

DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMITTING AND COMPLIANCE DIVISION
ENVIRONMENTAL MANAGEMENT BUREAU

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RECEIVED

PO BOX 200901
HELENA, MONTANA 59620-0901

DEC 10 1998

December 9, 1998

**ENVIRONMENTAL
QUALITY COUNCIL**

Dear Reader:

Enclosed for your review is an Environmental Assessment (EA) prepared by the Department of Environmental Quality - Hard Rock Program. The EA evaluates a proposal by Black Diamond Aggregates, Inc. requesting an amendment to their operating permit to increase their permit area from 60 acres to approximately 120 acres.

Public comment on this EA will be received by the Department of Environmental Quality until 5:00 p.m. January 7, 1999. Comments should be about the adequacy of the EA in assessing issues, new information not considered that may influence the analysis, and any clarification of issues the reader feels are warranted. Comments should be specific in nature and germane to issues related to the proposed action. The Department will use these comments, agency responses, the EA, and the application to make a final decision on the application. The decision will be to either approve or deny the proposal. Modifications to the proposed action may be made by the Department based on information received during the comment period.

Written comments should be directed to:

Peter Werner
Department of Environmental Quality - Hard Rock Program
PO Box 200901
Helena, MT 59620-0901

Thank you for your time and consideration. Please call Peter Werner (444-2468) if you have any questions or desire to give verbal comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Werner".

Peter Werner, P.E.
Hard Rock Program
Department of Environmental Quality

PW/smb
Enclosure

fc: 00089.37

CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Black Diamond Aggregates, Inc. **Project:** Merriman Quarry

LOCATION: 2849 Highway 89 South **County:** Park

PROPERTY OWNERSHIP: Federal State Private

TYPE AND PURPOSE OF ACTION: This Environmental Assessment is being prepared in response to a request for a minor amendment to Black Diamond Aggregates, Inc.'s operating permit #00089. This application for amendment requests an increase in permit and disturbance acreage above and beyond what is currently permitted.

PROPOSED PLAN: The applicant is proposing to expand the operation of an existing stone and aggregate quarry. This facility was originally permitted in 1977, and has produced sporadically over the intervening years. The proposed plan calls for an increase in permit acreage from 60 acres to 119.2, an increase of 59.2 acres. The proposed acreage to be disturbed over the course of the mine life will increase from a current disturbance of approximately 55 acres to a total disturbance of approximately 87 acres, or an increase of 32 disturbed acres. The majority of the new disturbed acres will come from an expansion of the quarry pit.

In-pit quarry operations (blasting, crushing and segregating) are expected to take place during a two to eight week period in any given year. Activities over the balance of the year will involve product sale and load-out. Black Diamond Aggregates, Inc. anticipates production of approximately 100,00 tons per year. This volume of production, especially after years of inactivity at the quarry site, will generate an increase in traffic (haul trucks) along this portion of Highway 89S. The expected life of the mine is being projected at 64 years.

N = Not present or No Impact will occur.
 Y = Impacts may occur (explain under Potential Impacts).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
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?	[Y] Topsoil is scarce to non-existent on the mine site. Average topsoil depths range from 0" - 6". Great care will be required to salvage all topsoil resources prior to development of an area for quarry expansion. The stockpiling, seeding of stockpiles, and weed control on stockpiles will be primary objectives in protecting this resource for future reclamation use. The applicant has committed to salvaging all topsoil resources where practicable, and supplementing this resource at reclamation with in-pit quarry fines generated during material processing.
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?	[N] There are no surface water resources on the site, and groundwater is at depth. There have been no surface water discharges off-site from precipitation events since Black Diamond Aggregates, Inc. (BDA) has owned the facility, and BDA has not nor does it intend to apply for a storm water discharge permit. Several natural depressions on the permit area catch run-off from roads and the processing area. Precipitation falling on the quarry site infiltrates into the highly permeable alluvium underlying the quarry site.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Current processing operations include dust collection devices; fines from the crushing operation are too heavy to be susceptible to wind erosion. MT DEQ has reviewed the operation and determined that it will not need an Air Quality Permit.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] Primary plant species on the quarry site include native grasses and juniper. Paucity of topsoil inhibits vigorous plant growth and diversity. There are no sensitive species located on the site which are listed with the MT Natural Heritage Program. Knapweed is pervasive and the applicant has initiated an aggressive weed control program.

