FINAL ENVIRONMENTAL ASSESSMENT

March 14, 2026

Waste Management and Remediation Division
Montana Department of Environmental Quality

PROJECT/SITE NAME: Ekland Property

APPLICANT/COMPANY NAME: Mon-Dak Construction Supply

PROPOSED PERMIT/LICENSE NUMBER: S-1207

LOCATION: 949 FAS 254, Glendive, MT 59330; Sections 20 and 24, T17N, R53E

COUNTY: Dawson

PROPERTY OWNERSHIP: Private

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1. Overview of Proposed Action

1.1 Authorizing Action

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the Montana environment. The Proposed Action is considered to be a state action that may have an impact on the Montana environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This EA will examine the proposed action and alternatives to the proposed action and disclose potential and proximate 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 Administrative Rules of Montana (ARM) 17.4.608.

1.2 Description of DEQ Regulatory Oversight

DEQ implements the Septage Disposal and Licensure Act of Montana, overseeing the management of septage land application sites. DEQ has authority to issue land application site permits. DEQ is also responsible for the regulation of air and water quality under the Clean Air Act of Montana (CAA) and the Montana Water Quality Act (WQA), respectively. DEQ continuously oversees land application sites for compliance with septage land application rules.

1.3 Proposed Action

Mon-Dak Construction Supply has applied for a disposal land application site permit under the Septage Disposal and Licensure Act of Montana. The proposed action would be located on private land in Glendive, Montana. All information included in this EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

Table 1. Summary of Proposed Action

General Overview	Upon approval of the new land application site, Mon-Dak Construction Supply would begin land applying septage on the approved site.
Estimated Disturbance	Septage would be applied on approximately 80 acres of private land on the Ekland property.
Location and Analysis Area	**Location**: 949 FAS 254, Glendive, MT 59330 **Analysis Area**: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.

Table 2. The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.

Air Quality	Because of the moisture of the septage, any dust would be minimized by the land application of the septage.
Water Quality	The applicant would be required to not apply pumpings to land within 100 feet of a drinking water supply source, or to apply pumpings to land within 150 feet of any state surface water, including ephemeral or intermittent drainages and wetlands per ARM 17.50.509 (2) and (3).
Erosion Control and Sediment Transport	The applicant would be required to not apply pumpings on land with a greater than 6% slope per ARM 17.50.509 (6).
Solid Waste	The applicant would be required to remove litter from site within six hours of application per ARM 17.50.509 (10).
Cultural Resources	The applicant proposes to not to disturb or alter historic structures.

Table 3. Cumulative Impacts

Past Actions	The site has been used for agriculture and there is an oil well on the property.
Present Actions	The site is currently being used for agricultural activities.
Related Future Actions	No impacts are expected.

1.4 Purpose, Need, and Benefits

DEQ's purpose in conducting this environmental review is to act upon Mon-Dak Construction Supply's application for a permit to conduct septage land application. DEQ's action on the permit application is governed by § 75-10-1211, et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.50.803, et seq.

The applicant's purpose and need, as expressed to DEQ in seeking this action, is to properly manage land application of septage as a beneficial resource, providing economic and environmental benefits with no adverse public health effects. Mon-Dak Construction Supply's application was submitted to DEQ under the laws and rules for licensing septic tank pumpers, demonstrating their intent to meet the minimum requirements for the pumping and land application of septage. A licensed land application program recognizes and employs practices that maximize those benefits.

1.5 Amount and Extent of Septage Application

Land application must not exceed the AAR (gallons per acre per year) based on:

1. The nitrogen content of the waste applied at the Site (EPA, 1993); and
2. The crop nitrogen yields for the crop or other vegetation at the Site.

