

## ENVIRONMENTAL ASSESSMENT

### On an Application for an OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

**APPLICANT:** Malta Ready Mix, Inc.

**SITE NAME:** Anderson

**LOCATION:** Section 26, T31N, R30E

**COUNTY:** Phillips

**DATE:** October 2011

**PROPOSAL:** The proponent has submitted an application to permit a new, long-termed gravel pit to mine and transport 1.0 million cubic yards of gravel over the next 18 years from 50.7 acres of crop and range land approximately 5 miles northeast of Malta (See [FIGURE 1 – AREA MAP](#)). The site would be mined gradually as market conditions allow. Only 4 acres of the 50.7 are bonded for operations at this time and additional areas would be bonded as needed until the entire site has been mined. A screen and a grizzly will be used to process the mined sand and gravel. No crusher or wash plant is being permitted at this time.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to grassland and wildlife habitat would be completed by November 2029. As part of the permit application, the proponent has submitted a Plan of Operation that provides baseline information, operation plans, and plans for reclamation that would replace soils and plant grasses on the finished slopes, and prepare the affected lands for wildlife habitat. Reclamation is required by the Opencut Mining Act and the operator must comply with that statute and the rules and regulations promulgated under it.

### IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>This site is located in relatively flat to rolling, glaciated terrain approximately 50 feet above the Milk River Valley, northeast of Malta (See <a href="#">FIGURE 2 – SITE MAP</a>). The material is most likely Quaternary alluvium deposited by glacial activity and influenced by fluvial activity from the Milk River. Soils generally average 12 inches deep.</p> <p><i>Impacts:</i> Mining this area will result in irreversible and irretrievable removal of aggregate material from the site and will create a small impact to the quantity and quality of soils from salvaging, stockpiling, and re-soiling activities, but this would not impair the capacity of the</p>

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	soils to support full reclamation. There are no unusual topographic, geologic, soils or special reclamation considerations that would lead to reclamation failure.
<b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b>	The nearest surface water is the Milk River that flows in a southerly direction about a half-mile west of the site. Significant vegetation and elevation differences preclude the potential for runoff into that water body. No fuel will be stored and no recycled materials will be stockpiled or processes at this site. Groundwater is greater than 25 feet from the surface and will not be impacted by this activity. The site receives approximately 11 to 14 inches of precipitation and has 110 to 130 frost-free growing days a year.
<b>3. AIR QUALITY</b>	<p>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.</p> <p>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.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
<b>4. VEGETATION COVER, QUANTITY AND QUALITY</b>	This site is within the Greater Missouri Breaks Megasite. The general area is a mix of grain crops and grass land in good condition with species including several wheatgrasses, needle-and-thread, prairie junegrass and little bluestem. During soil stripping operations, all vegetation will be removed. Some vegetative seed will remain viable in the soil and could assist in regeneration of those species when soils are replaced. The applicant will re-seed the area to species compatible with the post-mine land use of grass land and wildlife habitat.
<b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b>	<p>Due to agricultural activities, this area tends to be excellent habitat for a wide range of animal species. It is likely an extension of the Northwestern Glaciated Plains Ecoregion. The area supports populations of deer, elk, antelope, rodents, song birds, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to grassland.</p>
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b>	The Montana Natural Heritage Program indicates that bird species including the Great Blue Heron and the Greater Sage Grouse, and fish species including the Northern Redbelly Dace, Pearl Dace, Iowa Darter and Sauger are animal species that could be present in the region.

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	<i>Impacts:</i> These species have not been found on this site. Even if suitable habitat did exist at this specific location, the mining disturbance area would be small and large areas of similar or identical habitat surround the site. The possible impact to these species would be minimal.
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b>	The Montana State Historic Preservation Office (SHPO) has not identified any sites that have been previously discovered on this property. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation.  <i>Impacts:</i> If during operations, resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	Energy in the form of diesel fuel for dozers, loaders and trucks would be consumed while this site is operated and material is hauled to various projects. Water in minimal amounts will be utilized as necessary for dust control.

