

## MEMORANDUM

**DATE:** November 13, 2024

**TO:** Tyler Walls, City of Missoula Brownfields Specialist  
John Adams, City of Missoula, Strategic Projects Administrator

**FROM:** Tyler Etzel, Sr Geologist

**CC:** File

**RE:** Roseburg Phase I ESA Findings and Recommendations

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This memorandum describes the findings and recommendations of the Phase I Environmental Site Assessment (ESA) completed by WGM Group, Inc (WGM) on January 30, 2024 for the Roseburg Forest Products (RFP) property. The purpose of the ESA was to identify any Recognized Environmental Conditions (RECs) for the property. A REC can be broadly described as the presence of contamination, potential presence of contamination, or threat of contamination on a property. A Controlled Recognized Environmental Condition (CREC) is a REC that has been addressed to the satisfaction of the regulatory authorities and allows the contamination to remain in place subject to implementation of required controls and/or monitoring.

## FINDINGS

WGM identified the following environmental conditions on the property:

**CREC #1:** A groundwater leachate plume containing volatile organic compounds (VOCs) and dissolved metals originates from the Allied Waste Systems of Montana, LLC Landfill (Missoula Landfill). This plume extends southward onto the RFP property. The approximate location of this plume is shown in **Attachment A**. The distance from ground surface to the water table where the plume is located is approximately 85 to 105 feet. Our review of data provided in previous groundwater monitoring reports indicates that VOC concentrations in groundwater show a declining trend and suggest that past remediation efforts by the Missoula Landfill were successful in decreasing contamination levels; however, VOCs and dissolved metals remain at concentrations above regulatory screening levels.

**REC #2:** A large petroleum stain was observed on surface soil adjacent-south of the Lubrication Building near two empty Intermediate Bulk Containers; this was considered a REC for the Subject Property. In June 2024, representatives for LMI Environmental removed the petroleum-stained soil from this area (less than 1 cubic yard) and discovered that the entire area was underlain by a secondary containment barrier constructed of asphalt with concrete and/or wax-bermed sidewalls. Photographs of the cleanup action and secondary containment are included in **Attachment B**.

**De minimis condition:** The ESA noted disturbed ground along the northwestern boundary of the property just south of the Missoula Landfill. This location appears to have been used historically for gravel and wood fiber storage. The available maps reviewed in the ESA indicated that this location covers an area of approximately five acres. The approximate location of the gravel/wood fiber storage

is shown in **Attachment A**. This gravel/wood fiber storage area is not a considered a release, hazardous waste, or REC for the property.

## CONCLUSIONS

In the 2024 Phase I ESA for the RFP property, WGM identified environmental conditions on the property including the groundwater plume that originates and extends from the Missoula Landfill onto the northern portion of the Roseburg Forest Products property and approximately five acres of gravel/wood fiber storage along the northern portion of the property.

WGM concluded that the groundwater plume originating from the Missoula Landfill is a CREC because it is under the regulatory oversight of Montana Department of Environmental Quality (DEQ). It is WGM's opinion that the groundwater plume will not present a hinderance on potential future development of the property because current information suggests that contamination concentrations are declining. Additionally, the impacted groundwater is over 80 feet below ground surface, which suggests that no vapor intrusion issues would occur from the VOCs in groundwater. Replacement and/or renovations to several of the monitoring wells associated with the landfill plume will likely be necessary prior to any development of the property. Any presumed limitation associated with the VOCs plume would be a restriction of new groundwater supply wells within or near the area of the plume. Since water service would be provided by the City of Missoula Water System, any new supply wells would not be required in this area.

The stained soil located adjacent-south of the Lubrication Building was identified as a REC for the property. All the petroleum-impacted soil has been cleaned up and no further impacts to soil are present at this location. WGM does not recommend any additional assessment or cleanup for the petroleum stained soil area. It is WGM's opinion that this REC has been sufficiently addressed through the cleanup actions completed and WGM does not consider this location to represent a presence or likely presence of a release to the environment, and therefore, is no longer a REC.

The wood fiber storage along the northern boundary of the property will likely need to be removed prior to any development of the property. Since this wood fiber is present on ground surface and is not associated with residual moisture from a former log pond, it does not present a hazardous condition for methane generation. The wood fiber is considered a *de minimis* condition for potential future development of the property.

