

DNRC - Trust Land Management Division

DS-252

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Proposed Pit Expansions on State of Montana Oil & Gas Leases #10,858-68 and #10,859-68	Proposed Implementation Date: July 10, 2004
Proponent: Helis Oil & Gas, Company, C/o Mark Hedstrom, PO Box 1645, Havre, MT 59501	
Type and Purpose of Action: Helis Oil & Gas Co. has requested to expand two water disposal pits on two different State of Montana Oil & Gas Leases. The first existing pit located in the SE4NW4NE4, Sec. 16, T36N, R19E would be increase to a 60' by 60' pit to hold more production water from the Battle 2-16 natural gas well. The second existing pit located in the SE4NW4NW4, Sec. 36, T36N, R19E would be increase to a 70' by 100' pit to hold more production water from the Battle 4-36-36-19 natural gas well. The purpose of expanding these pits is so that the existing pits will be able to hold more production water from these wells and Helis Oil & Gas will not have to haul water from these remote areas as much. The Montana Department of Natural Resources and Conservation's (DNRC): Havre Unit Office, Minerals Management Bureau, and the Montana Board of Oil & Gas are responsible for administrating natural gas developments on State School Trust lands.	
Location: SE¼NW¼NE¼; Section 16, T36N, R19E – Battle #2-16 SE¼NW¼NW¼; Section 36, T36N, R19E – Battle #4-36	County: Blaine County, Montana

I. PROJECT DEVELOPMENT

<p>1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.</p> <div align="center">  <p>RECEIVED JUL 01 2004 LEGISLATIVE ENVIRONMENTAL POLICY OFFICE</p> </div>	<p>The Montana Department of Natural Resources and Conservation has been petitioned by Helis Oil & Gas Co. to expand two water disposal pits on the above referenced tracts of state land. The State of Montana owns the surface and mineral rights on these two tracts of land. Mark Hedstrom, Landman for Helis Oil & Gas Co. will contact the state's surface lessee, S Bar B Ranch, Inc., C/o Jack W. Davies, regarding their intentions to expand these two existing water disposal pits on these tracts of state land. Damages to the native rangeland resource will be settled with S Bar B Ranch, Inc., prior to any surface activity. Expanding these water disposal pits will decrease the overall amount of production water from these two natural gas wells that Helis Oil & Gas will have to haul out of the state land.</p>
<p>2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:</p>	<p>The Montana DNRC/TLMD's; Havre Unit Office, Minerals Management Bureau, and the Montana Board of Oil and Gas are the only governmental agencies that have jurisdiction for this type of activity on State School Trust land.</p>

3. ALTERNATIVES CONSIDERED:	<p>Action Alternative: Grant Helis Oil & Gas Co. permission to expand the existing water disposal pits on these tracts of State School Trust land. Mitigation measures will be used to limit the impact to the native rangeland resource and protect the wildlife and bird species that are found within this area.</p> <p>No Action Alternative: Deny Helis Oil & Gas Co. permission to expand the existing water disposal pits on these tracts of State School Trust land. Helis Oil & Gas Co. will have to continue to haul water from these two natural gas wells for disposal somewhere else.</p>
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II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>Action Alternative: The existing water disposal pits are located approximately 17 miles (Sec. 36) and 20 miles (Sec. 16) north of Chinook, Montana. Helis Oil & Gas Co. will disturb the soils on these tracts of state land by expanding the existing water disposal pits from the Battle #2-16 and Battle #4-36 natural gas wells. The existing natural gas well water disposal pits area located on an upland bench with silty soils. The soil in this area is suitable for this type of activity. During construction of the site, mitigation measures will be used to stockpile the topsoil upslope from the project, so that it may be used for reclaiming the site. The topsoil will be used to create the berm around the pit, so that it will be easy to redistribute once the natural gas well is no longer capable of commercial production. The subsoil and excessive dirt will be stock piled in a separate pile, down-slope from the project and used first for covering the expanded pits. There are no special reclamation considerations for this proposed project. No unusual geologic features are present in either area of the proposed disturbance.</p> <p>No Action Alternative: The soils currently found on these tracts of state land will not be altered. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

5. 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?

