FINAL ENVIRONMENTAL ASSESSMENT

for the .

TP Construction, Inc.

Land Application Site

Havre, Montana

Solid Waste Section

PO Box 200901

Helena, MT 59620-0901

February 7, 2020

Table of Contents

Tables

Figures

ACRONYMS

TPC – TP Construction, Inc.

ARM – Administrative Rules of Montana

AAR– Annual Application Rate

Draft EA – Draft version of an environmental assessment before public comment

DEQ – Montana Department of Environmental Quality

DNRC – Montana Department of Natural Resources and Conservation

EA – Environmental Assessment

EIS – Environmental Impact Statement

GWIC – Ground Water Information Center

MBMG – Montana Bureau of Mines and Geology

MCA – Montana Code Annotated

MEPA – Montana Environmental Policy Act

MNHP – Montana Natural Heritage Program

O&M – Operation and Maintenance

Proposed Action – Approving a new septage land application site

Septic Rules– ARM Title 17, chapter 50, subchapter 8, "Cesspool, Septic Tank, and Privy Cleaners"

SDLA – "Septic Disposal Licensure Act", Title 75, chapter 10, part 12, MCA

Site – Approximately 4.9 acres of property located approximately 1.3 miles south of Havre in Hill County, Montana, west of State Highway 234.

SWL – Static Water Levels

USFWS – United States Fish and Wildlife Service

USGS – United States Geological Survey

1. NEED FOR PROPOSED ACTION

1.1 SUMMARY

This environmental assessment (EA) was prepared for the septage land application site by TP Construction, Inc. (TPC) in accordance with the Montana Environmental Policy Act (MEPA). On February 4, 2019, the Department of Environmental Quality (DEQ) received an application from TPC for a new septage land application site (Proposed Action). TPC proposed the land application of septage, portable toilet waste, grease trap waste, sump pumpings, and graywater on 4.9 acres of property located 1.3 miles south of Havre in Hill County, Montana, west of State Highway 234 (Site, **Figure 1**).

1.2 BACKGROUND

TPC obtained a license from DEQ to pump and land apply septage in Montana. TPC is currently approved to land apply septage at two other land application sites in Hill County. TPC is proposing to add the Site to their license. The Site is on private property and is currently unused grassland.

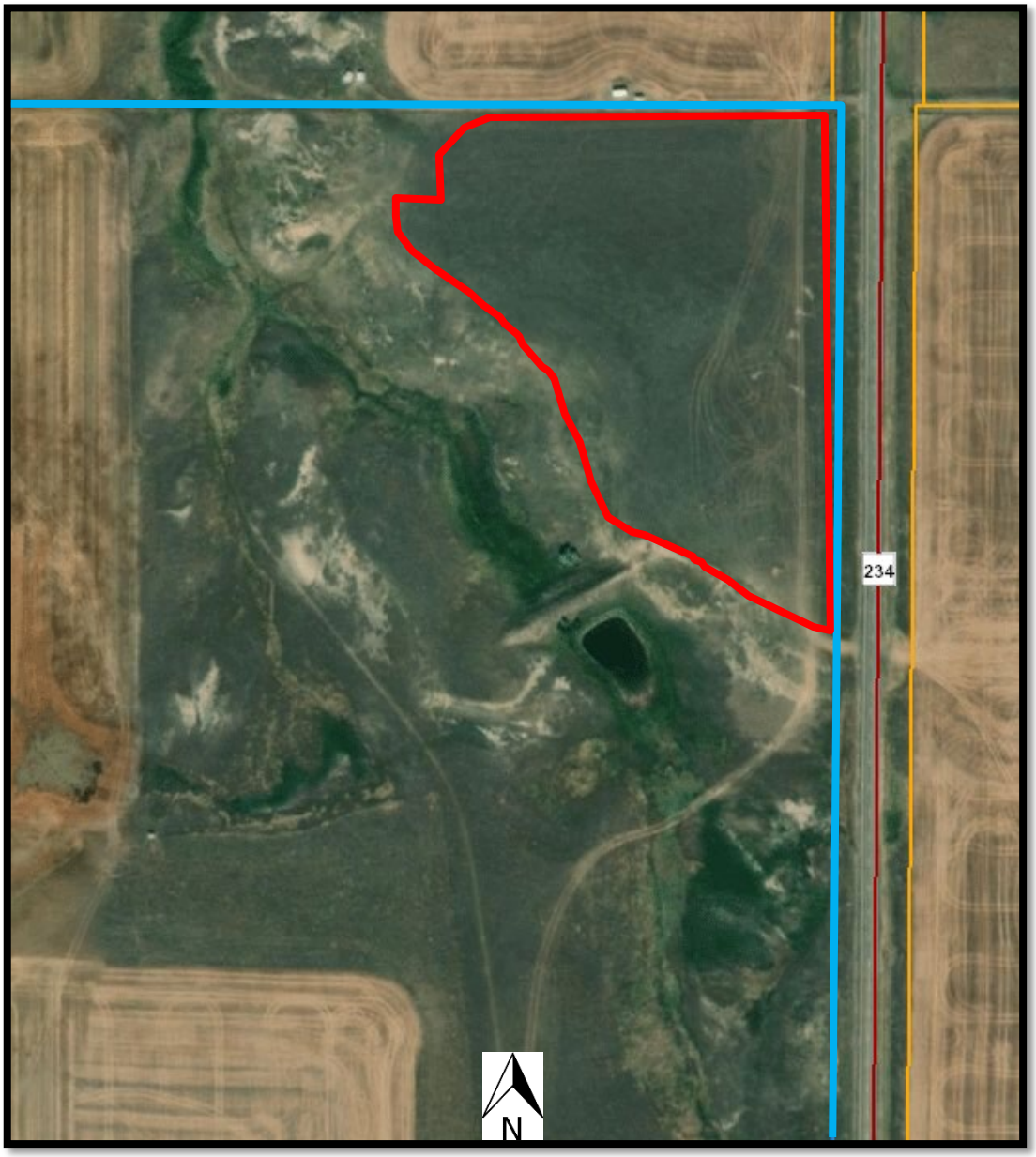
Septage is the liquid and solid material removed from a septic tank, cesspool, portable toilet, or similar treatment works that only receive domestic waste and wastewater from humans or household operations. As the population grows in Montana, the demand for disposal of septage increases. Wastewater treatment plants are limited to the amount of waste they can receive. Land application of septage allows for disposal to occur without overloading Montana's wastewater treatment plants. The Septic Rules establish minimum requirements for the pumping and land application of septage.

