



Malmstrom Air Force Base

Draft Environmental Assessment for

Reissuance of a Hazardous Waste Permit

Hazardous Waste Program
Waste and Underground Tank Management Bureau

APPLICANT: Malmstrom Air Force Base (MAFB)			
SITE NAME: Malmstrom Air Force Base			
PROPOSED PERMIT NUMBER: MTHWP-22-01			
APPLICATION DATE: December 29, 2021			
LOCATION: Sections 1, 2, 3, 10-15, Township 20 North, Range 4 East, and Sections 6 and 7, Township 20 North, Range 5 East			COUNTY: Cascade
PROPERTY OWNERSHIP:	FEDERAL <u> X </u> STATE <u> </u> PRIVATE <u> </u>		
EA PREPARER:	Rebecca Holmes/Erica Shuhler	EA DATE:	9/23/2022

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

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 determine the need to prepare an Environmental Impact Statement (EIS) through an initial evaluation and determination of the significance of impacts associated with the Proposed Action. This document may disclose impacts over which DEQ has no regulatory authority.

The Proposed Action of reissuing the MAFB hazardous waste permit is considered a state action that may have an impact on human health and the environment. Therefore, DEQ must prepare an EA.

This Draft EA analyzes the Proposed Action and reasonable alternatives. Potential impacts that may result from the Proposed Action and alternatives are also discussed. DEQ will determine the need for additional environmental review based on consideration of MEPA criteria set forth in ARM 17.4.608.

COMPLIANCE WITH THE MONTANA HAZARDOUS WASTE ACT

The Montana Hazardous Waste Act (MHWA) is the Montana equivalent of Subtitle C of the federal Resource Conservation and Recovery Act (RCRA). MHWA and RCRA Subtitle C govern proper management and disposal of hazardous waste, including permitting requirements for certain treatment, storage, and disposal activities. In addition, these laws govern requirements for facility-wide investigation and remediation of releases of hazardous waste or hazardous constituents at permitted facilities.

Regulations for hazardous waste management are found in the Code of Federal Regulations (CFR) Title 40, parts 260 through 273 and in the Administrative Rules of Montana (ARM) 17.53.101 through 17.53.1502. The hazardous waste provisions in the federal CFR are incorporated by reference in the ARM. Montana hazardous waste permits are issued under the authority of the Montana Hazardous Waste Act, Title 75, chapter 10, part 4, Montana Code Annotated (MCA), and according to the ARM Title 17, chapter 53.

Section 75-10-406, MCA, requires Malmstrom Air Force Base (MAFB) to have a hazardous waste operating permit for its greater-than-90-day hazardous waste storage facility (HWSF). Under § 75-10-406(7), MCA, MAFB is required to conduct investigation and remediation in areas within the facility that managed or released hazardous waste or hazardous constituents and for releases of hazardous waste or hazardous constituents that have migrated beyond the facility boundaries.

This Draft EA was prepared in accordance with the requirements of 40 CFR 124.8, as incorporated by reference in the ARM 17.53.1201. For ease of reading this document, when federal regulations under Title 40 of the CFR have been incorporated by reference into the ARM, only the federal citation is used.

PUBLIC COMMENT ON THE ENVIRONMENTAL ASSESSMENT

The public is being given the opportunity to comment on the draft EA. For information on how to comment, please see the Public Involvement Section of this document.

SUMMARY OF THE PROPOSED ACTION:

The Proposed Action is reissuance of a hazardous waste permit for MAFB. MAFB is located in Great Falls, Montana.

Hazardous waste permits issued to facilities in Montana are in effect for up to 10 years and must be reissued or terminated at the end of that period. A hazardous waste permit was initially issued to MAFB in 1989, reissued in 2001, and again in 2012. The MAFB permit allows storage of hazardous waste in an on-site storage building for one year. In addition, MAFB must conduct facility-wide investigation and remediation of hazardous waste and/or hazardous constituents that may have been released to environmental media (soil, sediment, groundwater, and surface water).

In December 2021, MAFB submitted an application for a third reissuance of its hazardous waste permit. The application was submitted within the regulatory timeframe and, after review, was deemed complete by DEQ. A draft permit for reissuance has been prepared by DEQ. The draft permit includes provisions for continued management of the on-site hazardous waste storage facility (HWSF) and continued implementation of facility-wide corrective action.

DEQ has prepared this Draft EA to assess impacts of reissuing the MAFB hazardous waste permit.

PURPOSE AND BENEFIT FOR PROPOSED ACTION:

DEQ would reissue a hazardous waste operating and corrective action permit to MAFB after considering all comments received during a 45-day public comment period. The HWSF would continue to accept hazardous waste generated at MAFB and other operations under its control. MAFB would be required to implement and complete facility-wide corrective action.

