DEPARTMENT OF ENVIRONMENTAL QUALITY
OPENCUT MINING PROGRAM

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Requested Action: Amendment # 3
Proponent: Richard Huttinga
Site Name: Huttinga Pit
Legal: Sec 25 T3S R4E
County: Gallatin
Existing Permit #: 1343 (Formerly HUT-001), Amendments #1 and #2
Date: May 2010

Requested Action: This is the third application to amend the permit. It requests:

- Adding 23.6 acres to the existing 25-acres;
- 42.6 acres would be reclaimed to pasture and 6 acres to a wildlife pond.
- Extending the final reclamation date from 2015 to October of 2020.
- Hours of operations would be from 7:00 a.m. to 5:00 p.m. Monday through Saturday. Saturday operations would only allow loading, hauling, and maintenance. Maintenance could be conducted until 10:p.m. Mondays through Friday.
- Water monitoring would be conducted as required by Gallatin County and the operator would copy the results to DEQ.
- Continued concurrent reclamation.

Type and Purpose of Action: The main purpose of this amendment is to increase the amount of material available for mining and sale by approximately 675,000 cubic yards, and to extend the life of the business by 5 years to 2020.

Concurrent reclamation consisting of regarding, replacement of soil, and seeding, is presently occurring in the south and east ends of the existing pit. A reclamation bond of $50,432 is being held to assure complete reclamation of the existing 25-acre permitted area. After partial reclamation of this approximately 9 acres, part of the bond would be transferred to the new amendment areas as activity would begin in Phase I. Additional bond has been submitted to bring the total to about $67,000.

History of Permit: A total of 25 acres are permitted, and will be reclaimed to a 6-acre pond and 19 acres of pasture by 2015 if this amendment is not approved.

- The original permit was granted in 1996 to mine 5 acres and reclaim it to a fish or wildlife pond.
- Amendment #1 added 10 acres when approved in 2003.
- Amendment #2 added an additional 10 acres and increased the pond size to 6 acres in 2006.

The original and two supplemental environmental assessments identified no significant impacts and are still applicable to this site.

The amendment explains how concurrent reclamation would be executed, where new soil berms would be placed, and would add some information and activities that would satisfy new requirements of the Opencut Act and its rules. The major changes to the Plan of Operations are to add hours of operations, addition of the water monitoring plan approved by the county, and salvage of 6 inches of overburden for reclamation purposes. All aspects of the gravel pit operation will remain the same.

1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

The amendment area is north of the existing permit boundary at the foot of the hill. The property drops about 60 feet in elevation over the 2,000 feet from the east to the west. The pit floor is about 25 feet below the natural ground level.

The original plan stated that 12 inches of soil would be salvaged, and all overburden could be sold as product, which was allowed at that time. Recently the standard for salvage of soil and overburden was increased to 18 inches for pasture or grazing reclaimed use. This amendment would require 6 inches of overburden to be required.

Annual precipitation in this location is about 16 inches.

***Impacts**:* Irreversible and irretrievable removal of gravel from the site would occur.

The increase of salvaged reclamation materials would help vegetation get established and survive long term. A small impact to the quantity and quality of soils would occur from salvaging, stockpiling, and resoiling activities, but this would not impair the capacity of the soils to support full reclamation. Precipitation is sufficient to support revegetation.

There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent the reclamation from being successful.

2. WATER QUALITY, QUANTITY AND DISTRIBUTION

Big Bear Creek is on the south side of Little Bear Road and about 15 feet in elevation below the road and permit boundary. Huttinga's irrigation ditch runs along the north side of the new amendment area. No wetlands exist on the property.

The Jelke Huttinga well, located just south of the pit, is part of the state's water monitoring system and is monitored by the Montana Bureau of Mines and Geology. The water level has been monitored quarterly since 1992 (before the mine was operating), and has been consistent throughout the time period. The elevation at the well is 5285 feet above mean sea level (msl). The highest water levels were in the 1990's and reached 5271 feet msl. Since 2005 the highest reading has been 5267 feet msl and the lowest 5260 feet msl. The pond elevation in December 2007 was approximately 5263.