**ATTACHMENT A**  
Site Map

**ATTACHMENT A**  
**Site Map**  
 Roseburg Phase I ESA Memo  
 Missoula, MT



250 500 Feet

**Subject Property**



LOC: Missoula County    PROJ MGR: TETzel  
 TR: 13N 19W            DRAWN BY: JJM  
 BASE: Google Satellite    PROJ: 231208  
 FILE: 00\_PhIESAMemoSiteMap    DATE: 10/22/2024

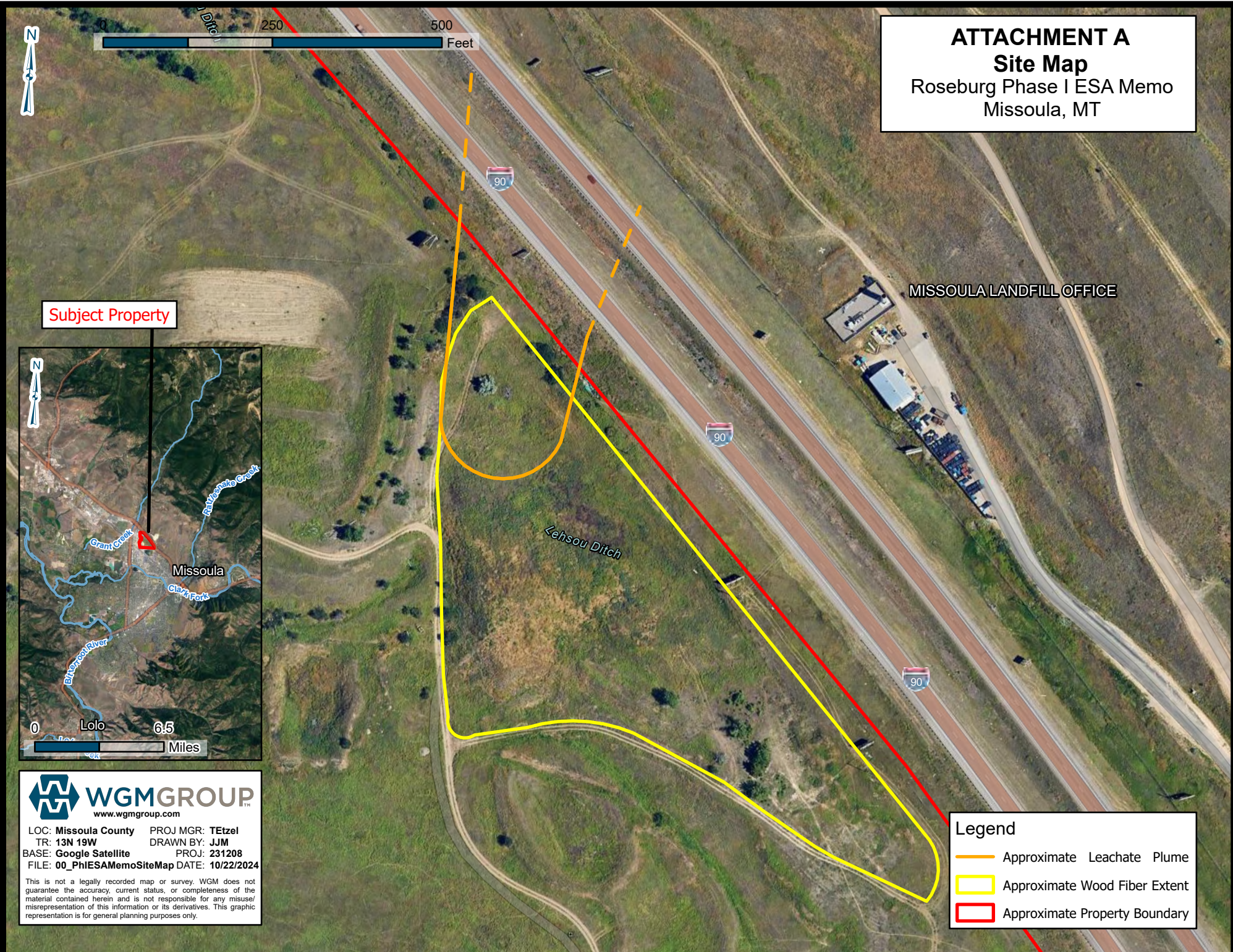
This is not a legally recorded map or survey. WGM does not guarantee the accuracy, current status, or completeness of the material contained herein and is not responsible for any misuse/misrepresentation of this information or its derivatives. This graphic representation is for general planning purposes only.

MISSOULA LANDFILL OFFICE

*Kehsou Ditch*

**Legend**

- Approximate Leachate Plume
- Approximate Wood Fiber Extent
- Approximate Property Boundary



**ATTACHMENT B**  
Fieldwork Photographs



**Asphalt pad discovered beneath the petroleum stained soil.**



**Concrete bermed corner**



**Concrete sidewall**