



November 16, 2006

Dear Reader:

Enclosed for your review and comment is a summary Draft Checklist Environmental Assessment (CEA) for an operating permit requested by Nitty Gritty Dirt, LLC, (NGD) of Belgrade, MT on July 28, 2006 and revised on September 15, 2006. NGD applied for an operating permit for quarrying and rock picking from a site located in a portion of Section 5, Township 2 North, Range 1 East, about five miles northwest of Three Forks, MT. This Draft CEA evaluates the potential impacts from this operation. The Montana Department of Environmental Quality (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 agencies have decided to approve the permit as proposed as the preliminary preferred alternative. 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 full Draft CEA can be obtained by writing DEQ, Environmental Management Bureau, P.O. Box 200901, Helena, MT 59620, c/o Herb Rolfes, or calling (406)444-3841; or sending email addressed to hrolfes@mt.gov. The Draft CEA will also be posted on the DEQ web page: www.deq.mt.gov. Public comments concerning the adequacy and accuracy of the Draft CEA will be accepted for 30 days, until December 18, 2006.

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, Chief
Environmental Management Bureau

Date

File: pending NittyGrittyDirt

DRAFT CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Nitty Gritty Dirt, LLC, P.O. Box 384, Belgrade MT. 59718

PROJECT: Quarry operation with rock crushing.

PERMIT OR LICENSE: Operating Permit Application

LOCATION: The proposed site is about five northwest of Three Forks, MT in Section 5, Township 2 North, Range 1 East (See Figure 1).

COUNTY: Broadwater

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

TYPE AND PURPOSE OF ACTION: Nitty Gritty Dirt, LLC (NGD) wants to expand a quarry and rock crushing operation on the Rolling Glen Ranch subdivision northwest of Three Forks, MT (See Figure 1). An existing quarry is present at the site and is covered under a Small Miner's Exclusion Statement (SMES). This proposed expansion would exceed the acreage allowed under an SMES and an Operating Permit must be obtained. The blasted rock would be crushed rock and used for road base material and concrete mix in a subdivision. Uncrushed rock would be used for rip-rap and landscaping. The quarry would be excavated to the current road level, resulting in a highwall with a maximum height of 110 feet. The operator would use dozers, front end loaders and standard rock crushing equipment.

Soil would be salvaged to a depth of six inches from facility areas including the rock stockpiles, processing and staging areas. Soil would be salvaged at least ten feet ahead of quarrying and those areas used for waste rock disposal. The stone would then be removed.

Soil and overburden would be handled separately and placed on regraded areas or stockpiled. Soil stockpiles that would remain for more than one year would be shaped and seeded. On areas where reclamation would not require a soil cover, the soil would be retained on site in an accessible location until the alternate reclamation area is ready to be reclaimed.

Existing roads would be used to access the quarry. The Price Road entrance to the Rolling Glen Ranch subdivision development would be upgraded to Broadwater County design and construction specifications.

The operator would take appropriate measures to ensure protection of surface and groundwater quality and quantity. All equipment, facilities and disturbances would be kept at least 100 feet from surface water. Stormwater will be controlled by use of silt fences and straw bales. Crushed rock may be washed with water from a nearby supply well. This water would then be routed to a settling basin. A water truck would be used for dust suppression.

Above ground fuel storage tanks would be located within a containment berm. Fuel tanks would be inspected and maintained to prevent spillage and the operator would immediately retrieve and properly dispose of any spilled fuel or contaminated materials. All spills over 25 gallons would be reported to the Department of Environmental Quality (DEQ) Enforcement Division.

NGD would not dispose of solid wastes on site unless an appropriate solid waste management system license is first obtained.

DEQ must prepare an environmental assessment (EA) because the quarry and associated facilities would exceed

the disturbance limitations in a Supplemental Programmatic Environmental Assessment (SPEA) completed by DEQ for rock collecting sites and quarries in 2004. The site proposed by NGD meets all requirements under the SPEA except the disturbance cannot be kept below five acres disturbed and unreclaimed at any one time.

N = Not present or No Impact would occur.

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

N/A = Not Applicable

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACT 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?	<p>[Y] The quarry site is located on a ridge of Quadrant Quartzite. There are unusual geologic features in the area, specifically vertebrate fossils in the Eocene Climbing Arrow Formation located a few miles south of the project site which would not be affected by the quarry. Soils in the quarry area are predominantly composed of a thin 'A' horizon developed over the quartzite that supports sagebrush, cactus, and grasses. Salvaging soils for reclamation of stockpile areas after quarrying is completed would accelerate new soil development on reclaimed areas. Soil disturbance is an unavoidable impact of quarrying activities. These soils are susceptible to wind erosion when exposed. The small size of the disturbances would limit soil loss. During periods of extreme drought, reclamation seeding may fail with some resulting loss of soil. A failed seeding would be reseeded until vegetation is successfully established and the reclamation bond is released.</p> <p>A permanent cut would be made through the north end of the quartzite hill and would be retained as a subdivision road corridor. This is an unavoidable impact of the quarrying operation.</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?	[N] The site is dry and over 100 feet from surface water. The final quarry wall would have a maximum height of 110 feet with a slope of 1.5 to 1 from the road level to the top of the hill, and would not impact ground water. Impacts from petroleum product spills and herbicide use to control weeds would be limited by the distance from water. A water supply well associated with the quarry is located within the proposed permit area.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[Y] There would be dust produced by these operations due to travel on the unpaved roads commonly found in these areas, as well as from the crushing operation and stockpiles. A water truck would be used for dust control at the crusher area, stockpiles and roads. The crusher would have to obtain an air quality permit from DEQ.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be	[Y] The native plant communities that would be impacted are common in this arid environment. Disturbance of these native plant communities is an unavoidable impact of the quarrying activities. Reclamation of the