MAFB has submitted a timely hazardous waste permit application requesting reissuance of the permit. DEQ determined the application to be adequate and complete. MAFB has been in substantial compliance with hazardous waste permit conditions and hazardous waste regulations with regards to the hazardous waste storage facility and facility-wide corrective action during the duration of its previous three permits.

The benefits of the Proposed Action include continued use of the HWSF to safely store hazardous waste generated at MAFB and other operations under its control until shipped off-site for disposal. The HWSF is permitted to store hazardous waste longer than 90 days. This additional storage time optimizes MAFB's ability to manage hazardous waste on-site and ship these wastes to appropriately permitted hazardous waste disposal facilities. In addition, corrective action activities would continue to address contaminated environmental media

found on the facility, ensuring protection from potential risk of contaminant exposure to human and ecological receptors.

REGULATORY RESPONSIBILITIES:

In accordance with ARM 17.4.609(3)(c), DEQ must list any federal, state, or local authorities that have concurrent or additional jurisdiction or environmental review responsibility for the Proposed Action and the permits, licenses, and other authorizations required.

MAFB must conduct operations at the HWSF and implement corrective action activities according to the terms of its hazardous waste permit. MAFB must also comply with hazardous waste management and disposal requirements set forth in ARM Title 17, chapter 53. There are no other federal, state, or local authorities that have concurrent or additional jurisdiction or environmental review responsibilities for the Proposed Action.

MAFB must comply with laws and regulations of any federal, state, or local entity that may have authority over the MAFB facility. These entities may include, but not be limited to, DEQ Water Protection Bureau (groundwater and surface water discharge and stormwater permits) and DEQ Air Quality Bureau (air quality permit).

Table 1: Proposed Action Details

Summary of Proposed Action	
General Overview	<p>The Proposed Action would be the fourth issuance of a hazardous waste permit to MAFB allowing storage of hazardous waste in a dedicated hazardous waste storage facility (HWSF) and continuing implementation of facility-wide corrective action activities. The term of the permit would be no greater than 10 years. MAFB has an option to apply for reissuance at the end of that term.</p> <p>The permit would contain the following requirements:</p> <ul style="list-style-type: none">• Module I: standard conditions, including requirements for reissuance, modification, analysis, and release reporting.• Module II: conditions and requirements for management of hazardous waste in the HWSF.• Module III: conditions and requirements for continued facility-wide corrective actions to address contamination of environmental media throughout the facility.
Proposed Action Estimated Disturbance	
Disturbance	<p>The permit will allow continuation of waste management practices and corrective action activities from previous hazardous waste permits issued to MAFB. Requirements for operation of the HWSF and implementation of corrective action activities would remain the same. No expansion of any permitted activity is included in the permit.</p>

Proposed Action	
Duration	The term of the hazardous waste permit would be no greater than 10 years. DEQ may terminate a hazardous waste permit for cause.
Location and Analysis Area	Location: Malmstrom Air Force Base, east of Great Falls, Montana (Figure 1) Analysis Area: The area being analyzed as part of this environmental review encompasses the Malmstrom Air Force Base (Figure 2). Specifically, the HWSF (Figure 3), areas considered for corrective action activities (Figure 4), and surrounding private property near the analysis area, as reasonably appropriate for the impacts being considered.
Conditions incorporated into the Proposed Action	Conditions of the hazardous waste permit governing management of the HWSF and facility-wide corrective action drive the Proposed Action.
Resources or methods used in the EA analysis.	Previous remedial investigations, remedy selection documents, professional knowledge of the MAFB facility, and hazardous waste rules and regulations (state and federal) were used in performing this analysis.

Figure 1: Location map of the MAFB facility.