When properly managed, land application of septage is a beneficial resource, providing economic and environmental benefits with no adverse public health effects. A licensed land application program recognizes and employs practices that maximize those benefits. Septage does not include prohibited material (*e.g.*, garbage or tampons) removed from a septic tank or similar treatment works by pumping.

1.3 PURPOSE AND NEED

DEQ's purpose and need in conducting the environmental review is to act upon TPC's application to add a new disposal site to its existing license to pump and land apply septage in Montana. DEQ's decision to approve or deny the application depends upon the consistency of the application with the Septage Disposal Licensure Act (SDLA); the Administrative Rules of Montana (ARM) Title 17, chapter 50, subchapter 8, "Cesspool, Septic Tank, and Privy Cleaners" (Septic Rules); the Montana Clean Air Act; and the Montana Water Quality Act.

Figure 1: Land Application Site
(*Site in red; Patrick Holding, LLC property in blue; surrounding property boundaries in orange*)



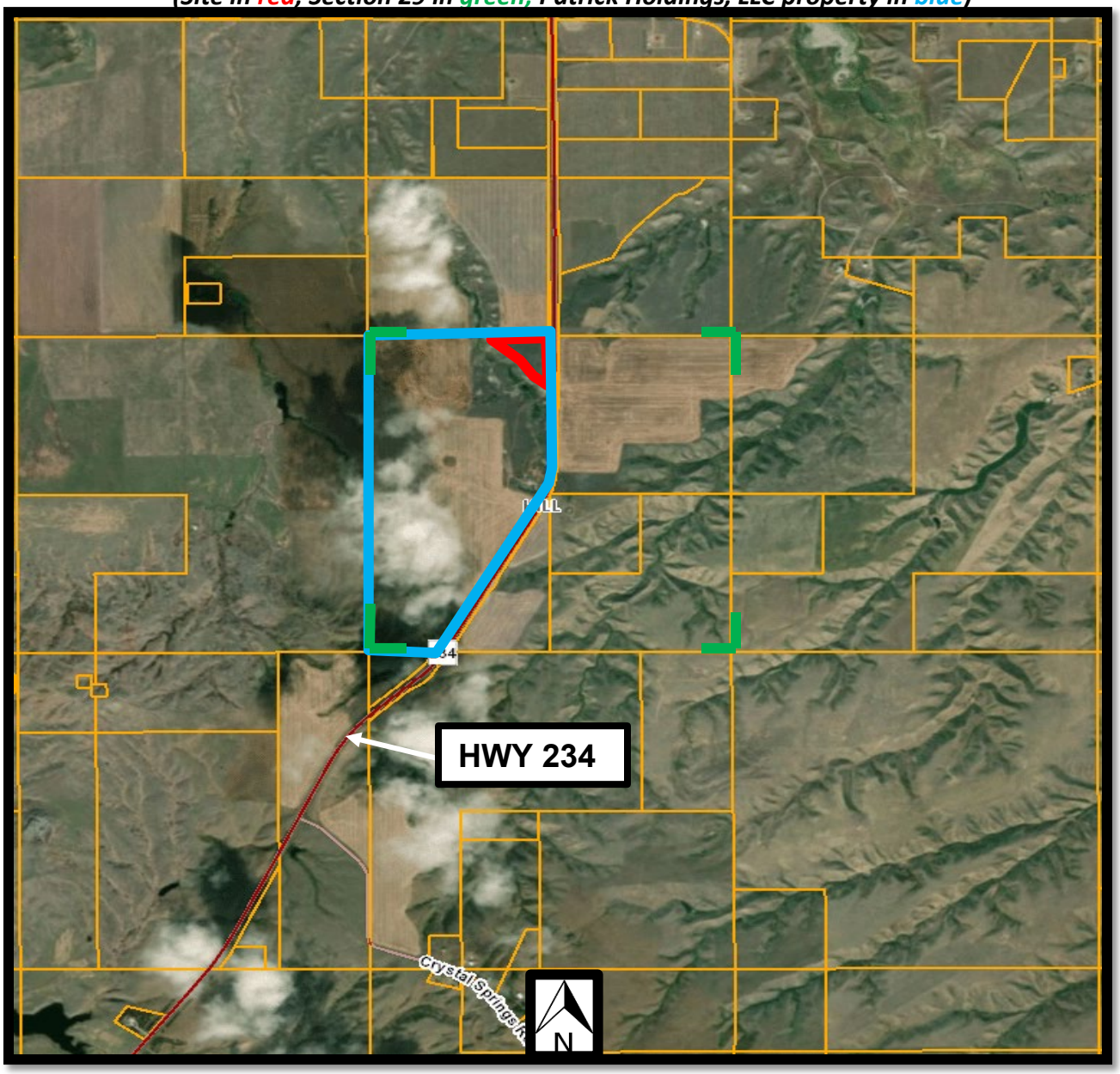
*Source: Montana Cadastral (**NOT TO SCALE**)*

1.4 LOCATION DESCRIPTION AND STUDY AREA

The Site is located 1.3 miles south of Havre, west of State Highway 234. A private road would be used to access the Site (**Figure 2**).