The AAR for portable toilet and vault type waste is calculated as follows:

$$\textbf{AAR} = \frac{\text{minimum crop nitrogen requirement (lbs./acre/year)}}{0.0052 \text{ (lbs./gallon)}}$$

74 acres of the site would be used to grow oats. The other three acres will continue growing native grasses. The nitrogen requirement for oats is 120 pounds per acre per year based on a conservative yield expectation at the site. The nitrogen requirement for native grasses is 75 pounds per acre. (Fertilizer Guidelines for Montana Crops, 2005; EPA, 1993). For the oat field crop, the resulting AAR for septage is 23,076 gallons per acre per year, which is equal to less than 5/8th inches of liquid applied annually per acre. For the native grasses the resulting septage is 14,423 gallons per year. For comparison, the average annual precipitation in the Glendive area is 14 inches per year.

Land application of septage at the AAR is alternated annually between separate parcels to allow for agronomic crop uptake of the applied nitrogen. Plants can utilize nitrogen available from the septage if the volume of septage applied each year does not exceed the AAR. When land application is rotated, one parcel is used every year. For example, if 100 acres are proposed for land application, 50 acres will be used one year and the other 50 acres will be used similarly the next year. In this case, Mon-Dak would rotate the site's acreage each year. The residual soil nutrient levels at each parcel would vary over time. DEQ may periodically monitor the soil for nutrient content to determine compliance with the AAR.

Based on these calculations, the James Ekland property could treat the proposed volume of waste without exceeding the site AAR each year.

Figure 1. General Location of the Proposed Project (all available land application outlined in yellow)

1.6 Other Governmental Agencies and Programs with Jurisdiction

The proposed action would be located on private land. All applicable local, state, and federal rules must be adhered to, which may also include other local, state, federal, or tribal agency jurisdiction. Other governmental agencies which may have overlapped, or additional jurisdiction include but may not be limited to: Dawson County including the Dawson County Health Department.

2. EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE

The impact analysis will identify and evaluate the proximate direct and secondary impacts to the physical environment and population in the area to be affected by the proposed project. *Direct impacts* occur at the same time and place as the action that causes the impact. *Secondary impacts* are a further impact to Montana's environment that may be stimulated, induced by, or otherwise result from a direct impact of the action (ARM 17.4.603(18)). Where impacts would occur, the impacts will be described in this analysis. When the analysis discloses environmental impacts, these are proximate impacts pursuant to 75-1-201(1)(b)(iv)(A), MCA.

Cumulative impacts are the collective impacts on Montana's environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. 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. The projects identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource.

The duration is quantified as follows:

- **Operation Impacts (long-term)**: These are impacts to the environment during the operational period.

The intensity of the impacts 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.

2.1 Geology and Soil Quality, Stability and Moisture

The proposed project site lies along the Cedar Creek Anticline in the Tongue River member of the Fort Union Formation. The Fort Union Formation is made up of carbonaceous and coal shale, along with sandstone, siltstone, and limestone (University of Montana). The soils include Absher loam and Lonna silt, both are moderately well draining (Montana Natural Heritage Program).

Direct Impacts

No impacts to geology would be anticipated because of the Proposed Action. The geology of the area remains unaltered or unaffected by agriculture or construction activities. The applicant would be required to not apply pumpings on land with a greater than 6% slope per ARM 17.50.509 (6). A minor positive impact to soils would be anticipated due to the additional moisture and nutrients from land septage application.

Secondary Impacts

No secondary impacts to geology would be expected because of the proposed action.

Cumulative Impacts

No cumulative impacts to geology would be expected because of the proposed action.

2.2 Water Quality, Quantity, And Distribution

Precipitation in the area has an annual accumulation of approximately 14 inches (Western Regional Climate Center). The Federal Emergency Management Agency (FEMA) does not have any data for flood potential, however the National Risk Index rates Dawson County as having relatively low risk for riverine flooding (FEMA Flood Map Service Center). The location of the site experiences seasonal streams and is located outside the 100-year floodplain. Primary surface water bodies are located more than 150 ft away from the proposed location. Drinking water sources are also located greater than 100 ft from the proposed pumping location. Depth to groundwater ranged between 50 to 500 ft below ground surface according to the Groundwater Investigation Program (GWIC GIS Data Hub). The proposed location does not contain any areas designated as wetland habitat by the United States Fish and Wildlife Services (USFWS, National Wetlands Inventory Mapper) or the Montana National Heritage Program (MTNHP, 2025 National Heritage Map Viewer). Seasonal streams and wetlands neighbor the proposed site.