Figure 2: MAFB Vicinity Map

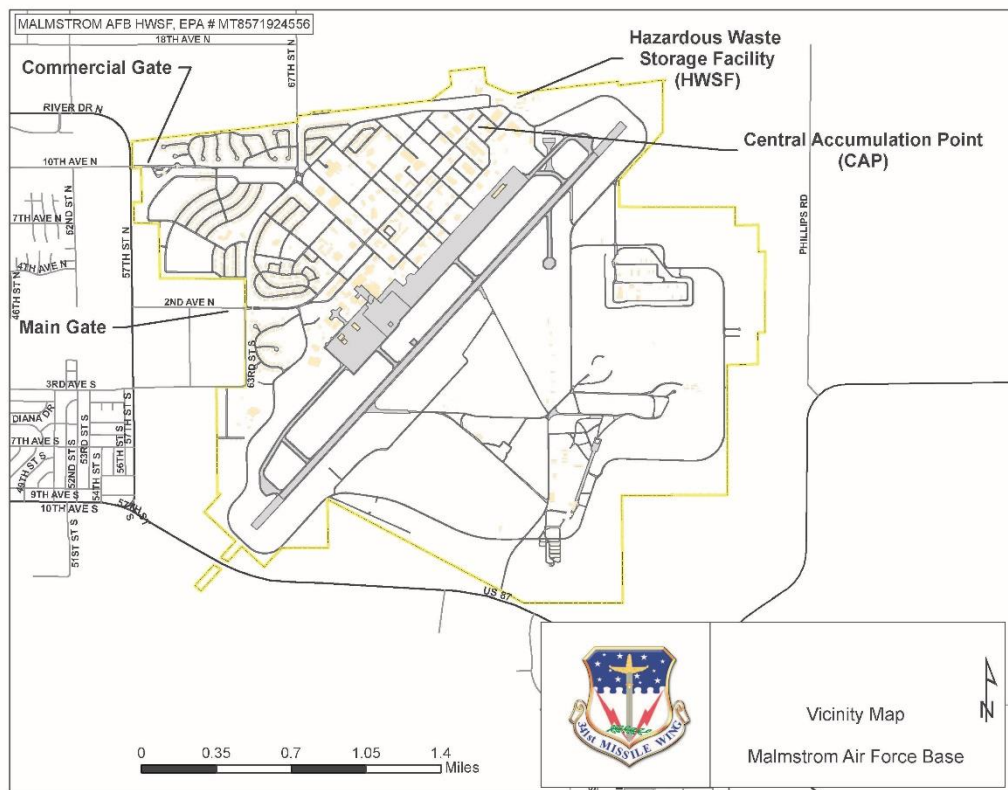
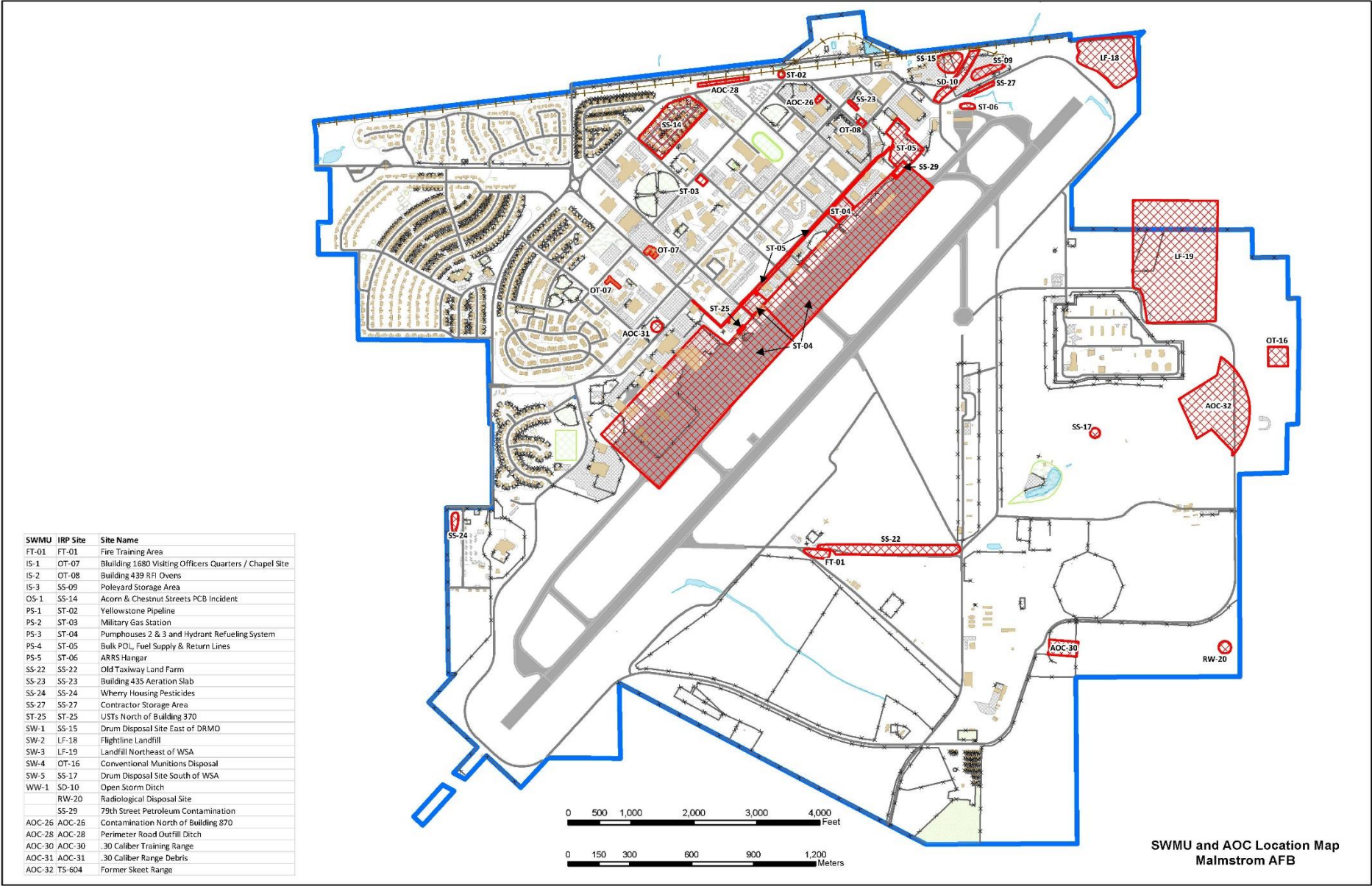