Figure 2: Study Area

(Site in red; Section 29 in green; Patrick Holdings, LLC property in blue)



*Source: Montana Cadastral (**NOT TO SCALE**)*

The study area perimeter (not shown) extends beyond the boundaries of the Site (**Figure 2**).

The Site is located on the Patrick Holdings, LLC property, located in the NE ¼ NW ¼ of Section 29, Township 32 North, Range 16 East in Hill County, Montana (**Figure 1**). Currently, the Site is grassland. The Site would be split into two parcels. Land application would be rotated annually between the parcels.

1.5 COMPLIANCE WITH MEPA

Under MEPA, Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The Proposed Action is considered to be a state action that may have an impact on the human environment and, therefore, DEQ must prepare an environmental review. This EA examines the Proposed Action and alternatives to the Proposed Action, and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in ARM 17.4.608.

1.6 PUBLIC INVOLVEMENT

DEQ released the draft version of this environmental assessment (Draft EA) to present its initial findings described in Section 4.2. A 30-day public comment period begins upon release of the document. The public comment period ended on February 2, 2020. A notice of availability for the Draft EA was sent to adjacent landowners and other interested parties. A public notice was published in the Havre Daily News and the Great Falls Tribune. The public notice, Draft EA, and final EA may be viewed at: https://deq.mt.gov/public/ea/SepticPumpers.

2. DESCRIPTION OF ALTERNATIVES

This Section describes the Proposed Action and No Action alternatives. MEPA requires the evaluation of reasonable alternatives to the Proposed Action, Reasonable alternatives are achievable under current technology and are economically feasible, as determined by the economic viability of similar projects with similar conditions and physical locations. Reasonable alternatives are determined without regard to the economic strength of the applicant and may not include an alternative facility or an alternative to the proposed project itself.

According to ARM 17.4.609(3)(f), an EA must include reasonable alternatives whenever reasonable and prudent. DEQ has not included any other alternatives to mitigate potential impacts because TPC's application and operation and maintenance plan contain sufficient mitigating factors.

2.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the Site would not be approved by DEQ. Therefore, the Site could not be used by TPC, and disposal of septage would have to occur at another approved location.

2.2 PROPOSED ACTION

2.2.1 LAND APPLICATION SITE OPERATIONS

The operational and setback requirements for land application of septage at this Site are provided in **Tables 1** and **2**:

Table 1: Land Application Operational Requirements

ARM Reference	Specific Restrictions
17.50.809(10)	All non-putrescible litter must be removed from the land application site within 6 hours of application.
17.50.809(12)	Pumpings may not be applied at a rate greater than the annual application rate (AAR) of the site for crop nitrogen requirement on an annual basis.
17.50.810(1)	Pumpings may not be applied to flooded, frozen, or snow-covered ground if the pumpings may enter state waters.
17.50.811(3)	Pumpings may be applied only if the person first performs one of the following vector attraction and pathogen reduction methods: • injection below the land surface so no significant amount remains on the land surface within one-hour of injection; • incorporation into the soil surface's plow layer within 6 hours of application; • addition of alkali material so that the pH is raised to and remains at 12 or higher for a period of at least 30 minutes; or, • management as required by 17.50.810 when the ground is frozen

Table 2: Land Application Site Setback Requirements

ARM Reference	Specific Restrictions
17.50.809(1)	Pumpings may not be applied to land within 500 feet of any occupied or inhabitable building.
17.50.809(2)	Pumpings may not be applied to land within 150 feet of any state surface water, including ephemeral or intermittent drainages and wetlands.
17.50.809(3)	Pumpings may not be applied to land within 100 feet of any state, federal, county, or city-maintained highway or road.
17.50.809(4)	Pumpings may not be applied to land within 100 feet of a drinking water supply source.
17.50.809(6)	Pumpings may not be applied to land with slopes greater than 6%.
17.50.809(8)	Pumpings may not be applied to land where seasonally high groundwater is 6 feet or less below ground surface.

Land application would be limited to areas approved by DEQ. Areas within the Site would not be used until their boundaries have been marked and approved by DEQ or the local county sanitarian.

TPC would be required to log the type and amount of septage land applied annually as well as the dates applied. Semi-annual disposal logs would be submitted to DEQ. DEQ would verify the Site's annual application rate (as discussed in Section 2.3).

2.2.2 EQUIPMENT AVAILABLE AND PUMPER TRUCK REQUIREMENTS

TPC has the following equipment available for land application activities:

1. Peterbilt pump truck
2. Western Star vac truck
3. Chevy 1-ton pump truck
4. 250 John Deere excavator
5. Heston tractor with a plow
6. Semi with side dump

The Septic Tank, Cesspool, and Privy Cleaner Vehicle Inspection Form was created by DEQ to guide the vehicle inspection. The county health officer's (or designated representative's) signature on the vehicle inspection form certifies that the vehicle is equipped with the necessary equipment to adequately screen and spread septage while land applying. The following questions are on the form to verify compliance with the Septic Rules:

1. Does the vehicle show signs of leakage?
2. Is the vehicle equipped with the proper spreading equipment?
3. Is the spreading equipment mounted on the vehicle or separate?
4. If required to screen septage before land applying, is the vehicle, or site, equipped with the proper screening equipment?
5. Is the spreading equipment approved for use?
6. Is the screening equipment approved for use?
7. Make/Model of Vehicle
8. Tank Size

TPC would be required to submit this form for each pump or vac truck to DEQ prior to land application.

