable peak particle velocity (vmax) for ground vibration in inches/seconds ¹	² Scaled distance factor to be applied without seismic monitoring
0 to 300	1.25	50
301 to 5,000	1.00	55
5,001 and beyond	0.75	65

¹Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements.

An operator may use the scaled-distance equation, $W=(D/Ds)^2$, to determine the allowable charge weight of explosives that can be detonated in any 8 millisecond period without seismic monitoring (where W= the maximum weight of explosives, in pounds; D= the distance, in feet, from the blasting site to the nearest protected structure; and Ds= the scaled-distance factor, which may initially be approved by the Administrator using the values for scaled distance factor listed in the above paragraph).

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²Applicable to the scaled-distance equation of the following paragraph.



MPVII-4.8.9 Surface Water and Ground Water Monitoring During Mining

Ground water samples will be taken from the Proposed Monitoring Well (PMW) #1, adjacent to the active mine area (Map MPVIII-1). The monitoring well will be monitored quarterly, and monitoring results will be submitted in the annual report. A baseline sample will be obtained for the new well prior to mining. Also, baseline analysis of the physical and chemical characteristics of the local ground water has been completed from Soldier Springs No. 2 (P45893W) (see Appendix DVIII6-Hydrology). The analysis includes testing for hardness, alkalinity, nitrate, petroleum hydrocarbons, conductivity and recording ground water levels.

MPVIII-4.9 <u>Public Nuisance and Safety</u>

This operation should not adversely impact human or other environmental resources. Trucks will generally be operated on a continuous time schedule, and hauling will take place seven days a week because the main processing plant operates on a 24-hour per day, 7 day per week schedule. Current production estimates require a minimum of 60 truckloads per day, but this could change if process modifications require more limestone. Private vehicle traffic should be minimal.

When excavated, the pit will be approximately 8 to 15 feet below the current ground surface (minimum). The pit area will negate the affects of daytime blasting.

The effects of dust created by crushing and hauling activities on nearby residences will be minimized to the maximum extent practicable by the use of dust suppressants (e.g. water, magnesium chloride). The effects of dust caused by blasting will be minimized by coordinated all blasts with climatic conditions to mitigate the migration of dust to residences (to the extent practicable).

During nighttime operations MCC will avoid shining stationary light plants on homes to the north and northwest.

MPVIII-4.10 Archaeological and Paleontological Resources

Archaeological or paleontological resources have not been observed within the Area C Limestone Quarry area. Any unanticipated archaeological or paleontological resources encountered will be immediately reported to the appropriate state and federal agencies.

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trees planted will be replaced. Planting locations will be selected to best ensure survival and will be near the existing trees and drainage.

RPVIII-5.4 <u>Protection of Seeded Areas</u>

All seeded areas may be fenced if deemed necessary based upon land uses at the time of reclamation. If necessary, noxious weeds will be sprayed and eliminated as much as feasible. The decision to allow grazing when vegetation has been established will be made by the LQD, Mountain Cement and the landowner. The fence will be constructed according to WDEQ/LQD Guideline No. 10, Type III. Fences will be maintained two years or longer depending on vegetation stand establishment.

RPVIII-5.5 Access Road Reclamation

The access roads will be reclaimed unless otherwise agreed to by the property owner (State of Wyoming). This includes re-contouring, topsoil replacement, scarifying, seeding, and mulching.

RPVIII-6.0 Reclamation Schedule

Reclamation activities will be completed within approximately 2 years after mining is completed in limestone Area C mining area.

RPVIII-7.0 Reclamation Costs

Mountain Cement estimates that no more than 9.0 acres will be disturbed at any one time. Reclamation areas will require overburden replacement, re-contouring, topsoil replacement, final grading, and seeding. Table RPVIII-4 includes the cost estimates for reclaiming 9.0 acres of quarry disturbance.

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Appendix DVIII6

Hydrology

EXHIBIT D

DVIII6.1 Introduction

The Section 36 Area C Limestone Quarry is located in Albany County of Wyoming approximately 7 miles southeast of Laramie. Access to the site is by way of Howe Lane Road to the Etchepare mining pits, and then from there, west to the Area C Limestone Quarry. The permit area is found in the NE½NE½ of section 36, T15N, R73W, of the 6th P.M. The proposed expansion amendment occupies approximately 40 acres but the affected/disturbance will be only about 33.9 acres or less.