Figure 3: HWSF



Figure 4: Location of facility-wide corrective action activities



ADDITIONAL ALTERNATIVES CONSIDERED:

No Action Alternative: In addition to the Proposed Action, DEQ is considering a "no action" alternative. The "no action" alternative would deny the approval of the Proposed Action. The applicant would lack the authority to conduct the proposed activity. Any potential impacts that would result from the Proposed Action would not occur. The no action alternative forms the baseline from which the impacts of the Proposed Action can be measured.

If the applicant demonstrates compliance with all applicable rules and regulations as required for approval, the "no action" alternative would not be appropriate. Pursuant to § 75-1-201(4)(a), MCA, DEQ "may not withhold, deny, or impose conditions on any permit or other authority to act based on" an environmental assessment.

Corrective Action Order Alternative: Under this alternative, an administrative order on consent would be issued. The permit reissuance for the HWSF would be denied.

MAFB is required by the MHLWA to implement and complete facility-wide corrective action, which may be accomplished through a hazardous waste permit or an alternative enforceable mechanism, such as an administrative order on consent. Corrective action provisions for facilities that treat, store, or dispose of hazardous waste are found in § 75-10-406, MCA, § 75-10-425, MCA, and 40 CFR 264.101, as incorporated by reference in ARM 17.53.1201. To meet these provisions, DEQ must issue a permit or administrative order to MAFB for continued implementation of corrective action. An administrative order would contain the same or similar corrective action conditions as the proposed operating and corrective action permit.

The operating portion of the current permit pertains to operation and management of a greater-than-90-day storage facility. Large quantity generators of hazardous waste may not store hazardous waste on-site for more than 90 days without a permit. MAFB has operated an on-site storage facility for hazardous waste under hazardous waste permits issued in 1989, 2001, and 2012. MAFB submitted a complete application in January 2022 requesting reissuance of the permit allowing storage of hazardous waste on-site for greater than 90 days.

Denial of the permit reissuance for operation of an on-site storage facility would require MAFB to ship wastes for off-site disposal within 90 days of generation. DEQ does not have statutory or regulatory authority to issue administrative orders for storage of hazardous waste for greater than 90 days. MAFB and the missile alert and launch control facilities under its control generate a wide variety of hazardous wastes. Generally, the volume of waste generated per month is small; therefore, consolidation of wastes is an economical and efficient way to dispose of hazardous wastes generated throughout a given year.

The Corrective Action Order alternative was not included in the environmental analysis for the following reasons:

1. This alternative would deny MAFB a permit to store hazardous waste for longer than 90 days. The HWSF provides an efficient and cost-effective way to manage hazardous waste at

the facility. MAFB has maintained substantial compliance with permit conditions for waste management and storage in the HWSF throughout the duration of its previous permits.

2. Corrective action is on-going at the MAFB facility per requirements of the current and previous hazardous waste permits. To ensure consistency, a corrective action order must contain the same or similar conditions for corrective action as the proposed permit. Therefore, there would be no benefit of an order over a permit.
3. MAFB and DEQ discussed options for a permit or corrective action order. MAFB expressed its need to retain the HSWF. Based on that need, MAFB submitted a timely permit reissuance application in compliance with Montana hazardous waste regulations. DEQ has determined the application to be complete.

EVALUATION AND SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT IN THE AREA AFFECTED BY THE PROPOSED PROJECT:

The impact analysis will identify and evaluate direct and secondary impacts. Direct impacts are those that occur at the same time and place as the action that triggers the effect. Secondary impacts mean “a further impact to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action.” ARM 17.4.603(18). Where impacts are expected to occur, the impacts analysis estimates the duration and intensity of the impact.

The duration of an impact is quantified as follows:

- **Short-term:** Short-term impacts are defined as those impacts that would not last longer than the proposed operation of the site.
- **Long-term:** Long-term impacts are defined as impacts that would remain or occur following shutdown of the proposed facility.

The severity of an impact is measured using the following:

- **No impact:** There would be no change from current conditions.
- **Negligible:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** The effect would alter the resource.

1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

The analysis area includes the HWSF and two closed landfills undergoing corrective measures.

Waste management activities in the HWSF take place in an enclosed building and on paved areas of the base. Operation of the HWSF would not impact geology and soil quality, stability, and moisture.