2.2.3 AMOUNT AND EXTENT OF SEPTAGE APPLICATION

Land application must not exceed the AAR (gallons per acre per year) based on the type of waste liquids pumped and the crop or other vegetation at the Site. The AAR is calculated as follows:

AAR = crop nitrogen requirement (lbs/acre/year) / 0.0052 (lbs/gallon)

Because septage, portable toilet waste, grease trap waste, sump pumpings, and graywater (or mixtures thereof) would be land applied by TPC, the AAR is adjusted for the grease trap waste which has the highest nitrogen concentrations.

The grass at the Site has a crop nitrogen requirement of 125 pounds per acre per year. The resulting AAR for septage is 24,039 gallons per acre per year, which is equal to approximately 0.89 inches of liquid applied annually per acre. For comparison, the average annual precipitation in the Havre area is 11.2 inches per year.

Land application of septage is alternated annually amongst separate parcels to allow agronomic crop uptake of all applied nitrogen. When land application is rotated, one parcel is used every year. For example, if 100 acres are available for land application, 50 acres would be used one year and the other 50 acres would be used similarly the next year. TPC would designate two equal areas of 2.45 acres and rotate each parcel every year.

The Patrick Holdings, LLC property could annually treat up to 58,896 gallons of waste applied at the AAR maximum on 2.45 acres each year.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES BY RESOURCE

3.1 LOCATION DESCRIPTION AND STUDY AREA

The Site is referenced in Section 1.1 of this EA. The study area includes land and resources in and around the Site. DEQ staff visited the Site to observe resources, habitats, land uses, and species present.

3.2 IMPACTS

Table 3 shows a summary of the impacts of the No Action Alternative and the Proposed Action.

Table 3: Impacts

Resource	Alternative 1 – No Action	Alternative 2 – Proposed Action
Wildlife and Habitats	No impact.	Minor impact. Wildlife tend to avoid land application sites due to human scent and activities and would relocate (See Section 3.2.1)
Soils and Vegetation	No impact.	Minor impact. The quality of soils and vegetations would be enhanced by the Proposed Action (See Section 3.2.2)
Hydrology and Hydrogeology	No impact.	No impacts. (See Section 3.2.3)
Aesthetics	No impact.	Minor impact. Land application activities resemble agricultural activities occurring in the surrounding area. (See Section 3.2.6) Odor would largely be controlled by daily tilling.
Human Health & Safety	No impact.	No impacts. (See Section 3.2.7)
Demand for Government Services	No impact.	Minor impact. Hill County sanitarian and DEQ would conduct periodic inspections of the Site. (See Section 3.2.8)
Traffic	No impacts.	Minor impact. TPC would access the Site via State Highway 234, which currently supports traffic to homes and businesses in the area. (See Section 3.2.9)

3.2.1 WILDLIFE AND HABITATS

Transient wildlife tends to avoid land application sites due to human scent and activities. Montana Fish, Wildlife & Parks (FWP) manages the overall wildlife populations in the region. Species of fish and amphibians are not included on the following lists because land application activities will not impact nearby waters (see Section 3.2.3.1). There are no wetlands on the Site.

The applicant does not plan to expand the Site beyond what is described in the application. Therefore, no habitats outside the land application area would be impacted. Adjacent cultivated fields limit the habitat suitability immediately surrounding the Site. Because of the limited development and low human population in the surrounding area, an adequate amount of similar habitat near the Site can accommodate species forced to relocate due to the Proposed Action.

Impacts to wildlife and habitats from the Proposed Action would be minor.

3.2.1.1 THREATENED AND ENDANGERED SPECIES

U.S. Fish & Wildlife Service's (USFWS) online databases were used to identify plant and animal species at the Site and study area (USFWS, 2019). The USFWS species and status listings for Hill County, Montana, are shown in **Table 4**:

Table 4: Federally Established Species List

Scientific Name	Common Name	Status
Canis lupus	Gray wolf	recovery
Haliaeetus leucocephalus	Bald eagle	recovery

The Site does not provide the habitat necessary for the bald eagle or gray wolf and is not anticipated to impact these species.

3.2.1.2 SPECIES OF CONCERN

Designation as a species of concern is not a statutory or regulatory classification. Instead, these designations provide a basis for resource managers and decision-makers to make proactive decisions regarding species conservation.

The Montana Natural Heritage Program's (MNHP) online databases were accessed for listed species (MNHP, 2019). The MNHP species and status listing for Township 32 North, Range 16 East is shown in **Table 5**:

Table 5: Montana Recognized Species List

Scientific Name	Common Name	Status	GRank/SRank

Myotis lucifugus	Little Brown Myotis	species of concern	G3/S2

The MNHP uses a standardized ranking system developed by The Nature Conservancy and maintained by NatureServe. Each species is assigned two ranks; one representing its global status (GRank), and one representing its status in the state (SRank). The scale is 1-5; 5 means common, widespread, and abundant; 1 means at high risk. Species with a GRank 5 are not included in **Table 5**. The Site does not provide habitat necessary for the Little Brown Myotis and is not anticipated to impact this species of bat.