IMPACTS ON THE PHYSICAL ENVIRONMENT

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] There are no rare or endangered species which inhabit the mine site. The close proximity of Highway 89S has a limiting impact on wildlife activity in the immediate vicinity of the quarry.
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?	[N] No threatened or endangered species have been identified on the permit site. There are no wetlands on the site either.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] The Historic Preservation Office of the MT Historical Society has determined that there are no historic, paleontologic or archaeological sites on or near the permit area.
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?	[N] The quarry site is located next to Highway 89S, however its location on a bench above the highway effectively blocks it from public view. The scale house and office are visible from the highway however.
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?	[N] This portion of Park County has ubiquitous stone and gravel deposits, of which BDA is the only exploiter of significance in the surrounding area. The activities described under the permit are limited to the development of the stone and gravel resources, and the permittee has no plans to develop any other resource besides those stated.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	The principal activities in this part of Park County are limited to livestock grazing and crop production. These activities will not affect the permittee or his operation.

IMPACTS ON THE HUMAN POPULATION

11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] There will be haul trucks entering and leaving the quarry from Highway 89S. MT DOT has determined that both the increased traffic volume and its potential impact to the road base will not significantly impact Highway 89S.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] The proposed operation is a stone and aggregate producer. It is the sole enterprise of its kind (aggregate quarry) in the Paradise Valley, and does not impose economic competition on other similar operations in the area.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Current employment consists of three people for 2 to 8 weeks per year, and one to two part-time people for the balance of the year. Job creation due to this amendment does not change.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] Tax revenues will remain the same.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] (see Item #11) No public services beyond what is currently provided to the local population will be needed.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]

IMPACTS ON THE HUMAN POPULATION	
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?	[N] The permit area is contained entirely on private land, and the surrounding area on all sides is also privately held. The nearest public land is approximately 1.5 miles to the SE across Highway 89. There will be no impact to the access of public lands.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] (see Item #13) Employment will be minimal and the work force will be drawn from the existing population. There will be no need for additional housing.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] The permit site is on private land and employment will be minimal. It is highly unlikely that this operation will have any impact on traditional lifestyles.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] Currently this portion of Park County is being developed for residential housing. The existence of this type of industrial operation will not add to this trend.
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.	[Y] This mining activity is conducted under the authority of the Metal Mine Reclamation Act (Title 82, Part 4).
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] The mining and required reclamation would continue.
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.	[N/A]
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

25. Alternatives Considered:

No Action: The No Action alternative would maintain the permit boundary of the quarry at its current limits, however this would not preclude the permittee from operating the quarry for several more years until reserves were exhausted within the current permit boundary. Impacts would be the same as described above, but mining would cease before the estimated 64 year life.

Approval: Approve the application as presented. Impacts are described above.

Approval with modification: (Not considered as no identifiable impacts which need modification)

26. Public Involvement: Notice of availability of this EA will be published in the *Livingston Enterprise*. The public comment period will end **January 7, 1999**.

27. Other Governmental Agencies with Jurisdiction: None

28. Magnitude and Significance of Potential Impacts: Impacts would occur as stated above in the resources 1, 11 and 21. These impacts are not significant.
29. Cumulative Effects: Cumulative effects from approval of this action would be seen in a slight increase in traffic volume along Highway 89S in the vicinity of the quarry, although MT DOT has determined that this would not create a significant impact. Other effects will be a more vigilant weed control program on the quarry site which will aid in reducing the potential seed population from establishing on adjacent properties.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Peter Werner

Approved By: Bob Winegar

Robert C. Winegar
Signature

12/9/98
Date