Direct Impacts:

Proposed Action: Vegetative caps must be maintained as part of the corrective measures for the two closed landfills. Minor positive impacts to topography, geology and soil quality, stability, and soil moisture would be expected from corrective action activities since the Proposed Action requires maintenance of the vegetative caps on the landfills. No impacts would be expected from operation of the HWSF.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to topography, geology and soil quality, stability, and moisture would be expected.

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION:

The analysis area includes the HWSF and one closed landfill undergoing corrective measures.

The HWSF is an enclosed building with cement floors. Operation of the building would not impact water resources.

Direct Impacts:

Proposed Action: The Proposed Action would continue to require that areas of contamination undergo corrective action. The existing MAFB Hazardous Waste Permit requires corrective action of contaminated sites, including groundwater remediation at one closed landfill. This groundwater remediation would continue to be required under the Proposed Action which would continue to improve water quality in surface and groundwater by reducing contamination in groundwater. Improvement of water quality would be a positive impact of the Proposed Action to water quality, quantity, and distribution.

Minor positive impacts would be expected to water quality, quantity, and distribution from corrective action activities, including the requirement for ongoing groundwater remediation at the landfill on base. No impacts would be expected from operation of the HWSF.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to water quality, quantity, and distribution would be expected.

3. AIR QUALITY:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Facility-wide remediation efforts would not affect air quality. Storage of hazardous waste will take place in an enclosed building.

Direct Impacts:

Proposed Action: The Proposed Action would continue to require that hazardous waste be handled properly, such as keeping all containers of hazardous waste closed unless filling or emptying the container, which minimizes air emissions. The correction action portions of the Proposed Action would continue to require that the vegetative caps on the landfills are maintained, which also reduces potential air emissions. For these reasons, no impacts to air quality are expected under the Proposed Action.

No Action: Potential negligible to minor air impacts would be expected if No Action would be taken due to potentially uncontrolled containers of hazardous waste and erosion of the landfill cap integrity.

Secondary Impacts:

Proposed Action: No secondary impacts to air quality are expected.

4. VEGETATION COVER, QUANTITY AND QUALITY:

The analysis area includes the HWSF and two closed landfills undergoing corrective measures.

The HWSF is an enclosed building with cement floors.

Direct Impacts:

Proposed Action: Vegetative caps must be maintained as part of the corrective measures for two closed landfills. Minor positive impacts from corrective action activities would be expected to vegetative cover, quantity, and quality. Operation of the HWSF would not impact vegetative cover quality, stability, or moisture as the HWSF is an existing building. No impacts would be expected from operation of the HWSF.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to vegetative cover, quantity, and quality are expected.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

The analysis area includes the HWSF and one closed landfill with on-going groundwater remediation.

Waste management activities in the HWSF take place in an enclosed building and on paved areas of the base. The Proposed Action would have no impact on terrestrial and aquatic life and habitats.

Direct Impacts:

Proposed Action: Minor impacts, both positive and negative, from corrective action activities are expected to terrestrial and aquatic life and habitats. Surface and ground water sampling activities may cause movement of terrestrial and aquatic life. This would be a temporary negative impact, as wildlife tend to temporarily move away from areas of human activity and then return. Minor positive impacts on terrestrial and aquatic life and habitats from the Proposed Action would result from ongoing groundwater remediation and any other corrective action deemed necessary under the Proposed Action. No impacts are expected from operation of the HWSF.

No Action: No impact.

Secondary Impacts:

Proposed Action: No impacts to terrestrial and aquatic life and habitats are expected.

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

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

The site is currently a United States Air Force Base, and the Proposed Action would not place further demand on unique, endangered, fragile, or environmental resources. No threatened or endangered species or critical habitat covered under the Endangered Species Act are present on the MAFB facility.

Direct Impacts:

Proposed Action: No impacts to unique, endangered, fragile or limited environmental resources are expected.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to unique, endangered, fragile or limited environmental resources are expected.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Historical and archaeological sites are not present in the analysis area.

Direct Impacts:

Proposed Action: No impacts to historical and archaeological sites are expected.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to historical and archaeological sites are expected.

8. SAGE GROUSE EXECUTIVE ORDER:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

The MAFB facility is not located in core, general, or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program.

Direct Impacts:

Proposed Action: The Proposed Action is not located within Sage Grouse habitat; therefore, no direct impacts would be expected.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to sage grouse or sage grouse habitat would be expected.

9. AESTHETICS:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impacts to aesthetics are expected. Corrective action activities are limited to areas away from housing and base operations. Activities in and around the HWSF are part of standard operating and waste management procedures. Corrective action and HWSF waste management activities proposed under the Proposed Action would not impact aesthetics.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to aesthetics are expected.

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

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impacts to demands on environmental resources of land, water, air, or energy are expected. The Proposed Action would not place any additional demands for

water, air, or energy resources from those already in place for current hazardous waste permitted activities at the MAFB facility.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to demands on environmental resources of land, water, air, or energy are expected.