Action Alternative: Helis Oil & Gas Co. will expand these two water disposal pits to alleviate hauling water from these wells on a weekly basis. The new expanded pits will be layered with a protective liner to keep the production water out of the surrounding surface and groundwater resources located in these areas. The project will have a minimal impact on surface and groundwater resources in the surrounding area. Expanding these water pits will not impact the water quality, quantity, and distribution found within this area. The location of the proposed project is in a very rural area and the land is primarily used for livestock grazing purposes. There is no potential for violating any ambient water quality standards with this type of project, as long as Helis Oil & Gas Co. follow the Montana Board of Oil & Gas regulations for constructing water disposal pits from natural gas wells. Drinking water will not be contaminated with this type of activity.

No Action Alternative: The water quality, quantity, and distribution currently found on these tracts of state land will not be altered. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

Action Alternative: Expanding the existing water disposal pits on these two tracts of state land will produce some dust particulates. The dust particulates will be produced throughout the entire length of time it takes to complete the expanded pits. However, once the pits are completed, Helis Oil & Gas Co. water trucks will produce less dust particulates in this area since they will not be hauling water out of these areas weekly. The project is not influenced by air quality regulations or zones. Air quality levels will be better after the water disposal pits are completed in these areas.

No Action Alternative: The air quality will not be enhanced in this area. Dust particulates will continue to be produced in much larger quantities, from water trucks hauling water out of this area from these two natural gas wells. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?

Action Alternative: The vegetative communities found in the immediate area of the disturbance will be permanently altered with this type of project. The proposed project area does not contain any rare plants or cover types. The area of disturbance is on native rangeland. The area of disturbance primarily consists of needle-and-thread (*Stipa comata*), blue grama (*Bouteloua gracilis*), green needlegrass (*Stipa viridula*), prairie junegrass (*Koeleria pyramidata*), fringed sagewort (*Artemisia frigida*), silver sagebrush (*Artemisia cana*) and western wheatgrass (*Agropyron smithii*). The area of the proposed project is best described as a short grass prairie habitat type. This area is primarily used for livestock grazing purposes. The topsoil excavated from the site will be stock piled upslope from the project and used to make the berm around the expanded pits. The area of disturbance will be reclaimed with a mixture of native and tame grasses and sweetclover. The reclamation plan will be incorporated as a stipulation for expanding the water disposal pits.

No Action Alternative: The vegetative communities currently found on these tracts of state land will not be permanently altered. Native grasses and forbs will not be destroyed. The vegetative cover, quantity, and quality will remain in its current state on these tracts of state land. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Is there substantial use of the area by important
wildlife, birds or fish?

Action Alternative: The habitat found in the immediate area of disturbance will be impacted with the expansion of the water disposal pits. The area of disturbance will be small in scope and shall be reclaimed with the terms and conditions outlined in the reclamation plan. The disturbed area will be reclaimed with a mixture of native and tame grasses and sweetclover. Helis Oil & Gas Co. will construct a fence around the expanded pits to keep wildlife species out of the water disposal pits. They will also cover the pit with a wire mesh to keep bird species from entering these pits as well. Many different types of wildlife species use this area for habitat. The proposed project will not have any long-term impacts on the wildlife species that currently inhabit this area.

No Action Alternative: The terrestrial and avian life and their habitats found in this area will not be altered. Wildlife and bird species will continue to use this area for habitat. Wildlife and bird species found in this area may be further impacted by Helis Oil & Gas Co. hauling water out of this area on a weekly basis. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?

Action Alternative: Expanding the water disposal pits on these two tracts of state land will have a minimal impact on the unique, endangered, fragile, and limited environmental resources present in this area. There are no wetlands located in the area of the proposed disturbances. No sensitive species or species of special concern will be threatened by this project. Listed, threatened, or endangered species will be able to migrate through this area with minimal impact. There is no confirmed use of this area by threatened or endangered species, however the potential of occasional use does exist. Wildlife and bird species may be temporarily displaced during the construction activities, but they will not be permanently relocated.

