

ENVIRONMENTAL ASSESSMENT

PROPONENT: Elk Ridge Farms

SITE NAME: Elk Ridge Farms

LOCATION: Section 29, T36N, R4E

COUNTY: Liberty

TYPE AND PURPOSE OF ACTION: Proponent has applied for a 14.3-acre openpit mine permit area where they propose to remove over 100,000 cy of gravel from a bench next to an ephemeral prairie drainageway. Processing equipment would include a grizzly, screen, and crusher. The tentative final reclamation date is November 2028. The application contains all items required by the Act and Rules. Proponent commits to properly conducting openpit operations and would be legally bound by their permit to reclaim the site to a postmining land use of grassland.

A = significant unavoidable impacts. B = insignificant as a result of conditioned mitigation. C = insignificant as proposed.

	POTENTIAL IMPACTS AND MITIGATIVE MEASURES					
	A	B	C	LONG TERM	SHORT TERM	EXPLANATION
PHYSICAL ENVIRONMENT						
1. <u>TOPOGRAPHY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed site is located on the valley floor and east-side bench of an ephemeral prairie drainageway. Gravel removal to a maximum depth of 20 feet would alter the topography by lowering the surface and creating new slopes. All surfaces would be graded to 3:1 or flatter and blended into the surrounding topography and drainageways.
2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Department reviewed potential impacts due to the removal of mine material and determined that the site can be reclaimed to a stable condition.
3. <u>SOILS</u> : quality, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The average soil thickness is 9 inches and the average overburden thickness is 0 inches. Soil would be stripped from mine-level areas and evenly placed on areas prepared for resoiling or stockpiled for later reclamation use. Soil stripped from facility-level areas would be evenly replaced on those areas.
4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Surface and ground water do not appear to be factors at this site. There are no water wells in or near the site that could be affected by this operation.
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There would be some degradation of air quality while operations are in progress. Proponent must comply with state air quality regulations.
6. <u>UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None identified.

BIOLOGICAL ENVIRONMENT						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The Montana Natural Heritage Program reports one species of special concern in the area of the proposed operation.</p> <p>Ferruginous hawk. The ferruginous hawk is a large bird of prey. Most of Montana is summer range for this raptor. Fall migration begins in August and continues into early September. Young birds will migrate south earlier than, and independent of, adults. The habitat of this bird is described as mixed-grass prairie, shrub-grasslands, grasslands, grass-sagebrush complex, and sagebrush steppe.</p> <p>The opencut operation would disturb a relatively small area. Abundant similar habitat exists in the area.</p>
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The proposed disturbance area consists of native range on the coulee slope and dryland grain field on top. The Montana Natural Heritage Program reports no species of special concern. Abundant similar vegetation exists in the area.</p> <p>No noxious weeds were observed on or next to the proposed permit area. Proponent contacted the local weed district about the proposed operation and is in compliance with their requirements.</p>
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>A small area of native range and an even smaller area of dryland grain field would be temporarily out of production. This would not substantially impact local agriculture. The site would be reclaimed to grassland.</p>
HUMAN ENVIRONMENT						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. <u>HUMAN HEALTH & SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No problems are anticipated. Restricted hours of operation are not needed at this remote site.
6. <u>COMMUNITY & PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. <u>TAX BASE</u> : local, state tax revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

9. <u>GOVERNMENT SERVICES:</u> demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. <u>INDUSTRIAL, COMMERCIAL, & AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No resources were identified during the Department of Environmental Quality's premine inspection.
12. <u>AESTHETICS:</u> noise, visual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is in a remote location. There are no nearby residences.
13. <u>ENVIRONMENTAL PLANS AND GOALS:</u> local, regional	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proponent contacted the local zoning authority about the proposed operation and is in compliance with local zoning regulations.
14. <u>DEMANDS ON ENVIRON- MENTAL RESOURCES:</u> land, water, air, energy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
15. <u>TRANSPORTATION:</u> networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proponent would use a county road to transport mine material to project sites. This activity would not substantially affect local traffic.

ALTERNATIVES CONSIDERED: The Department would deny an incomplete application or one that does not comply with the Act and Rules. The proponent could then submit a modified application or submit an application for another site.

PUBLIC INVOLVEMENT: Agencies and individuals involved in the process included the Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, county weed control board, and landowner.

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION: DEQ's Air Resources Management Bureau regarding air quality, DEQ's Water Protection Bureau regarding water discharge, DNRC's Water Rights Bureau regarding water rights, and MSHA regarding mine safety.

REGULATORY IMPACT ON PRIVATE PROPERTY: The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS: No further analysis

INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA: None

Approved
By:

Date:

(Signature)

Prepared by: Mark Carlstrom