11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impacts to other environmental resources are expected. No additional environmental resources, other than those analyzed in the impact criteria noted above, have been identified as being impacted by the Proposed Action.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to other environmental resources are expected.

12. HUMAN HEALTH AND SAFETY:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

As part of the Proposed Action, MAFB personnel and their contractors would take part in soil and groundwater sampling, closed landfill and HWSF inspections, and waste management activities. To protect human health, MAFB has internal safety protocols and standard safety procedures for waste management operations and corrective action activities on the base. Plans detailing preparedness, prevention, and contingency in case of an emergency are required attachments to the HWSF module of the permit. MAFB staff and contractors must follow federal Air Force safety protocols when conducting corrective action activities.

Direct Impacts:

Proposed Action: Minor impacts would be expected to human health and safety. MAFB must comply with conditions of the hazardous waste permit and with internal Air Force safety and health protocols. Any impacts of the Proposed Action to human health and safety would be mitigated by safety protocols and permit conditions.

No Action: No Action would have minor to potentially major negative impacts to human health and safety since the handling of hazardous waste and cleanup of contamination

would no longer be required by permit. Mishandling of hazardous waste or cessation of groundwater remediation would potentially expose both humans and ecological receptors to toxic, flammable, reactive, corrosive, or carcinogenic contaminants, threatening health and safety.

Secondary Impacts:

Proposed Action: No secondary impacts would be expected to human health and safety.

13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: Minor positive impacts to industrial and commercial activities and production are expected. The Proposed Action would have minor positive impacts with regard to the HWSF. The ability to store hazardous wastes for longer than 90 days prior to shipment to a TSDF would increase efficiency in transportation costs and staff time.

MAFB hires environmental consulting firms to conduct environmental sampling and technical evaluations and develop work plans and reports for corrective action activities. Samples for analytical evaluation would continue to be sent to an external analytical laboratory for analysis. This would have a minor positive economic impact on commercial businesses.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to industrial, commercial, and agricultural activities and production are expected.

14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impact to quantity and distribution of employment is expected. The quantity and distribution of employment would not change from the distribution influenced by current and previous hazardous waste permits. An increase or decrease in distribution and number of employees participating in the Proposed Action's activities is not expected.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impact to quantity and distribution of employment is expected.

15. LOCAL AND STATE TAX BASE AND TAX REVENUES:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impact. The local and state tax base and tax revenue would not increase from those generated by the facility's current use and would not be different from current and previous hazardous waste permits issued to MAFB.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impact to local and state tax base and tax revenues is expected.

16. DEMAND FOR GOVERNMENT SERVICES:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: Minor impacts are expected to demand for government services. The Proposed Action would require submittal of work plans, reports and completion certification documentation for corrective action activities. These submittals would be reviewed by staff in DEQ's Hazardous Waste Program (HWP). In addition, HWP staff would periodically conduct inspections of corrective action activities. Therefore, a minor impact to government services is anticipated due to corrective action activities.

Under the Performance Partnership Agreement between EPA and DEQ, the HWSF must, at a minimum, be inspected annually. The inspections would result in resources spent on HWP staff time for inspections, report writing, and enforcement actions, as necessary. Therefore, a minor impact to government services is anticipated.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impact to demands for government services is expected.

17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: Minor impacts are expected to locally adopted environmental plans and goals. Permit conditions would require that MAFB implement institutional measures to control or prevent present and future on-base use and access to areas of contaminated groundwater and soils. MAFB's General Plan for the base consolidates plans and programs related to management and development of Air Force lands, facilities, and resources.

The plan would be updated to incorporate institutional controls to prohibit current and future use of ground and surface water and restrict land use of contaminated areas on the MAFB facility. MAFB currently has a perpetual easement for off-base properties within 1,000 feet of the base boundary which precludes human habitation and building for human occupancy. Further off-base institutional controls may be required, including easements and administrative agreements with adjacent landowners. Changes to the MAFB General Plan and agreements with adjacent landowners are expected to have minor impacts on local environmental plans and goals.

Under the Proposed Action, impacts of the HWSF to locally adopted environmental plans and goals would be minor and would occur at closure of the building. MAFB intends to clean close the HWSF. If confirmatory sampling shows no residual contamination is present in the building or soils, no institutional measures will be necessary. However, institutional controls to restrict use of the building or land would be required if residual contamination is present and cannot be remediated to concentration levels that pose no risk to human health or the environment.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impact to locally adopted environmental plans and goals is expected.

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

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Wilderness activities are not present at the site.

Direct Impacts:

Proposed Action: No impacts are expected to access to and quality of recreational and wilderness activities. On-base recreation facilities are not located near the HSWF or within areas under facility-wide corrective action.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impact is expected to access to and quality of recreational and wilderness activities.

