EA Form R 1/2007

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* Ash Grove Cement Co.
100 Highway 518
Clancy, MT 59634

2. *Type of action:* Change Application No. 41I 30049510
Statement of Claim No. 41I 89439-00

3. *Water source name:* Groundwater

4. *Location affected by project:* SW ¼ NW ¼ NE ¼ , Section 13,
Township 9 N, Range 3 W,
Jefferson County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The applicant proposes to change the point of diversion for Statement of Claim No. 41I 89439-00 by adding a second point of diversion. The source for both the current and proposed points of diversion is groundwater. Both diversions consist of a well drawing from what is likely the same limestone aquifer. The current point of diversion has been in use for over 45 years and service of the well is difficult to impossible due to overhead electrical lines. Should a change authorization be issued, the applicant proposes to use the old well only for backup during times when the new well is off-line. The well serving the new point of diversion was completed in July, 2006.

The purpose (Industrial) would remain unchanged, as would all other elements of the water right claim. The Ash Grove Cement Co. has been manufacturing Portland cement at the location since 1962. The applicant proposes to draw water at a rate equal to or less than the claimed flow rate of 249 gpm. Additionally, the applicant proposes that the new point of diversion will divert and consume respective volumes of water equal to or less than what has historically been used.

The proposed additional point of diversion is located near Montana City at SW ¼ NW ¼ NE ¼ Section 13, Township 9 N, Range 3 W, Jefferson County.

The DNRC shall issue a change authorization if an applicant proves the criteria in § 85-2-402, MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction):

Montana Natural Heritage Program – Species of Concern
Montana Department of Fish Wildlife and Parks – Dewatered Streams List (5/2003)
U.S. Fish and Wildlife Service – Wetlands Mapper

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

***Water quantity* -** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: N/A

Although the groundwater source is likely hydraulically connected to Prickly Pear Creek, the potentially affected reach of Prickly Pear Creek has not been identified as chronically or periodically dewatered stream by DFWP.

***Water quality* -** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: N/A

Source is groundwater. No changes to existing water uses are anticipated.

***Groundwater* -** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: Minor Impact

No water quality impacts are anticipated as water use will remain unchanged.

It is projected that the zone of influence created by the new pumping well will shift to the southwest by approximately 650 feet. The nearest well to the proposed point of diversion is located approximately 1,400 feet away, but the actual existence and use of this well is in question. Regardless, it is anticipated that the maximum change in drawdown to this well is roughly 0.5% of the available drawdown (i.e. water column in well casing).

The new point of diversion is completed in the same limestone source aquifer as the existing diversion. Both wells are located similar distances to Prickly Pear Creek, the likely affected

surface water body. Thus, the rate and timing of stream depletions is projected to be minimal to non-existent.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No Anticipated Impact

The proposed diversion works (well completed July, 2006) consists of a 12-stage Byron Jackson (8GM) deep well turbine pump. Operating under a projected hydraulic head of 304 ft, the pump should be able to produce up to 275 gpm –roughly the same flow rate as the original diversion. Produced water will then be distributed throughout the facility using existing conveyance and storage infrastructure.

The proposed point of diversion is approximately the same distance from the nearest surface water body, Prickly Pear Creek, as the original point of diversion. The proposed point of diversion more than likely draws water from the same limestone aquifer as the existing well.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No Anticipated Impact

A March 4, 2011, Montana Natural Heritage Program query of the project area found five occurrences of plant and animal species of concern. The species include: lesser rushy milkvetch (Astragalus convallarius), northern goshawk (Accipiter gentillis), gray wolf (Canis lupus), wolverine (Gulo gulo), and Canada lynx (Lynx Canadensis).

Considering that the additional point of diversion was constructed in July, 2006 and that no other changes are proposed for the facility, it appears at this time that no adverse impact will occur to species of special concern, wildlife migration patterns or adjacent surface flows.

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: No Impact

A March 4, 2011, U.S. Fish and Wildlife Service's Wetlands Mapper program indicates that the proposed diversion will not adversely affect wetlands.

Ponds **-** *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: No Anticipated Impact

The proposed project involves the addition of a well –no change in the place or use of water will occur.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No Anticipated Impact

There will be no change in land use practices associated with this change. The well has been in place since July 2006.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No Anticipated Impact

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A

Project not located on State or Federal lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No Anticipated Impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The land where the project is located is zoned for industrial use by the Jefferson County Planning and Zoning Department. Thus, locally adopted environmental plans and goals have already been addressed.

Determination: No Anticipated Impact

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: Proposed project is located on private land long used for industrial purposes.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No Anticipated Impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
Yes___ No_X_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No Anticipated Impact

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* None

(*b*) *Local and state tax base and tax revenues?* None

(c) *Existing land uses?* None

(*d*) *Quantity and distribution of employment?* None

(e) *Distribution and density of population and housing?* None

(f) *Demands for government services?* None

(g) *Industrial and commercial activity?* None

(h) *Utilities?* Possible minor impact to local power distribution.

(i) *Transportation?* None

(j) *Safety?* None

(k) *Other appropriate social and economic circumstances?* None

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: No Anticipated Impacts

Cumulative Impacts No Anticipated Cumulative Impacts

3. Describe any mitigation/stipulation measures:

None. The proposed change will use water for the same purpose, at the same location, and at the same volume and rate.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

The no action alternative is a denial of the change authorization. Such an action would hinder the applicant's cement production.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is to grant the proposed point of diversion change.

2 Comments and Responses

None

3. *Finding:*
*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts have been identified, thus, an EIS is unnecessary.

Name of person(s) responsible for preparation of EA:

Name: Bryan Gartland
Title: Hydrologist / Water Resource Specialist
Date: April 20, 2011