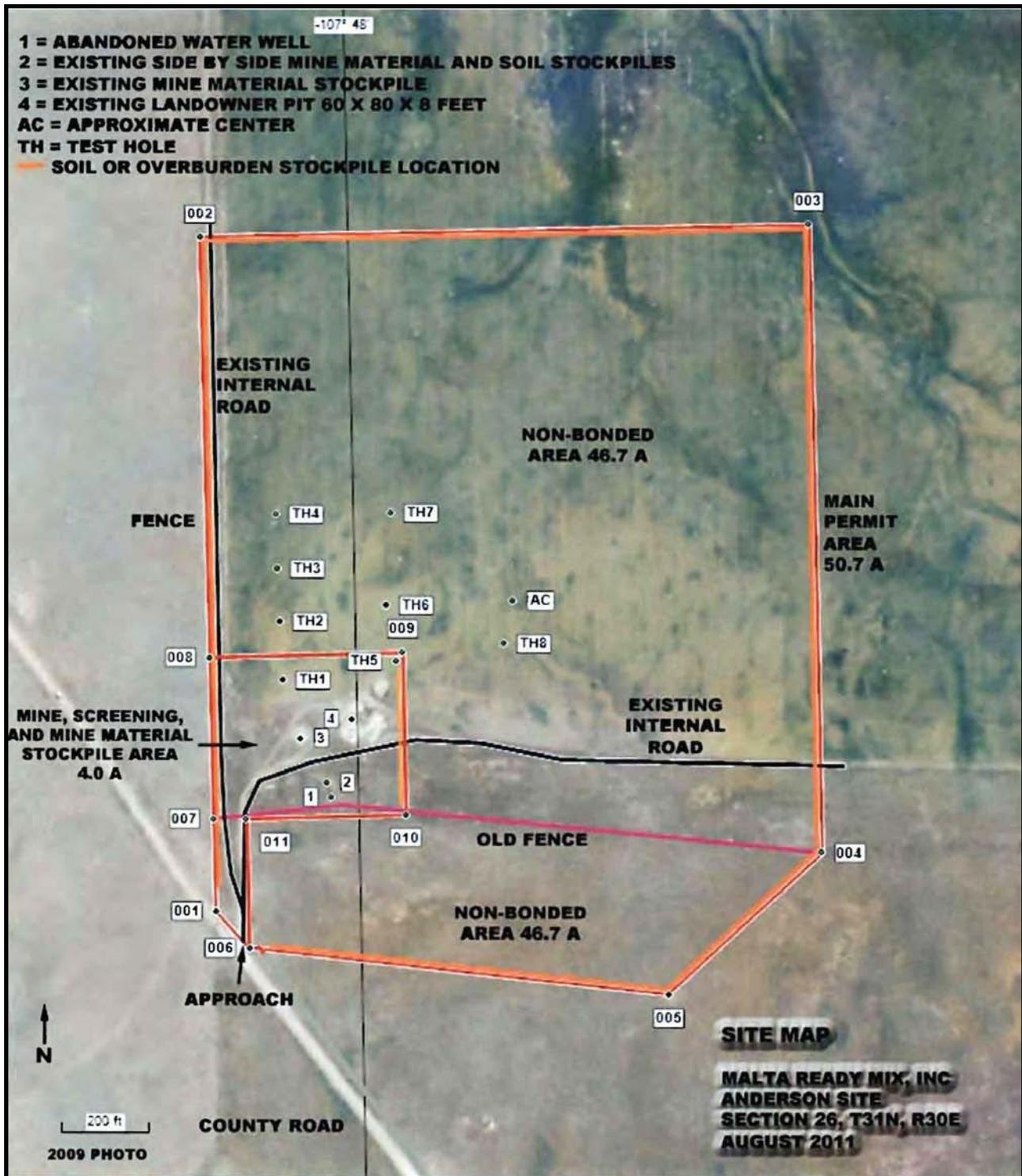
<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</b>	This area is not zoned by Phillips County and a Zoning Form was signed on June 20, 2011.
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	None of these resources will be affected.
<b>11. AESTHETICS</b>	This site is visible from a county gravel road that passes nearby. Work would begin in an old gravel pit next to the county roadway and would progress north, east and south. Dozers, scrapers, loaders, trucks and a screen will be noticeable to the general public. No crushing or wash plant will be used, which will further eliminate odors, dust and noise. The site would be operated intermittently with hours of operation of 7:00 a.m. to 7:00 p.m., Monday through Friday.  <i>Impacts:</i> There would be mining and hauling activity at this site during normal work hours from time to time, mainly in the summer, which could be noticeable to some. These impacts would be short-termed and minimal but could be intense at times during large projects.
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> No impact on employment; the same crews will be utilized for all operations.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	This will be an industrial site with periods of stripping, mining and hauling, mainly during the summer seasons.  <i>Impacts:</i> This site would be taken out of crop and grass land during the project and would be reclaimed to grass land and wildlife habitat upon project completion.
<b>14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME</b>	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc. from the companies, employees, or landowners benefitting from this operation.



**FIGURE 1 – AREA MAP**



**FIGURE 2 – SITE MAP**



## 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.