19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impacts are expected on density and distribution of population and housing. The site is currently a United States Air Force base. The Proposed Action would have no impact on distribution of population or housing.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts are expected on density and distribution of population and housing.

20. SOCIAL STRUCTURES AND MORES:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Direct Impacts:

Proposed Action: No impacts to social structures and mores are expected. The site is currently a United States Air Force base. The Proposed Action would not place any demand on social structures and mores.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to social structures and mores are expected.

21. CULTURAL UNIQUENESS AND DIVERSITY:

The analysis area includes the HWSF and the areas throughout the MAFB facility where corrective action activities have taken place.

Areas of cultural and/or diversity significance are not present on the MAFB facility.

Direct Impacts:

Proposed Action: No impacts to cultural uniqueness and diversity are expected.

No Action: No impact.

Secondary Impacts:

Proposed Action: No secondary impacts to cultural uniqueness and diversity are expected.

22. PRIVATE PROPERTY IMPACTS:

MAFB is a federally owned facility. No aspect of the alternatives under consideration would restrict the use of private lands or regulate their use beyond the permitting process.

prescribed by the HWP. The conditions that would be imposed by DEQ in reissuing a hazardous waste permit would be designed to ensure conformance of the Proposed Action to minimum environmental standards or to uphold criteria proposed and/or agreed to by MAFB. Thus, no further DEQ analysis is required beyond the MAFB permit reissuance review for protection of human health and the environment.

23. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Due to the nature of the Proposed Action, no further direct or secondary impacts are anticipated from this project.

CUMULATIVE IMPACTS:

Cumulative impacts are the collective impacts on the human environment when a specific action is considered in conjunction with other past, present, and future actions by location and type. Cumulative impact analysis under MEPA requires an agency to consider all past and present state and non-state actions. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. Cumulative impact analyses help to determine whether an action, combined with other activities, would result in significant impacts.

State and non-state activities and land use in the surrounding area of the MAFB facility were considered in determining cumulative effects. Land use outside the boundary of the MAFB facility includes residential areas to the northwest and west, and agricultural land to the north, east, and south. An industrial landfill permitted by the DEQ Solid Waste Program is located on the eastern boundary of the facility.

DEQ and MAFB are investigating the presence of per- and polyfluoroalkyl substances (PFAS) in environmental media in the area. DEQ has undertaken sampling along the Missouri River and the mouth of Whitmore Ravine. The head of Whitmore Ravine begins on the northern boundary of the MAFB facility. The US Air Force has conducted a preliminary investigation on the MAFB facility.

Analytical results from DEQ and MAFB's initial sampling efforts show concentrations of PFAS compounds in soil, sediment, and groundwater in the Whitmore Ravine and on the MAFB facility. Additional investigation to determine the nature and extent of the concentrations on the MAFB facility will be conducted by MAFB and the US Air Force. The PFAS investigation on the MAFB facility is not being conducted under the authority of the MAFB hazardous waste permit.

Under the Proposed Action, no expansion, process changes, or new remedial decisions are planned. Requirements under the draft permit are not substantially different from previous MAFB hazardous waste permits. Residential, agricultural, and industrial use of the land surrounding the MAFB facility has not substantially changed since reissuance of the MAFB

permit in 2012. Because the nature and extent of concentrations of PFAS in environmental media is not fully characterized, the potential cumulative effects of PFAS with regards to the Proposed Action cannot be determined at this time.

Based on analysis of the Proposed Action combined with state and non-state activities and land use, DEQ has determined the cumulative effects of these activities would not result in significant impacts.

PUBLIC INVOLVEMENT:

Scoping for this Proposed Action consisted of internal efforts to identify substantive issues and/or concerns related to the permit renewal. No expansion of permitted activities or disturbance of greenspace is planned or allowed in the proposed permit renewal. No substantive issues and/or concerns were identified related to the Proposed Action.

Public Comment Period

The public comment period allows interested citizens, members of the regulated community, and other governmental agencies an opportunity to comment on this EA. The comment period is Sunday, October 2, 2022, to Wednesday, November 16, 2022.

Copies of the EA and associated documents (draft permit and Fact Sheet) are available for review at the following locations:

Location Information	Review Hours
Great Falls Public Library 301 2 nd Ave. N Great Falls, MT 59401 (406) 453-0349	Monday 12–6PM Tuesday 10AM–8PM Wednesday 10AM–8PM Thursday 10AM–8PM Friday 10AM–6PM Saturday 10AM–6PM Sunday Closed
Montana Department of Environmental Quality Hazardous Waste Program Waste and Underground Tank Management Bureau Metcalf Building 1520 E. 6th Ave. Helena, Montana (406) 444-5300	Monday through Friday 8:00 am - 5:00 pm Website: Fact Sheet, Draft Permit, Draft Environmental Assessment: http://deq.mt.gov/Public/publiccomment