Direct Impacts

No impact to surface waters would occur as the applicant would be required to not apply pumpings to land within 100 feet of a drinking water supply source, or to apply pumpings to land within 150 feet of any state surface water, including ephemeral or intermittent drainages and wetlands per ARM 17.50.509 (2) and (3).

Secondary Impacts

No secondary impacts to water quality would be expected.

Cumulative Impacts

No cumulative impacts would occur from this proposed action. The surrounding areas are brushlands used for grazing and the surrounding area is utilized for agricultural purposes. Therefore, interactions between other operations and the proposed action mean no cumulative impacts on surface waters, or groundwater would occur.

2.3 Air Quality

According to the Clean Air Act of 1977, any national park that is greater than 6,000 acres and any wilderness area greater than 5,000 acres are considered Class 1 airsheds. Although Class 1 airsheds are managed and regulated by the National Park Service, U. S. Fish and Wildlife Service, U. S. Forest Service and Native American Tribes, the state may still redesignate areas to be considered Class 1 airsheds to better protect the air quality of a certain area. The nearest Class I airshed is the Theodore Roosevelt National Park, located 80 miles east of the proposed site. Septage would be incorporated into the soil surface within six hours of application and dust would be controlled by the moisture being applied to the soil.

Direct Impacts

No impact to air quality would be expected because dust would be controlled through the moisture during septage application.

Secondary Impacts

No secondary impacts to air quality would be expected because of the proposed action.

Cumulative Impacts

No cumulative impacts to air quality would be expected because of the proposed action.

2.4 Vegetation Cover, Quantity, and Quality

The Montana Natural Heritage Program compiles an online report to classify plant Species of Concern and Potential Concern in the state, employing a standardized ranking system to denote global (range-wide) and state status. Species are assigned numeric ranks ranging from 1 (highest risk, greatest concern) to 5 (demonstrably secure), reflecting the relative degree of risk to the species' viability, based upon available information. Species of Concern are native taxa that are at-risk due to declining population trends, threats to their habitats, restricted distribution, and/or other factors. Designation as a Montana Species of Concern or Potential Species of Concern is based on the Montana Status Rank and is not a statutory or regulatory classification (MTNHP, 2025). MTNHP was consulted for the proposed project area.

The current land use is cultivated cropland seeded with oats.

Direct Impacts

The proposed application site is currently used for cultivated crops (oats) and native grasses would continue to be cropped along with the application of septage. Some additional disturbance to vegetation from the application and tilling of septage would occur. The application site would be accessed directly off a private road, meaning no surrounding vegetation would be manually disturbed via vehicle traffic.

Secondary Impacts

Beneficial secondary impacts to vegetation could occur. Additional crop yield may occur because of the nitrogen addition through septage application.

Cumulative Impacts

No cumulative impacts to vegetation cover, quantity, and quality are expected because of the proposed action.

2.5 Terrestrial, Avian, and Aquatic Life and Habitats

Montana Animal Species of Concern are native Montana animals that are considered to be "at risk" due to declining population trends, threats to their habitats, and/or restricted distribution and are reported jointly between the Montana Natural Heritage Program (MTHP) and Montana Department of Fish, Wildlife, and Parks (MFWP). Designation as a Montana Species of Concern or Potential Species of Concern is based on the Montana Status Rank and is not a statutory or regulatory classification (MTHP, 2022). The MTNHP characterizes the analysis area as habitat potentially containing a mix of aquatic and grassland species. Northern Redbelly Dace, Sauger, and Bald Eagles have been directly observed in the analysis area. The analysis area is not located in general habitat for sage grouse according to the Montana Sage Grouse Habitat Conservation Program. The MTNHP also identifies some small areas of palustrine emergent wetland in the analysis area adjacent to the application site. These are temporarily flooded and contain wetland vegetation species during most of the growing season.