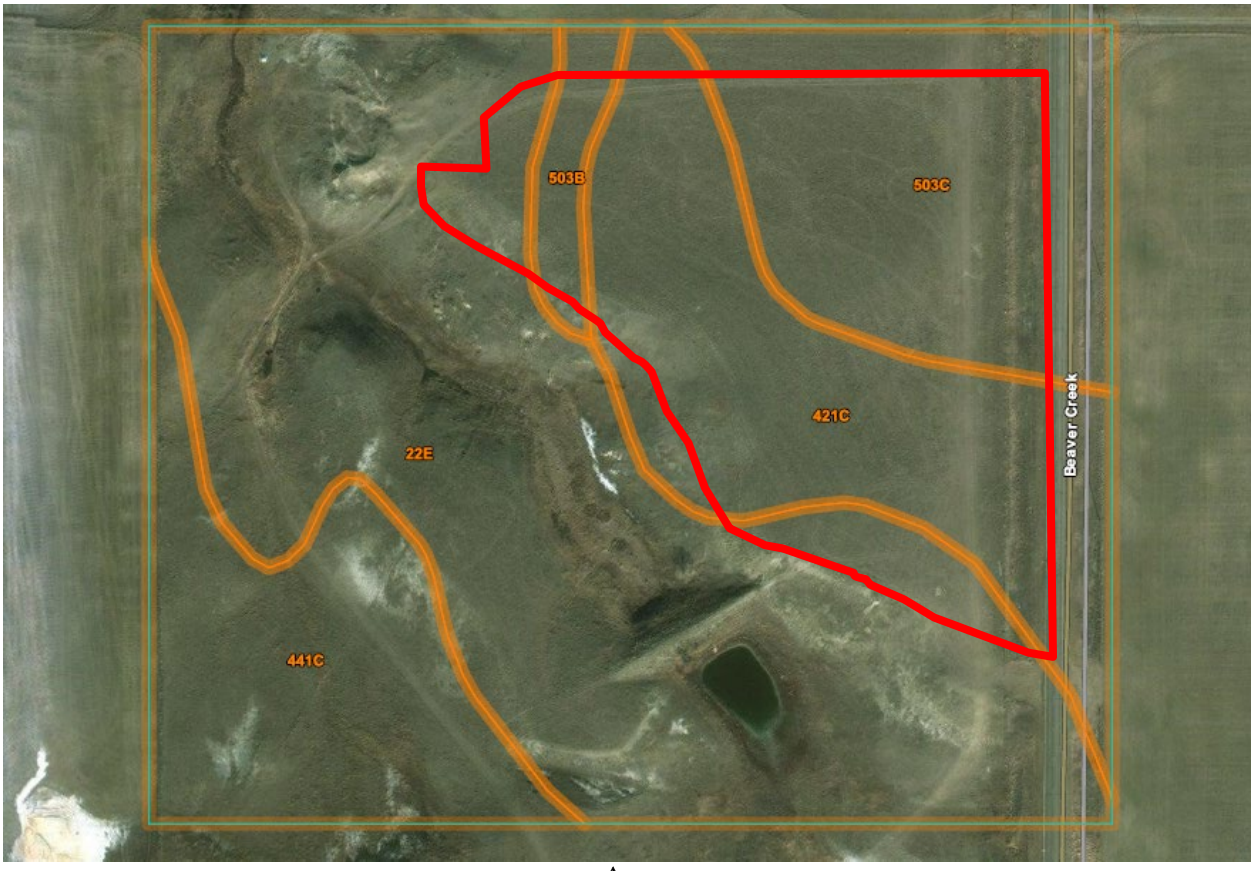
The Site is not located within a Core Area or any other recognized habitat level for sage grouse, as designated by the Department of Natural Resources and Conservation (DNRC).

3.2.2 SOILS AND VEGETATION

The impact of the Proposed Action to soils and vegetation would be minor.

The US Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) National Cooperative Soil Survey databases were accessed for information about the shallow subsurface soils at the Site and surrounding area (**Figure 3** and **Table 6**).

Figure 3: Soil Resource Map
(*Soil unit with delineation in orange, Site in red*)



*Source: USDA, Natural Resources Conservation Service (NRCS), 2019 (**NOT TO SCALE**)*

Table 6: USDA-NRCS, Custom Soil Resource Report, 2019

Map Unit Symbol	Map Unit Name	Soil Rating
22E	Hillon-Joplin loams, 8 to 25 percent slopes	Very limited
421C	Joplin-Hillon loams, 2 to 8 percent slopes	Somewhat limited
503B	Telstad-Joplin loams, 0 to 4 percent slopes	Somewhat limited
503C	Telstad-Joplin loams, 0 to 4 percent	Somewhat limited

The predominant soil types where the land application will occur are Telstad-Joplin loams (503B & C) and Joplin-Hillon loams (421C). The ratings shown in **Table 6** are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the septage is applied, and the method by which the septage is applied. "Not limited" indicates that the soil has features that are favorable for the specified use. Good performance and low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use (NRCS, 2019).

Thinly distributed shortgrass prairie grasses and forbs were documented in photos taken during DEQ's visit of the Site. Sparse sage and other varieties of brush cover were also observed on or near the Site. Adjacent agricultural fields have recently been dedicated to grain production as evidenced by submitted photos. The MNHP online databases were also accessed for listed plant species (MNHP, 2019). No species were listed for the Township 32 North, Range 16 East study area.

Septage contains nutrients that can reduce the reliance of the farmer on chemical fertilizers to improve soil. The Proposed Action would add valuable moisture, organic matter, and nutrients to the topsoil, improving the soil tilth and crop production on the Site. The quantity and quality of soils and vegetation at the Site would be enhanced by the Proposed Action.

DEQ analyzed how the land application of septage would impact the Site's environment given the weather of the region. The weather in the area is typical of north central Montana and is classified as hot summer continental climate. The monthly average pan evaporation is listed as 40.25 inches per year. The hot, dry months of July, August, and September coincide with the average Montana septic tank pumper's busy season. Dry soils, vegetation, and crops would benefit from the added moisture.