Impacts: The site drains internally so no stormwater would escape the site or have an impact on surrounding land, the north-side irrigation ditch, or Big Bear Creek.

Mining of the pond would be conducted with a large excavator at the pit floor into the water table. No dewatering occurs. The natural land surface elevation drops about 60 feet from east to west over the length of the pit. The east end of the pit is excavated about 30 feet deep.

The pond surface elevation is about 20 feet below Big Bear Road to the south. It fluctuates several feet seasonally. An excavator would reach about 20 feet down into the water. This could result in the maximum elevational difference from the pond bottom to Big Bear Road of around 50 feet.

The Montana Bureau of Mines and Geology samples a monitoring well immediately adjacent to the pit. Analytical results obtained via the Groundwater Information Center in October 2008 showed that all the measured parameters (14 major ions and 27 trace element metals and hydro carbons and others) were within U.S. EPA standards. Based on these data, no long term impact to water quality has occurred since the mine started operations in 1996. Because mining methods are not changing, no change in water quality is expected.

A fuel or fluids spill could occur. Under water quality law and regulations, DEQ requires immediate reporting and cleanup of spills. Contaminated materials must be disposed of in an approved manner or at an approved facility.

Mining in the amendment area would follow the same plan that has been in place except that the existing pond would be expanded. Although the pit would expand in size no change in the types of operations is requested. No change in the quantity or quality of water would be expected.

Ground monitoring is required by Gallatin County in accordance with the Conditional Use Permit (CUP) it issued on February 17, 2009. In accordance with the CUP, at least two off-site monitoring wells would be installed. Groundwater levels would be monitored every six months and water samples would be collected for analysis of extractable petroleum hydrocarbons. All data collected would be submitted to the county and the DEQ.

3. AIR QUALITY

Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.

Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied.

Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.

No major changes in the operation or the equipment to be used would occur. During an inspection by ARMB personnel on August 2, 2007, the pit was found to be in compliance with permit and fugitive dust requirements.

The operator has applied magnesium chloride to surrounding roads to control dust.

***Impacts**:* Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts. Concurrent reclamation of the south and east sides of the existing permit area would tend to offset any fugitive dust emissions that would occur from increasing the pit size.

4. AESTHETICS

A log processing plant and log home construction business is adjacent to the gravel pit. It occupies about 3 acres south of, and 4 acres north of Little Bear Creek Road.

Except for a couple of ranchers along the creek bottom and valley floor including the Huttinga land, the land to the south of Big Bear Creek has been subdivided into home sites from approximately1 to 20 acres. There are only 18 registered wells within a half mile of the gravel pit, so the vast majority of these lots have not been developed.

The plan of operations includes a schedule of hours of operations. They are:

- Monday – Friday from 7 a.m. to 5 p.m., and maintenance from 7 a.m. to 10 p.m.
- Saturday from 7 a.m. to 5 p.m. for loading, hauling, and maintenance.
- No operations on Sundays.

The crusher, screen, asphalt plant, etc. are or would be located in the pit floor about 25 feet below the existing natural ground level. The soil and overburden berms on the south and east sides of the pit would remain at the same height. Soil and overburden from the new amendment area would be placed in berms along the north and west boundaries. The entry into the pit at the southwest corner would not be bermed.

Impacts: The permit boundary along Big Bear Road was set back at initial permitting between 50 and 100 feet to provide an aesthetic buffer between the roadway, farm activities, and the pit. This would be maintained. The proposed new berm to the north would provide little to no reduction in noise to persons living on the hill north of the Huttinga property. This is because the berm cannot be high enough to block any noise going directly uphill. The berm to the west would help block noise down the valley. Keeping

the equipment on the pit floor and maintaining the berms would help reduce the noise levels to the neighbors.

5. PROPERTY VALUES:

The applicant hired a licensed land appraiser, Joel Peterson, to conduct a study of the possible impacts on nearby property values from operating the gravel pit.

Impacts: After reviewing and comparing historic sales price data for the local area and the entire Gallatin Valley, Peterson determined that the Huttinga gravel pit had not adversely affected the surrounding real property values.

Potential Impacts and Mitigation: It is expected that impacts associated with this proposal will mimic those identified in the originally approved EA and supplemental EAs.

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PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.