

**CHECKLIST ENVIRONMENTAL ASSESSMENT**

**COMPANY NAME:** Markus Chapman                      **Project:** Elk Creek Barite  
**PERMIT OR LICENSE** 00679  
**LOCATION:** section 16: T13N R15W                      **County:** Missoula  
**PROPERTY OWNERSHIP:**     Federal  State                       Private

**TYPE AND PURPOSE OF ACTION:** Markus Chapman, dba as Montana Barite Co., LLC has submitted a plan to excavate 5 trenches, each 75’ – 100’ long X 20’ wide and 40’ deep at the deep (north) end, daylighting on the south end and to scarify a vein outcrop 40’ in length. The trenches would be oriented north to south across a ridge top and spaced at an interval of 250’. Soil would be placed on the uphill side of each trench and overburden would be placed on the opposite side.

With Amendment 1, Chapman has proposed drilling 10 hammer drill holes, from two stations, one on each side of the vein. The holes would be 100’ deep and 1” in diameter. The south site would be accessed by travel overland. A road of 150’ would be constructed to access the north site.

**Reclamation Plan:** At closure, the trenches would be backfilled, with previously saved soil replaced, and each trench would be seeded with a grass mix selected for its ability to compete with spotted knapweed. The drill holes would be plugged at surface, with cuttings returned down hole, and the 150’ road would be returned to original contour and seeded.

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?	[N] The Elk Creek barite mine operated under this ridge until the early 1990’s. There is subsidence above the underground works which has expressed as steep sided bowls and swales.
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 is no surface water on site.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N]
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] Vegetation on the ridge has been severely altered by past mining disturbance and by invasion by spotted knapweed. Trenching and subsequent reclamation will not materially change the situation. Chapman has had the area sprayed for s. knapweed and will be required to spray the access route.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N]
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any	[N]

**IMPACTS ON THE PHYSICAL ENVIRONMENT**

wetlands? Species of special concern?	
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N]
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]
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]
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N]

## 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?	[N]
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] The project will create a few temporary jobs.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N]
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
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]
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]
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 SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

25. Alternatives Considered:

No Action:

Approval:

Approval with modification: No unresolved issues were identified which would require modification of the proposal.

26. Public Involvement: The DNRC has conducted public scoping as part of the EA process.

27. Other Governmental Agencies with Jurisdiction: DNRC is the surface management agency. The BLM has management authority over the Cap Wallace road, a portion of the access into the area.

28. Magnitude and Significance of Potential Impacts: There would be no significant impacts associated with this proposal.

29. Cumulative Effects: DNRC has a timber sale scheduled for the area.

**Recommendation for Further Environmental Analysis:**

EIS     More Detailed EA     No Further Analysis

**EA Checklist Prepared By:** \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date