

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Missile Albert Facility C-01: Sewer Lagoon Expansion
Proposed Implementation Date:	Spring 2026
Proponent:	United States Air Force (USAF)
Location:	T15N R12E Sec. 2 - SE4 NW4, SW4 NE4
County:	Judith Basin
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Malmstrom Airforce Base is requesting a Right of Way to expand their existing sewer lagoon along with moving a helicopter pad and the associated access road to the pad. The expansion of the sewer lagoon is needed to improve operational efficiency and reduce challenges associated with trying to pump the lagoon. Relocation of the helicopter pad and access road is needed to accommodate the proposed lagoon expansion.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The Department of Natural Resources and Conservation (DNRC)
Northeastern Land Office (NELO) & Lewistown Unit Office
Proponent: Department of the Air Force, Malmstrom Air Force Base
Surface Lessees: Randal Ridgeway (AG #8525)

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The DNRC and NELO have jurisdiction over this proposed project.

The proponent is responsible for acquiring all necessary permits for the proposed project and settling all surface damage with the surface lessees.

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Under this alternative, the Department does not grant the Right of Way request for the expansion of the sewage lagoon and moving the helicopter pad and access road.

Alternative B (the Proposed Action) – Under this alternative, the Department does grant Malmstrom Air Force Base the Right of Way they requested for the completion of their sewer lagoon expansion project.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Based on Web Soil Survey the soil that has greatest concern for seepage to ground water is outside the proposed project area. Cumulative effects to geology and soil quality, stability and moisture are anticipated but not significant.

Table — Sewage Lagoons — Summary by Rating Value			
Summary by Rating Value			
Summary by Rating Value	Rating	Acres in AOI	Percent of AOI
Very limited		110.5	83.2%
Somewhat limited		22.3	16.8%
Totals for Area of Interest		132.8	100.0%

Description — Sewage Lagoons	
ENG - Engineering	
Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.	
Ksat is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a Ksat rate of more than 14 micrometers per second are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.	
A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.	
The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.	
Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).	
The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.	
Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.	

Tables — Saturated Hydraulic Conductivity (Ksat) — Summary by Map Unit				
Summary by Map Unit — Judith Basin Area, Montana (MT602)				
Summary by Map Unit — Judith Basin Area, Montana (MT602)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
Aa	Absarokee clay loam, 2 to 8 percent slopes	9.0000	3.6	2.7%
Ah	Absarokee-Maginnis channery clay loams, 2 to 8 percent slopes	9.0000	14.2	10.7%
Cp	Cheadle stony loam	23.0000	4.7	3.5%
Mb	Maginnis-Absarokee channery clay loams	2.7000	21.0	15.8%
Po	Promise clay, 2 to 8 percent slopes	0.9100	22.3	16.8%
Pp	Promise clay, 8 to 15 percent slopes	0.9100	21.3	16.0%
Ro	Rhoades-Arvada complex	9.0000	21.1	15.9%
Wn	Winifred-Utica complex	2.7000	24.7	18.6%
Totals for Area of Interest			132.8	100.0%
Description — Saturated Hydraulic Conductivity (Ksat)				
Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.				
For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.				
The numeric Ksat values have been grouped according to standard Ksat class limits.				

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Impacts on local water resources are anticipated, but not significant.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

No significant impacts to air quality are anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The disturbance of soil during construction provides noxious weeds with an opportunity to establish. The proponent will be responsible for controlling weeds following construction.

If re-seeding is necessary the proponent will acquire certified, weed free seed and refer to the Plant Materials Tech Note No. MT-46 (Rev. 4) dated September 2013 for seeding rates.

No rare plants or cover types are present. No significant impacts to vegetation are anticipated.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Planned disturbance of 2.1 acres for construction of the sewer lagoon will reduce perennial grass habitat used by various species. No significant long-term impacts on terrestrial, avian, or aquatic habitats are anticipated.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

No threatened or endangered species observed in the project area; several species of concern were noted. Those include Long-billed curlew, Ferruginous Hawk, Brewers Sparrow, Little Brown Myotis and Northern Hairy Bat.

No significant impacts to unique, endangered, fragile or limited environmental resources are anticipated, though temporary displacement of local wildlife may occur during the project.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that *Antiquities* have not been identified in the APE. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Proposed sewage lagoon construction activities are expected to have *No Effect* to *Antiquities*. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

All proposed changes will be observable from Mountain View Rd. and US Highway 87. Once completed no significant impacts on the aesthetics of the area are anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No limited environmental resources will be significantly impacted because of this project. This project will not add any significant cumulative demands to environmental resources.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other projects or plans being considered on the tracts listed in this EA Checklist.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Human Health and Safety risks will occur during construction when working around heavy equipment, then be reduced post construction.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

This project will not add to or deter from other industrial, agricultural, or commercial activities in the area.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The project will not create or eliminate any jobs, so no significant effects to the employment market are anticipated.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

There are no direct or cumulative effects to taxes or revenue for the proposed project.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There will not be any significant increases in traffic, school attendance, or the need for fire and police protection if this project is approved.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

There are no zoning or other agency management plans affecting this project.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

There will be no significant direct or cumulative effects on access to or quality of recreation and wilderness activities because of this project.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

The proposed project does not include any changes to housing or developments.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be significantly impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposed project will have no significant impact on any culturally unique quality of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The proposed project will not have any significant cumulative economic or social effect.

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B (the Proposed Action) – Under this alternative, the Department does grant Malmstrom Air Force Base the Right of Way they requested for the completion of their sewer lagoon expansion project.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Evaluation of the potential environment effects from the construction of the sewer lagoon expansion, yielded no concerns for significant environmental impacts.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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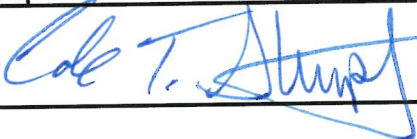
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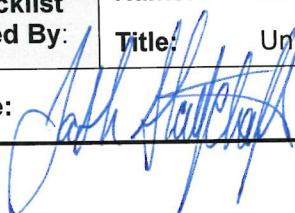
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More Detailed EA

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No Further Analysis

EA Checklist Prepared By:	Name: Cole Stumpf Title: Land Use Specialist
Signature: 	Date: 20 Aug. 2025

EA Checklist Approved By:	Name: Josh Stoychoff Title: Unit Manager, Northeastern Land Office
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