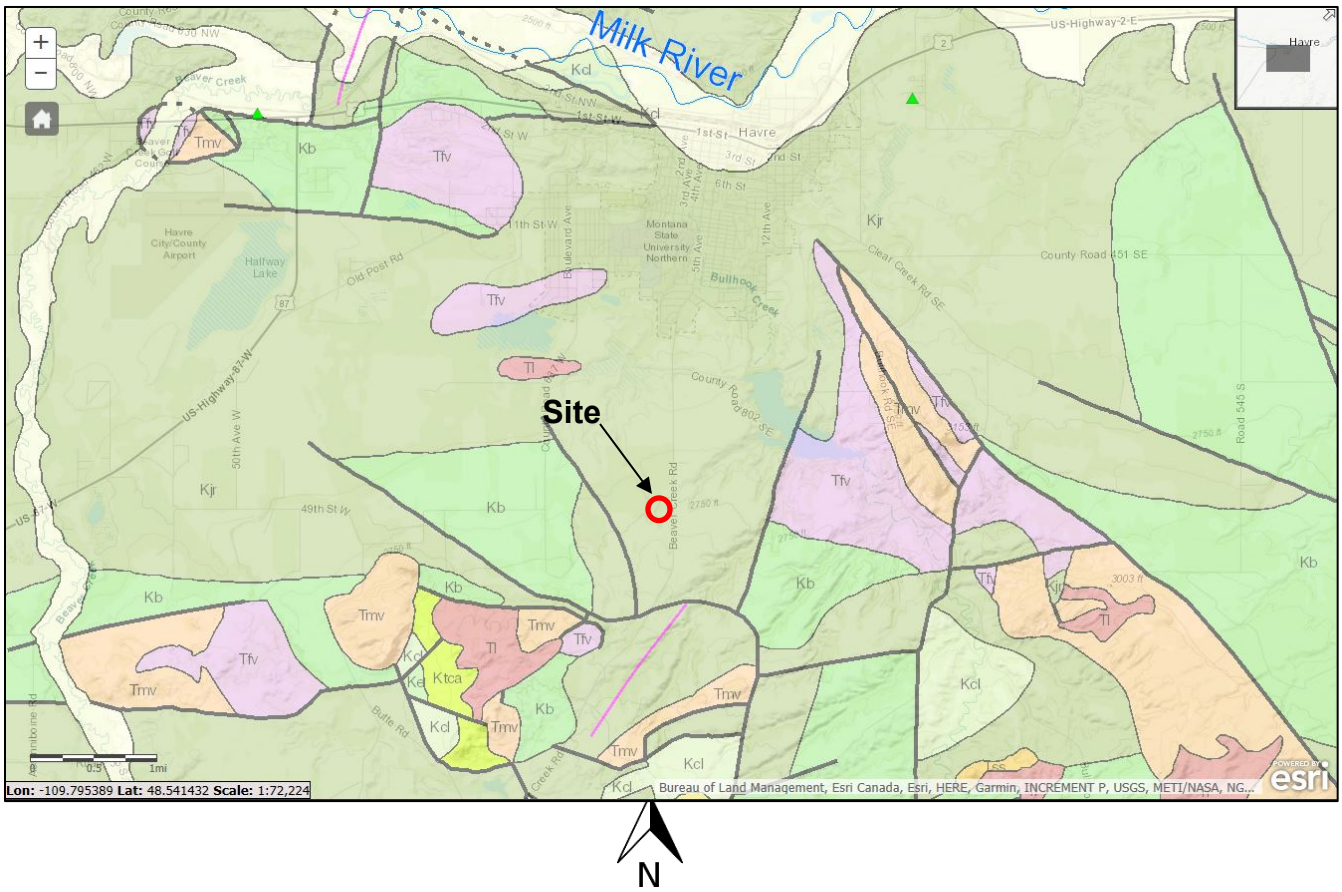
3.2.2.1 GEOLOGY

The geology of north-central Montana is characterized by thick sections of sedimentary rocks blanketed by glacial sediments and locally interrupted by igneous intrusives. Igneous intrusions form the lacolithic cores of several isolated mountain ranges in north-central Montana, including the Bear Paw Mountains located directly south of the Site. The intrusion of volcanics forced the overlying sedimentary layers to be domed, faulted, and tilted. Several faults extend (radial and concentric) from the base of the Bear Paws and can be seen flanking the Site in **Figure 5**.

Pleistocene age (2.6 million years ago) glaciation was the primary erosional and depositional mechanism responsible for the physiography of north-central Montana as we see it today. Four major glacial advances occurred in Montana during the Pleistocene, with ice covering the northern third of the state during the maximum extent of the glacial advance (Alden, 1932). Havre sits on top of glacial deposits of clay, silt, and sand which overlay coarser alluvial material from an ancient pre-glacial channel of the Missouri River. Prior to glaciation, the ancestral Missouri River flowed north around the Bear Paws and occupied the present course of the Milk River. The Bear Paw Mountains were therefore subject to rapid and prolonged erosion by numerous streams rushing down to the Missouri. The mountain mass and the bordering foothills were, in consequence, deeply dissected and much worn down (Alden, 1932).

Figure 4: Regional Geology Map

Symbols: Kjr – Judith River Formation (Sandstone with interbeds of carbonaceous shale), Kb – Bearpaw Shale (numerous thin bentonite beds), Kcl – Claggett Shale, Ke – Eagle Formation (sandstone/shale/coal), Tfv – felsic volcanic rocks, Tl – latite and porphyritic latite, Tmv – mafic volcanic rocks



Source: MBMG, web mapping application and Geologic Map 62 (2007)

3.2.3 HYDROLOGY AND HYDROGEOLOGY

The analysis area for hydrology and hydrogeology is the Site and the surrounding area (beyond a mile). Some discussion of regional geology, based upon published reports, is also provided. The analysis methods include reviewing wetland and jurisdictional waters information, onsite drilling reports, publications of the Montana Bureau of Mines and Geology (MBMG), and online maps (Esri/ArcGIS, 2019).

3.2.3.1 SURFACE WATER

No impacts to surface waters are expected due to the Proposed Action.