Direct Impacts

The current land use for the proposed site is cropland and native grasses, so no further habitat disturbance is expected from the application of septage. Wildlife could encounter litter contained in the applied septage, but this would be mitigated as septic pumpers are required to screen or pick litter from their application sites as stipulated in *ARM 17.50.811 Operation and Maintenance Requirements for Land Application or Incorporation of Septage*.

Secondary Impacts

No secondary impacts to terrestrial and aquatic life and habitats are expected because of the proposed action.

Cumulative Impacts

No cumulative impacts to terrestrial and aquatic life and habitats are expected because of the proposed action.

2.6 History, Culture, and Archaeological Uniqueness

No historic structures exist on the property (State Historic Preservation Office). The property owner disclosed that paleontological resources have been discovered in the vicinity of the Proposed Action. The spraying of septage would not be expected to impact these resources.

Direct Impacts

No direct impacts on history, culture, or archaeological uniqueness of the property are expected because of the proposed action.

Secondary Impacts

No secondary impacts to the property are expected because of the proposed action.

Cumulative Impacts

No cumulative impacts are expected because of the proposed action.

2.7 Demands on Environmental Resources of Land, Water, Air, or Energy

The proposed activity could use energy, water, air, and land resources in the area. There would be no unusual demands on the land, water, air, or energy.

Direct Impacts

A minor beneficial direct impact in the form of moisture and nitrogen from the septage.

Secondary Impacts

No secondary impacts on environmental resources would be expected because of the proposed action.

Cumulative Impacts

No impacts on environmental resource demands would be expected because of the Proposed Action.

2.9 Human Health and Safety

The applicant would be required to adhere to all applicable state and federal safety laws. The Occupational Safety and Health Administration (OSHA) has developed rules and guidelines to reduce the risks associated with this type of labor. Few, if any, members of the public would be in immediate proximity to the project during operations.

Septage would be land applied at the proposed site. Septage would be incorporated into the soil surface within six hours of application and dust would be controlled. Crops would not be

harvested until 14 months after the most recent septage application per ARM 17.50.811(3)(a). The site grows native grasses and oats, and no livestock would graze on the site within 30 days of land application per ARM 17.50.811(5)(a).

Direct Impacts

No direct impacts to human health and safety are expected because of the Proposed Action.

Secondary Impacts

No secondary impacts to human health and safety are expected because of the Proposed Action.

Cumulative Impacts

No cumulative impacts to human health and safety are expected because of the Proposed Action.

2.10 Aesthetics

Minor impacts to aesthetics and noise are expected because of the Proposed Action. The analysis area is the site and the surrounding area within one mile of the Site.

Direct Impacts

The proposed action would be visible from FAS 254 and resemble agricultural activities in the surrounding area. Only one truck would access the proposed site at a time. The pumper truck would access the proposed site via a private drive to conduct land application activities. Noise from the truck at the proposed site would resemble noises from agricultural activities currently occurring in the area. Minor visual and auditory impacts could occur intermittently for the duration of the proposed action.

Secondary Impacts

The naturally occurring bacteria in the soil uses carbon in the waste as a fuel source. This activity results in the breakdown of waste, which includes odors. Usually, odors are only detected at the time and immediate vicinity (within feet) of the land application activity. Therefore, a temporary olfactory impact could occur, but would be controlled by tilling within six hours of the land application. Land application could occur daily. Dust caused by tillage activities during the dry season would be reduced by the moisture content of septage.

Cumulative Impacts

No cumulative impacts to aesthetics are expected because of the proposed action.

2.11 Socioeconomics

The project would occur on private land. The area has a population of 4,796. The project area would be subject to any plans or rules set forth by Dawson County. It is not anticipated that this project would disrupt native or traditional lifestyles or communities. The project would not require construction, road work, or have any socioeconomic impact due to pursuance of the Proposed Action.