The public has until close of business on Wednesday, November 16, 2022, to submit written comments. Comments should include all reasonably available references, factual grounds for comments, and supporting material. Please submit written comments to the following address or email:

U.S. Mail

Erica Shuhler, P.E.
DEQ Hazardous Waste Program
P.O. Box 200901
Helena, MT, 59620-0901

Email

DEQhazwaste@mt.gov
Subject Line – MAFB Public Comment

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION:

Land affected by the proposed permit renewal is owned by the federal government. MAFB must adhere to all applicable local, state, and federal rules, which at some level may also include other local, state, or federal agency jurisdiction. Other Governmental Agencies which may have overlapping or sole jurisdiction may include DEQ Water Protection Bureau (groundwater and surface water discharge, stormwater), DEQ Air Quality Bureau (air quality), Montana Department of Natural Resources and Conservation (water rights), and the City of Great Falls.

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS:

Under ARM 17.4.608, DEQ is required to determine the significance of impacts associated with the Proposed Action. This determination is the basis for the agency's decision concerning the need to prepare an environmental impact statement and also refers to DEQ's evaluation of individual and cumulative impacts. DEQ is required to consider the following criteria in determining the significance of each impact on the quality of the human environment:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;

“Severity” is analyzed as the density of the potential impact while “extent” is described as the area where the impact is likely to occur. An example could be that a project may propagate ten noxious weeds on a surface area of 1 square foot. In this case, the impact may be a high severity over a low extent. If those ten noxious weeds were located over ten acres there may be a low severity over a larger extent.

“Duration” is analyzed as the time period in which the impact may occur while “frequency” is analyzed as how often the impact may occur. For example, an operation that occurs throughout the night may have impacts associated with lighting that occur every night (frequency) over the course of a one-season project (duration).

2. The probability that the impact will occur if the Proposed Action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;

3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
5. The importance to the state and to society of each environmental resource or value that would be affected;
6. Any precedent that would be set as a result of an impact of the Proposed Action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

The significance determination is made by giving weight to these criteria in their totality. For example, impacts with moderate or major severity may be determined to be not significant if the duration of the impacts is considered to be short-term. As another example, however, moderate or major impacts of short-term duration may be considered to be significant if the quantity and quality of the resource is limited and/or the resource is considered to be unique or fragile. As a final example, moderate or major impacts to a resource may be determined to be not significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

SIGNIFICANCE DETERMINATION

The severity, duration, geographic extent and frequency of the occurrence of the impacts associated with the Proposed Action would be limited. MAFB is requesting renewal of its hazardous waste permit for the Malmstrom Air Force Base. The permit allows storage of hazardous waste in a hazardous waste storage facility for greater than 90 days and requires continued implementation of facility-wide corrective action.

DEQ has not identified any significant impacts associated with the Proposed Action for any environmental resource. Reissuing the MAFB hazardous waste permit would not set precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If MAFB submits additional permit applications, DEQ is not committed to approve those applications. DEQ would conduct a new environmental review for any subsequent hazardous waste permit application. DEQ would make a decision on MAFB's subsequent applications based on the criteria set forth in the Montana Hazardous Waste Act.

DEQ's reissuance of a hazardous waste permit does not set a precedent for DEQ's review of other applications, including the level of environmental review. The level of environmental review decision is made based on a case-specific consideration of the criteria set forth in ARM 17.4.608.

DEQ does not believe that the Proposed Action has any growth-inducing or growth-inhibiting aspects or that it conflicts with any local, state, or federal laws, requirements, or formal plans. Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed state action is not predicted to significantly impact the quality of the human environment. Therefore, at this time, preparation of an environmental assessment is determined to be the appropriate level of environmental review under the Montana Environmental Protection Act.

Environmental Assessment and Significance Determination Prepared By:

<u>Rebecca Holmes</u>	<u>Senior Environmental Science Specialist</u>
<u>Erica K. Shuhler, P.E.</u>	<u>Environmental Science Specialist</u>
Name	Title

EA Reviewed By:

<u>Ann Kron</u>	<u>Environmental Science Specialist</u>
Name	Title

Responses to Substantive Comments will be attached to the Final EA.

References

CH2M Hill, 2004. Corrective Measures Study (CMS) Report for Site LF-19, Landfill Northeast of the Weapons Storage Area, Malmstrom Air Force Base, Montana. August.

Malmstrom Air Force Base, 1994, RCRA Facility Investigation Report, Volumes 1 through 4, Malmstrom Air Force Base, Montana. June.

Malmstrom Air Force Base, 2021. RCRA Part B Permit Renewal Application, Malmstrom Air Force Base, Hazardous Waste Storage Facility and Facility-Wide Corrective Action. December.

Montana Department of Environmental Quality, 2014. Montana Hazardous Waste Permit, Permit Number MTHWP-14-02, for the Malmstrom Air Force Base, Montana. September.