The Bullhook Creek-Milk River watershed, hydrologic unit code (HUC) 10050004, is the principle drainage in the area, with the Site being split by sub watersheds HUC 100500040404 and HUC 100500040403 (**Figure 4**). Bullhook

Creek, located 1.5 miles east of the Site, flows toward the Milk River which is located just over 3 miles north near US HWY 2 (**Figure 5**). An unnamed drainage borders the Site approximately 215 feet to the east; which appeared dry during the Site visit, but could capture intermittent flow during large storm events.

Setbacks will be maintained near the Site borders to ensure no septage enters any drainages. No impacts to surface waters are expected due to the Proposed Action

3.2.3.2 GROUNDWATER

No impacts to groundwater or groundwater wells are expected due to the Proposed Action.

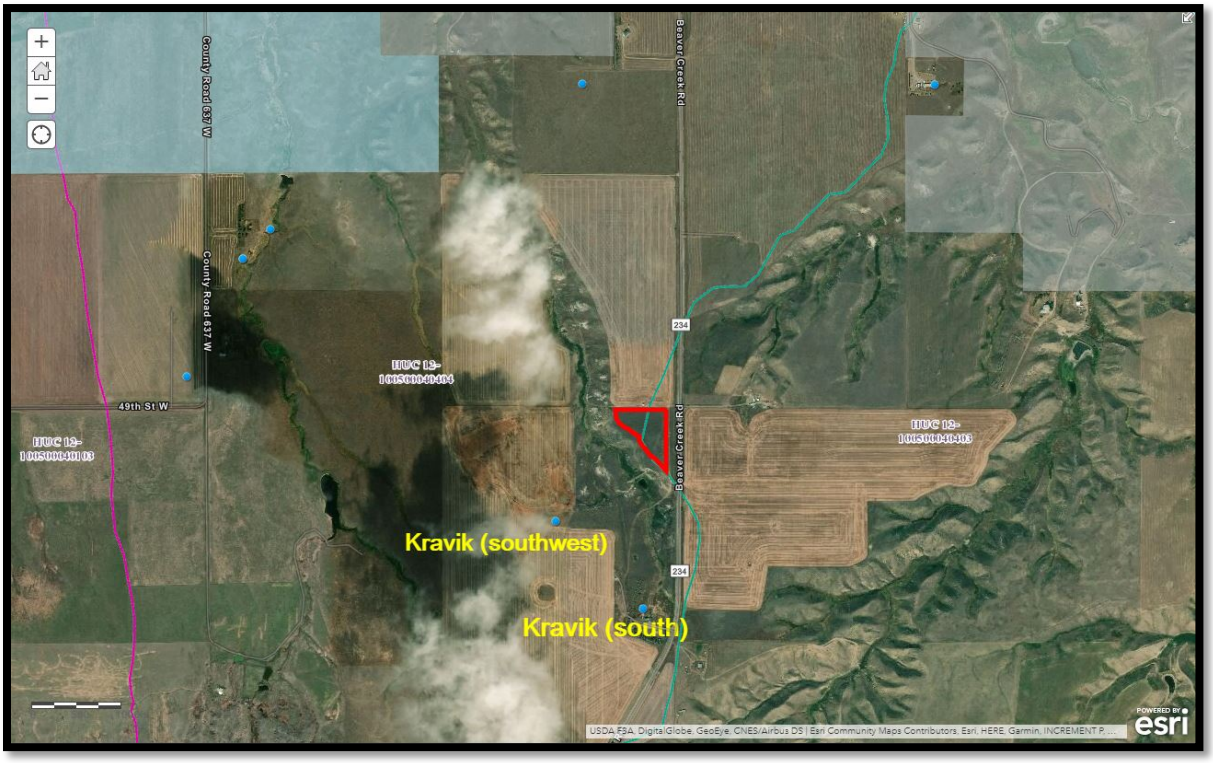
The Montana Bureau of Mines and Geology's Ground Water Information Center (GWIC) is DEQ's reference for well data in Montana. All wells located within one mile of the Site and documented by GWIC when this EA was written were considered. Any well not documented in GWIC is not included in this EA, but if wells are proven to be within setbacks, the Site's boundaries would be adjusted to maintain the setbacks.

Depth to groundwater in the Bullhook Creek-Milk River watershed is variable. The uppermost bedrock formations near the Site are the Judith River formation and Bearpaw shale. The Bearpaw shale acts as a regional confining layer and appears in the drilling records for the Kravik wells located less than ¼ mile south-southwest of the Site (**Figure 4**). The Kravik (south) well log indicates that over 400 feet of alternating shale layers were drilled through prior to encountering a sandy layer at just over 400 feet below the ground surface (bgs). The static depth to groundwater in the Kravik (south) well is 310 feet bgs (GWIC, 2019). Extrapolated groundwater elevation data from the Kravik wells and wells north-northwest of the Site indicate the groundwater flow direction mimics the north-northwest surface drainage patterns toward the Milk River. Based on the data available in GWIC's database, estimated depth to groundwater beneath the Site is greater than the six-foot minimum required by ARM 17.50.809(8).

No impacts to groundwater or groundwater wells are expected due to the Proposed Action.

Figure 5: Location of Nearby Groundwater Production Wells

(GWIC wells in blue circles, approximate Site boundaries outlined in red, sub watershed delineation green line)



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*Source: Esri/ArcGIS and GWIC/MBMG (**NOT TO SCALE**)*

3.2.4 AESTHETICS

The impact to aesthetics from the Proposed Action would be minor.

A private road would be used to access the Site. The Site is not located on a prominent topographical feature. No other development is anticipated at the Site. Land application activities would resemble agricultural activities occurring in the surrounding area.