Jim Orpet of Intermountain Resources compiled land use information for the Etchepare Amendment/Permit application (A5 amendment, Appendix DVII6) during October 1995 (revised 11/25/96). This information was approved in 1998 and is found in the Etchepare Amendment/Permit application. Because the Area C Limestone Quarry (amendment A7) is located adjacent to the Etchepare Quarry (amendment A5), the Appendix DVII6 was used as a source and reference.

The limestone bed to be mined dips gently to the west. Portions of the bed are covered with overburden (sandstone) while the remaining areas are exposed cap rock. Ephemeral drainages (E9 and E12) bound the southern mining area on the north and south sides, and ephemeral drainage E12 bounds the northern mining area on the south side. Topographical relief across the entire amendment area ranges from 7600 feet in the west to 7740 feet in the east boundary.

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DVIII6.2.4 Groundwater Summary

Mining will occur in the Casper Formation, extracting exposed limestone outcrops from the relatively near-surface. Mining will take place 180-200 feet above the piezometric surface of the groundwater. Due to the hydraulic conductivity of this formation, water will readily travel down dip, until it reaches a point where the voids in the formation are saturated with water. The Area C Limestone Quarry is identified to be located in the recharge zone of the Casper Aquifer.

The water from these wells is hard, with a fairly neutral pH, and low concentrations of total dissolved solids. Nitrate and sulfate concentrations are low. Alkalinity is at or near the limit for what is considered good drinking water. The overall water quality is good for human consumption, as is generally the case with water from the Casper Formation.

Impacts to the groundwater should me minimal, because of 1) the relatively shallow depth of mining activity, 2) the relatively near surface limestone extraction, and 3) mining will not occur within any saturation zones (180-200 feet above the piezometric surface). Please refer to section DVIII6.6 for discussion of any possible impacts to groundwater.

DVIII6.3 Surface Water

DVIII6.3.1 Drainage Basin Description

The Area C Limestone Quarry is primarily located in the central area of two identified watershed/drainage basins, formed from the identified E9 and E12 channels (identified from the Etchepare amendment). Please refer to Map DVIII6-2 for channel locations. Only about 9.0 acres of the area will primarily be affected. The general slope of the area is about 8-10%. The aspect of the watershed is predominately west.

All channels (E9 & E12) flow ephemerally to the west. Because of the ephemeral nature of these streams, they are considered as class 4 streams by the WDEQ (Wyoming Department of Environmental Quality 1990). In general, these channels demonstrate little lateral development, but many channels have formed deep gullies and canyons, with ledges forming natural drops, and pools.

Ultimately, the water from each watershed discharges into the Larmie River. The E9 and E12 channels make it to the Laramie River via Gilmore Gulch.

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BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY LAND QUALITY DIVISION STATE OF WYOMING

EXHIE	BIT F
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		EXHIBITE
IN THE MATTER OF THE MINE PERMIT AMENDMENT)	
APPLICATION OF MOUNTAIN CEMENT COMPANY,)	
TO PERMIT NO. 298C- A5; TFN 4 4/296.)	