Due to the scale of the proposed action, it is unlikely that employment opportunities would be created as a result of this land application site. The proposed action is not expected to move or eliminate jobs. It is also unlikely that the proposed action would add to the population or require additional housing.

Local, state and federal governments would be responsible for appraising the property, setting

tax rates, collecting taxes, etc., from the companies, employees, or landowners benefiting from this operation. Since the proposed site has been used as an agricultural site in the past, it is unlikely that the tax base on the land would be expected to change.

The location of the land septage application would be in a rural agricultural area. As stated by the applicant in the application, one Peterbilt 337 diesel truck would be used for septage application. This would be consistent with current traffic conditions in the area and is not expected to cause an increase in traffic.

There is no zoning requirement for this property.

The proposed activities would occur on private land. The project would not limit access to wilderness or recreational areas nearby.

DEQ is not aware of any native cultural concerns that would be affected by the proposed activity and also described in *History, Culture, and Archaeological Uniqueness* above. It is not anticipated that this project would disrupt native or traditional lifestyles or communities.

Direct Impacts

No direct impacts on socioeconomics are expected because of the proposed action.

Secondary Impacts

No secondary impacts on socioeconomics are expected because of the proposed action.

Cumulative Impacts

No cumulative impacts on socioeconomics are expected because of the proposed action.

2.13 Private Property Impacts

The Proposed Action would take place on private land owned by the applicant. DEQ's approval would affect the proposed site as noted in this Draft EA's impacts analysis. However, permit conditions ensure compliance with the rules and statutes in place for septage land application. DEQ's approval of the Proposed Action would not have private property-taking or damaging implications.

3. DESCRIPTION OF ALTERNATIVES

No Action Alternative: In addition to the proposed action, DEQ must also considered a "no action" alternative. The "no action" alternative would deny the approval of a land application site on the Ekland property. 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 required for approval, the "no action" alternative would not be appropriate.

4. CONSULTATION

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. External scoping efforts also included queries to the References section at the end of this document.

5. PUBLIC INVOLVEMENT

After publication of this document on October 17, 2025, there will be a 30-day public comment period that ends on November 17, 2025. Adjacent landowners and other parties of interest including state and county officials will be notified of the publication of the document and the opportunity to submit comments regarding the proposed action.

6. SIGNIFICANCE OF POTENTIAL IMPACTS AND NEED FOR FURTHER ANALYSIS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact;
- 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;
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts – identify the parameters of the proposed action;
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
- The importance to the state and to society of each environmental resource or value that would be affected;
- 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
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

7. CONCLUSIONS AND FINDINGS

The Proposed Action would meet the minimum requirements of the Septage Disposal and Licensure Act and associated administrative rules regulating solid waste disposal. Adherence to the septic tank pumper, solid waste, water quality, and air quality regulations and the DEQ-approved facility operation and maintenance plan would mitigate the potential for harmful releases and impacts to human health and the environment by the Proposed Action.

DEQ has prepared this EA to examine and document the effects of the Proposed Action on the human environment and to determine the need to prepare an environmental impact statement through an initial evaluation and determination of the significance of impacts associated with the Proposed Action. As discussed in Section 2 of this EA, DEQ has evaluated the severity, duration, geographic extent, and frequency of potential impacts to the human environment from the Proposed Action. DEQ has also evaluated the probability that the impacts will occur if the Proposed Action occurs. DEQ has not identified any significant environmental impacts from the Proposed Action.

DEQ has not identified any growth-inducing or growth-inhibiting aspects of the Proposed Action. DEQ's approval of the proposed landfill expansion would not set any precedent and would not commit DEQ to any future action with significant impacts, nor is it a decision in principle about any future actions that DEQ may act on. Finally, the Proposed Action does not conflict with any local, state, or federal

laws, requirements, or formal plans.

Based on consideration of all the criteria set forth in ARM 17.4.608, DEQ has determined that the Proposed Action would not significantly affect the human environment. Therefore, an environmental assessment is the appropriate level of environmental review and preparation of an environmental impact statement is not required.