IMPACTS ON THE PHYSICAL ENVIRONMENT	
significantly impacted? Are any rare plants or cover types present?	<p>site and seeding of grass species suited to arid conditions would limit impacts but the native plant communities cannot be restored. The areas to be reclaimed would be graded to support lawn and other landscape vegetation as part of the subdivision development.</p> <p>A search of the Natural Resource Information System (NRIS) database found that there are no known threatened and endangered or sensitive plant species growing in these areas. The disturbance on the sites would lead to more noxious weed invasion in the area. This is an unavoidable impact of disturbance. Weed control efforts would limit these impacts.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] The area is sometimes used by mule deer and antelope. The project is in an arid upland area, approximately 4 miles northwest of the Jefferson River near Three Forks.
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] A search of the NRIS database found that there are no known threatened and endangered animal species in the area.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] A records search by the State Historic Preservation Office indicated that no known cultural areas of concern exist in the permit area. As noted in the application, the operator would provide protection for archaeological and historical sites if they are discovered.
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?	[Y] The proposed quarry is in a remote, rural area. Activity would be visible from some county roads during operations, but the disturbance created would not be readily apparent in the absence of construction equipment. Soil would be replaced after the stockpiles and other facilities have been removed and then the areas would be reseeded. Soil would not be replaced on the quarry highwall due to its steepness. The reclaimed quarry would not have the appearance of the original hill. This is an unavoidable impact of quarrying activities.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area?	[N] This project would be isolated and require a limited amount of energy resources.
10. IMPACTS ON OTHER ENVIRONMENTAL	[N] The surrounding land use has historically been livestock grazing, but the area is being developed as a subdivision.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCES: Are there other activities nearby that will affect the project?

IMPACTS ON THE HUMAN POPULATION

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

[N]

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

[Y] The quarry will provide a source of crushed rock for road improvements in the subdivision.

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

[Y] The project would maintain current jobs associated with the SMES and development of the subdivision.

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

[Y] This project would create tax revenue.

15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?

[N] There is no anticipated need for increased government services that would result from this project.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?

[Y] There are plans in effect in the area but none that affect private lands.

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] There are no wilderness areas or major recreational areas on private land in this area. The major recreational uses in the region are hunting, and fishing and floating on the Jefferson, Madison, and Missouri rivers.

IMPACTS ON THE HUMAN POPULATION	
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] The work force would be local, or drawn from neighboring counties.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
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]
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]
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	[N]

IMPACTS ON THE HUMAN POPULATION	
SOCIAL AND ECONOMIC CIRCUMSTANCES:	

25. Alternatives Considered:
No Action: Deny the request for operating permit. No issues were identified which would require denying the permit.
Approval: Approve the permit as proposed.
Approval with Modification: No unresolved issues were identified which would require modification of the proposal.
26. Public Involvement: A legal notice and press release have been published notifying the public of the proposed operation. No comments were received. Another legal notice and press release will be issued when this draft CEA is released.
27. Other Governmental Agencies with Jurisdiction: None
28. Magnitude and Significance of Potential Impacts: There would be no significant impacts associated with this proposal. As noted, there would be impacts to soils, geologic resources, native plant communities and from an increase in noxious weeds in the area.

Building stone quarries and rock collecting sites are increasing throughout Montana. DEQ has prepared a Supplemental Programmatic Environmental Assessment (SPEA) on these operations. The operations that qualify must meet the following provisions as listed in the SPEA.

- Any individual small quarry must maintain a working disturbance of up to five acres maximum. Total disturbance during the life of an individual operation could exceed five acres, but concurrent reclamation would be required to keep the disturbance at any one time to five acres or less. Access roads would not be included in the disturbed total, but the operator would submit a reclamation bond for roads that do not have an appropriate use after quarrying. Roads appropriate for the land use after quarrying and access or haulage roads which are required by a local, state, or federal agency having jurisdiction over that road would not have to be bonded;
- There would be no impact to any wetland, surface or ground water;
- There would be no constructed impoundments or reservoirs used in the operation;
- There would be no potential to produce any acid or other pollutant drainage from the quarry;
- There would be no impact to threatened and endangered species; and
- There would be no impact to significant historic or archeological features.

The quarry proposed by NGD meets all these requirements except the operator cannot keep the disturbance to less than five acres disturbed and unreclaimed at any one time on some of the sites. There would be no other impacts other than the size of the disturbance area over those analyzed in the SPEA. This draft Checklist EA tiers to the 2004 SPEA. Reclamation would limit impacts. DEQ would bond NGD to reclaim acres disturbed by stockpiles and facilities associated with the quarry.

29. Cumulative Impacts: The quarry is located in an area that is planned for extensive subdivision and associated development.
30. Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

- 31. EA Checklist Prepared By: Wayne Jepson (Reclamation Specialist) and Herb Rolfes (Operating Permit Section Supervisor).
- 32. EA Reviewed By: Patrick Plantenberg, Reclamation Specialist, and Warren McCullough, EMB Bureau Chief

Signature

Date

Herb Rolfes
Operating Permit Section Supervisor

File: pending Nitty Gritty Dirt, LLC.70