STIPULATED RESOLUTION TO OBJECTIONS

I. RECITALS.

- A. Mountain Cement Company (MCC) filed an application with the Department of Environmental Quality, Land Quality Division (LQD) to revise its mining permit 298C-A5 which was first approved January 5, 1998, by the LQD. The purpose of this application is to allow mining to take place in more than one mine sequence area at the same time and to immediately open a quarry in Mine Sequence Area 5.
- B. MCC=s application was protested by Brian R. Waitkus in a letter dated September 6, 2006.
- C. An informal meeting was held by the LQD on September 21, 2006, at LQD's offices in Cheyenne, Wyoming, to attempt resolution of the protest filed by Mr. Waitkus. The meeting was attended by the Administrator and Staff of LQD, representatives of MCC, and Mr. Waitkus. Those negotiations were there after continued, resulting in this Stipulated Resolution.
- D. MCC and Mr. Waitkus have agreed to the following additional conditions to the approval of MCC=s permit application TFN 4 4/296 which revises MCC's existing Permit 298C-A5.
- E. This Stipulated Resolution resolves the objections raised by Mr. Waitkus to the issuance of TFN 4 4/296.
- F. This Stipulated Resolution to Objections supersedes and replaces the *Stipulated Resolution to Objections dated January11*, 2004, in TFN 4 3/119, entered into between Brian R. Waitkus and Mountain Cement Company and approved by the DEQ, resulting in the dismissal of Docket No. 03-4805 before the Environmental Quality Council on January 11, 2004.

II. ADDITIONAL STIPULATED CONDITIONS/MODIFICATIONS TO PERMIT.

Mountain Cement Company agrees that the following additional conditions be made a part of TFN 4 4/296 which amends MCC's Permit No. 298C-A5:

1. The Stipulated Resolution to Objections dated January 11, 2004, in TFN 4 3/119,

- entered into between Brian R. Waitkus and Mountain Cement Company and any conditions adopted by the DEQ implementing that agreement, are hereby rescinded and replaced in total by this agreement and the conditions to be adopted herein.
- 2. MCC agrees that it has completed mining limestone in Area A identified on the attached Exhibit A.
- 3. MCC agrees that it will not mine limestone within the area identified as "Area S-2" on the attached Exhibit A. The foregoing restriction does not prohibit MCC from placing, storing or stockpiling topsoil or overburden within Area S-2.
 - Area S-2 encompasses an area 200 feet in width along the length of the northern most boundary line of NE1/4NE1/4 of Section 36, T15N, R73W, Albany County, Wyoming.
- 4. Upon issuance of a permit to mine Area C as identified on Exhibit A, MCC agrees to commence mining limestone from Area C as soon as practicable.
- 5. Following initial disturbance within Area C as identified on Exhibit A, which is agreed to be the commencement of removing topsoil and overburden, MCC agrees as follows:
 - i. To complete all mining of limestone within Area C as soon as practicable. It is understood that MCC will have to mine from other areas within the Etchepare Quarry to blend with limestone extracted from Area C; and
 - ii. To re-seed Area C north of the southern most drainage within 12 months of completion of mining the limestone north of the southernmost drainage.
- 6. Upon issuance of TFN 4 4/296, MCC may proceed to mine in areas 7B, 6A and 6B at the same time. This will allow a greater selection of limestone for blending with Area C limestone, to promote faster consumption of the Area C limestone.
- 7. MCC will restrict its mining within the Etchepare Quarry to Areas 7B, 6A and 6B so long as MCC is mining within Area C.
- 8. Once MCC completes mining within Area C, it may mine from Etchepare 5 as allowed by TFN 4 4/296.
- 9. MCC agrees that all crushing operations will be conducted outside of Area C as identified on Exhibit A.
- 10. In the event that MCC conducts screening operations within Area C, it shall construct a 10 foot high topsoil/overburden berm on the north end of its quarry operation and shall position its screening operations south of the berm.
- 11. It is understood that MCC's Application to Modify its Permit is granted subject to these additional conditions.

MCC agrees that the above conditions will be made a part of its Permit Application TFN 4 4/296.

III. FINAL RESOLUTION OF DISPUTES AND WITHDRAWAL OF OBJECTIONS.

Based upon the foregoing stipulations, Mr. Waitkus does hereby withdraw his objections to the proposed issuance of Land Quality Permit No. TFN 4 4/296 to MCC.

Mr. Waitkus waives any right to an additional hearing on the permit application before the Environmental Quality Council, and agrees that the Land Quality Division may issue a permit to MCC for its application TFN 4 4/296 with the additional conditions stipulated herein in Part II.

This Stipulated Resolution to Objections may be signed in counterparts by the undersigned. It will become effective when all of the undersigned have signed a copy of this Stipulation.

Mountain Cement Company, a Nevada Corporation

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Attorneys for Applicant Mountain Cement Company

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