8. PREPARATION

Environmental Assessment and Significance Determination Prepared By:

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12/10/2025
Date

9. REFERENCES

2023 BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends,
2023 BLM Specialist Report - GHG Emissions and Climate Trends

Montana Tech of the University of Montana, Montana Bureau of Mines and Geology (MBMG), Ground Water Information Center http://mbmggwic.mtech.edu/

United States Fish & Wildlife Service, Environmental Conservation Online System, 2023
ECOS: Home (fws.gov)

Montana Natural Heritage Program, 2025
http://mtnhp.org/default.asp

Montana Cadastral
http://svc.mt.gov/msl/mtcadastral

Fertilizer Guidelines for Montana Crops, Montana State University, 2005
https://store.msuextension.org/publications/AgandNaturalResources/EB0161.pdf

Administrative Rules of Montana
http://deq.mt.gov/Portals/112/deqadmin/dir/documents/Legal/Chapters/CH50-08.pdf

EPA Domestic Septage Regulatory Guidance, 1993
https://www.epa.gov/biosolids/domestic-septage-regulatory-guidance-guide-epa-503-rule

Google Earth, 2023
https://earth.google.com/web/search/48.26730%C2%B0,+-114.40213%C2%B0

Montana DEQ's GIS Portal
https://gis.mtdeq.us/portal/apps/mapviewer/index.html

University of Montana
https://www.umt.edu/geosciences/documents/self-guided-geologic-field-trip-msla.pdf

State Historic Preservation Office
https://mhs.mt.gov/shpo/

10. COMMENT SUMMARY AND RESPONSE TO SUBSTANTIVE COMMENTS

The comment period on the original Draft EA started May 16, 2025. The public comment period ended on June 15, 2025.

During the comment period, DEQ received one submission.

A commentor voiced concern about a portion of the proposed land application site, shown on pg. 5. The commentor mentioned that the east-most parcels should be avoided as they are closest to residences. The commentor was concerned about foul smells and potential runoff during storm events.

The Septage Disposal and Licensure Act of Montana (§75-10-1201, et seq., Montana Code Annotated [MCA]) does not give DEQ siting authority for land septage application sites. A land application site must first be approved by the applicable county before the request for licensure is submitted to the Solid Waste Section for review. If the proposed site meets the requirements of the Septage Disposal and Licensure Act, then DEQ cannot deny the application. With regards to residences, Administrative Rules of Montana (ARM) 17.50.809(1) specifies that pumping may not be applied to land within 500 feet of any occupied or inhabitable building. With regards to runoff, ARM 17.50.809(2) specifies that pumpings may not be applied to land within 150 feet of any state surface water including ephemeral or intermittent drainages and wetlands. Further, a department or local health officer may require greater distances where slopes or other factors may increase the likelihood of runoff from the land application area. ARM 17.50.809(6) states that land application cannot occur on slopes greater than six percent. The setback requirements in ARM 17.50.809(1-6) are designed to mitigate potential runoff and drainage issues.

Foul smells originating from land septage application sites would be controlled through application levels. The annual application rate for the two small easternmost sections has been calculated based on the nitrogen needs of native grasses and must not be exceeded, in accordance with ARM 17.50.809(12). Proper application of septage should minimize odors at the proposed site and would minimize runoff potential. The naturally occurring bacteria in the soil uses carbon in the waste as a fuel source as described in ***Section 2.10 Aesthetics***. This activity results in the breakdown of waste, which includes odors. Typically, odors are only detected at the time and immediate vicinity (within feet) of the land application activity and are controlled by tilling within six hours.

To ensure that septage is being properly applied within the bounds of the permit, DEQ conducts soil sampling on a rotating basis per our Septage Land Application Monitoring (SLAM) program. DEQ tests for various nutrients with particular attention paid to excess nitrogen in the soil. If the soil samples show that the annual application rate has been exceeded (Section 1.5), the pumper would cease land application on that area until the nutrients have returned to acceptable levels, verified with a subsequent soil sample.