No Action Alternative: The unique, endangered, fragile and limited environmental resources found on these tracts of State School Trust land will not be altered. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?

Action Alternative: Staff from the Montana Department of Natural Resources and Conservation has inspected the site for historical and archaeological resources. The proposed expanded water disposal pits will be located on native rangeland. No visual surface features were identified in the immediate area to be disturbed. If historical or archaeological resources are discovered at any time during expansion of the water disposal pits, the proponent shall cease all activity and contact the MT DNRC's, Havre Unit Office.

No Action Alternative: There are no known historical or archaeological resources present in the areas of the proposed project. Unknown historical or archaeological features under the surface will not be altered. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

11. 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?

Action Alternative: The existing water disposal pits are located approximately 17 miles (Sec. 36) and 20 miles (Sec. 16) north of Chinook, Montana. The expanded water disposal pits will become a prominent topographic feature in this area. The natural gas wells are visible to the public from a county road. The land is primarily used for livestock grazing purposes. The project will produce some excessive noise throughout the construction phase of expanding these pits. Once the pits are expanded and the surrounding area is reclaimed, the noise levels will return to normal. The area of the proposed project is highly developed for natural gas production. Helis Oil & Gas Co. has many natural gas wells in this area.

No Action Alternative: The aesthetic character found on these tracts of state land will not be further impacted. This area may be altered even more by Helis Oil & Gas Co. hauling water out of this area on a weekly basis. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

12. 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?

Action Alternative: This project will demand the environmental resource of a small portion of land to expand the existing water disposal pits. The demand on other environmental resources such as water and air will be minimal. Once the project is completed, the proponent will reclaim the site, in accordance with the stipulations outlined by the Montana DNRC. The proponent will be required to settle all surface damages with the state's surface lessee, S Bar B Ranch, Inc., prior to any surface activity.

No Action Alternative: There will be no additional demands on the environmental resources of land, water, air, or energy, if the Montana DNRC denies this project. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?

Action Alternative: The Montana DNRC will continue to explore and develop natural gas resources on tracts of land in which the State of Montana owns the mineral rights on. The mineral rights belong to the State of Montana's, School Trust Fund and revenue brought in from these developments will continue to be used for educational purposes in the State of Montana. The MT DNRC will continue to explore and develop natural gas facilities as long as they are environmentally safe. The goal of the Montana DNRC/TLMD is to manage the State of Montana's trust land resources to produce revenue for the trust beneficiaries, while considering environmental factors and protecting the future income-generating capacity of the land. The Montana DNRC/TLMD will continue to monitor the surface licensed grazing activity and set stocking rates on these tracts of grazing land every ten years in accordance with Montana State Statute.

No Action Alternative: The proposed project will not impact future studies, plans, or projects that the DNRC has for these tracts of land. Helis Oil & Gas Co. will not be given permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.

III. IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	<p>Action Alternative: Helis Oil & Gas Co., its subcontractors, and/or their employees understand the risks associated with expanding the existing water disposal pits on these tracts of state land. Helis Oil & Gas Co., its subcontractors, and/or their employees assume these risks as occupational hazards. This project will not add to the human health and safety risks found in this area, as long as Helis Oil & Gas Co. follows the mitigation measures that the Montana DNRC has laid out for this project.</p> <p>No Action Alternative: The Montana DNRC will deny Helis Oil & Gas Co. permission to expand the water disposal pits on these tracts of state land. The human health and safety risks found in this area will continue to remain the same. Helis Oil & Gas Co. will not assume any occupational hazards by not expanding the water disposal pits that currently exist on these tracts of state land.</p>
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	<p>Action Alternative: Expanding the existing water disposal pits on these two oil and gas leases will add to the industrial activity on these two tracts of state land. However, expanding these water disposal pits will decrease the amount of production water Helis Oil & Gas will have to haul out of the existing pits on a weekly basis. The forage production on the native rangeland will be reduced somewhat due to a larger area of disturbance. However, the projects are small in scope and will only disturb a small amount of grazing land. In the long run, the reclamation plan to seed native grasses back into this area will increase the long-term, future forage productivity and enhance erosion control on these soils after the natural gas well is no longer capable of commercial production.</p> <p>No Action Alternative: The industrial, commercial, and agricultural activities that currently exist on these tracts of state land will not be altered. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>