DEQ and/or the local county sanitarian would respond to complaints about odor to determine if wastes were not properly managed. With proper management, odors would be minimal. The naturally occurring bacteria in the soil uses carbon in the waste as a fuel source. This activity results in the breakdown of wastes, which include odors. Usually, odors are only detected at the time of the land application activity and are controlled by tilling.

The Proposed Action would be visible from the road; therefore, impacts to aesthetics would likely be minor.

3.2.5 HUMAN HEALTH & SAFETY

No impacts on human health and safety are expected due to the Proposed Action.

Septage would be land applied at the Site. Septage would be incorporated into the soil surface within six hours of application. No livestock grazing areas exist on the Site. No crops are harvested from the Site. The Site is prairie.

Access into the Site, via a private road, is controlled by a fence and gate.

Therefore, no impacts to human health and safety are expected due to the Proposed Action.

3.2.6 DEMAND FOR GOVERNMENT SERVICES

The impact to demand for government services from the Proposed Action would be minor.

The Hill County sanitarian and DEQ would oversee operations at the Site. The Hill County sanitarian and DEQ staff would conduct periodic inspections of land application activities at the Site. Disposal logs showing volumes of waste applied at the Site are submitted to DEQ twice a year. Disposal logs would be reviewed by DEQ to ensure the AAR is not exceeded. Site inspections are performed at all septic tank pumper land application sites.

Therefore, the impact to the demand for government services from the Proposed Action would be minor.

3.2.7 TRAFFIC

The impact to traffic from the Proposed Action would be minor.

There would be no significant increase in traffic on State Highway 234. The Site would be accessed from State Highway 234 via a private road. State Highway 234, which would be used by TPC, currently supports traffic to homes and businesses in the area.

Therefore, the impact to traffic from the Proposed Action would be minor.

3.3 REGULATORY RESTRICTIONS

MEPA requires state agencies to evaluate regulatory restrictions to be imposed on private property rights as a result of actions of state agencies, including alternatives that reduce, minimize, or eliminated the regulation of private property (Section 75-1-201(1)(b)(iii), MCA> Alternatives and mitigation measures required by federal or state laws and regulations to meet minimum environmental standards, as well as actions proposed by or consented to by the applicant, area not subject to a regulatory restrictions analysis.

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 SLDA. The conditions that would be imposed by DEQ in issuing the license would be designed to make the Proposed Action meet minimum environmental standards or have been proposed and/or agreed to by TPC. Thus, no further analysis is required.

3.4 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.

The Site is currently unused grassland. The cumulative impacts of the Proposed Action would include improvements in soil health and vegetation growth at the Site. Limitations on the utilization of the Site for agricultural, recreational, and other activities would be present until the Proposed Action ceases.

4. FINDINGS

The depth and breadth of the project are typical of a land application site. DEQ's analysis of potential impacts from the Proposed Action are appropriate for the complexity, environmental sensitivity, degree of uncertainty, and mitigating factors provided by the Septic Rules for each resource considered.

To determine whether preparation of an EIS is necessary, DEQ is required to assess the significance of impacts associated with the Proposed Action. The criteria that DEQ is required to consider in making this determination are set forth in ARM 17.4.608(1)(a) through (g):

(a) The severity, duration, geographic extent, and frequency of occurrence of the impact;

(b) 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;

(c) Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;

(d) The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;

(e) The importance to the state and to society of each environmental resource or value that would be affected;

(f) Any precedent that would be set because of an impact of the Proposed Action that would commit DEQ to future actions with significant impacts or a decision in principle about such future actions; and

(g) Potential conflict with local, state, or federal laws, requirements, or formal plans.

The Site's location is described in Section 1.5 of this EA. It encompasses approximately 4.9 acres of the Patrick Holding, LLC property. As long as TPC renews their license and operations follow ARM, land application activities and DEQ site inspections would continue indefinitely. The Site is not within sage grouse core habitat, general habitat, or connectivity area. It has no special agricultural designation. Operations would not adversely affect any threatened or endangered species.

The Proposed Action is expected to improve soils and vegetation at the Site, as described in Section 3.2.2.

The Proposed Action is not expected to impact surface water resources. Operational standards require all the setback requirements from surface water and slopes exceeding 6% are met, as described in Section 3.2.3.1 of this EA.

The Proposed Action is not expected to impact groundwater, as described in Section 3.2.3.2. The site is well within the setback requirements for groundwater supply wells, as described in **Table 2** of this EA. The depth to groundwater is greater than 10-ft as required.

DEQ has not identified any growth-inducing or growth-inhibiting aspects of the Proposed Action. However, access to the parcels on the Site for utilization by human recreation, crops, and livestock would be limited to meet the regulatory restrictions necessary to protect human health. The Site was not previously used for these activities. DEQ's approval is not a decision regarding, in principle, any future actions that DEQ may perform. Furthermore, approval doesn't set any precedent or commit DEQ to any future action. Finally, the Proposed Action does not conflict with any local, state, or federal laws, requirements, or formal plans.

The Proposed Action would meet the requirements of the SDLA, Air and Water Quality Acts, and other applicable Montana environmental laws and regulations, as well as county ordinances. Adherence to the regulations and to the approved O&M plan would mitigate the potential for harmful releases and impacts to human health and the environment from the Proposed Action at the Site. Therefore, an EIS is not required.

5. OTHER GROUPS OR AGENCIES CONTACTED OR CONTRIBUTING TO THE EA

Hill County Environmental Health Department
United States Department of Agriculture
Montana Natural Heritage Program
Montana Department of Environmental Quality
Montana Historical Society State Historic Preservation Office
United States Geological Survey
Montana Bureau of Mines and Geology
US Fish & Wildlife Service
Montana Sage Grouse Habitat Conservation Program

6. AUTHORS

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