<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>Action Alternative: The project will provide Helis Oil & Gas Co. with additional time to manage other natural gas developments within the surrounding area. This project will create jobs within the surrounding area. The project will provide Helis Oil & Gas Inc.'s employees with additional work to expand the existing water disposal pits on these tracts of state land.</p> <p>No Action Alternative: The quantity and distribution of employment may be impacted in this area, if Helis Oil & Gas may not expand the existing water pits on these tracts of state land. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>
<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>Action Alternative: The project will not create additional tax revenue in Blaine County. The project will have no impact on the local and state tax base by expanding the existing water disposal pits adjacent to the natural gas wells on these two tracts of state land.</p> <p>No Action Alternative: The local and state tax base will not be impacted. Tax revenue will remain the same in Blaine County. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>
<p>18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>Action Alternative: The project will create some substantial traffic during the initial phases of expanding the existing water disposal pits. The project will not create a demand for additional government services. The project will not require the services of fire protection, police, or schools.</p> <p>No Action Alternative: There will be no demand for government services on these tracts of state land. The Montana DNRC/TLMD will continue to monitor grazing management activity and set stocking rates for these tracts of grazing land. The Montana DNRC will continue to monitor mineral management activity on these tracts of state land as well. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>

<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Action Alternative: The project will not interfere with any other locally adopted environmental plans or goals that the Montana DNRC has for these tracts of state land. No zoning plans will be in effect for the expansion of existing water disposal pits. The Montana DNRC will continue to explore and develop natural gas facilities on lands, in which the State of Montana owns the mineral rights on. Environmental Assessment Checklist's will continue to be the method of determination for installing future natural gas developments or other projects such as this.</p> <p>No Action Alternative: There are no other known locally adopted environmental plans or goals for these tracts of state land, at this point in time. The Montana DNRC will continue to work with natural gas companies to explore and develop natural gas facilities on tracts of land, in which the State of Montana owns the mineral rights on. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>
<p>20. 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?</p>	<p>Action Alternative: The proposed projects are located on legally accessible tracts of state land. The proposed project area is accessible to the public for recreational purposes. These tracts of state land do have recreational potential for hunting, hiking, and bird watching. The main recreational activities that occur on these tracts of state land are hunting and hiking. Expanding the existing water disposal pits will have a minimal impact on the recreational activities that may occur on these tracts of state land in the future.</p> <p>No Action Alternative: The recreational potential for these tracts of state land will continue to be moderate. The Montana DNRC does have recreational authority, provided by the Montana Fish, Wildlife & Parks on these tracts of legally accessible state land. This area is contained within a Block Management Area, which is administered through the Montana Fish, Wildlife and Parks hunting license fees. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>

<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>Action Alternative: The project will not add to the population or require additional housing. The density and distribution of population and housing will continue to be low in this rural area. The project will be completed within one week and the subcontractor will leave the site.</p> <p>No Action Alternative: The density and distribution of population and housing will continue to be low in this rural ranching and farming community. The Montana DNRC/TLMD is the agency responsible for any surface and subsurface activity on these tracts of state land. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>
<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or community's possible?</p>	<p>Action Alternative: The project will not disrupt the native or traditional lifestyles that are found within this community. Expanding the water disposal pits at these two natural gas well sites will alleviate additional work for Helis Oil & Gas employees. They will no longer have to haul water out of these pits on a weekly basis. Natural gas exploration, development, and production are slowly becoming somewhat high in this area.</p> <p>No Action Alternative: The native and traditional lifestyles will not be impacted in this rural ranching and farming community. The people who live in this area are very much open to natural gas exploration, development, and production on their own lands. The Montana DNRC will not give Helis Oil & Gas Co. permission to expand the existing water disposal pits at the Battle #2-16 and Battle #4-36 natural gas well sites.</p>

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	NSI
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By: Clive Rooney
Name

Area Manager, Northeastern Land Office
Title


Signature

6-11-4
Date