DRAFT ENVIRONMENAL ASSESSMENT

AUGUST 2025

Water Quality Division
Montana Department of Environmental Quality

PROJECT/SITE NAME: Belt Water Treatment Plant	
APPLICANT/COMPANY NAME: Montana Department of Environmental Quality Waste Management and Remediation Division (MDEQ-WMR)	
PROPOSED PERMIT/LICENSE NUMBER: MT0032247	
LOCATION: Section 26, Township 19N, Range 6E	**COUNTY:** Cascade
PROPERTY OWNERSHIP: **FEDERAL** ____ **STATE** __X_ **PRIVATE** ___	

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1. PURPOSE AND NEED FOR PROPOSED ACTION

1.1 Authorization 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 human environment. The Proposed Action is considered to be a state action that may have an impact on the human 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 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 Water Quality Act of Montana, issuing discharge permits in conformance with the federal Clean Water Act under the Montana Pollutant Discharge Elimination System (MPDES) pursuant to Section 75-5-101, *et. seq.*, Montana Code Annotated (MCA), and the Administrative Rules of Montana (ARM) Title 17, Chapter 30, Sub-chapters 2. 5, 6, 7, 12, and 13.

1.3 Proposed Action

MDEQ-WMR has applied for MPDES permit coverage to discharge treated wastewater to Belt Creek from a facility to designed to treat mine impacted water from abandoned coal mines near Belt, Montana. The proposed action would be located on state land near Belt. 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.

Please refer to the permit Fact Sheet (MT DEQ, 2025) for additional information.

Table 1: Summary of Proposed Action

Proposed Action	
General Overview	DEQ is proposing a draft Montana Pollutant Discharge Elimination System (MPDES) permit for the Belt Water Treatment Plant. The facility would treat mine impacted water (MIW) that has low pH and high metals concentrations. Treated water would be discharged to Belt Creek. See Fact Sheet (MT DEQ, 2025) for additional information.
Duration & Hours of Operation	Duration: The proposed action is to issue MPDES permit MT0032247 for a term of five years. Hours of Operation: Discharge would occur continuously, year-round.
Estimated Disturbance	The facility is constructed on a state-owned parcel of approximately 90 acres. Total disturbed area is less than 40 acres (estimated).
Personnel Onsite	Personnel sufficient to comply with the terms of the MPDES permit.

Location and Analysis Area	***Location***: 47.379865, -110.938087 The MPDES permit issuance is protective of beneficial uses in the immediate receiving water (Belt Creek). Protection of the immediate receiving water would also protect downstream beneficial uses. See Fact Sheet. (DEQ, 2025). ***Analysis Area****:* The area being analyzed as part of this environmental assessment includes the immediate project area (Figure 1), as well as neighboring lands surrounding the project area, as reasonably appropriate for the impacts being considered.
The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.	
Air Quality	N/A
Water Quality	The proposed permit renewal contains effluent limits and monitoring requirements such that beneficial uses of the receiving water would be protected.
Erosion Control and Sediment Transport	This facility holds a permit authorization under the DEQ General Permit for Discharges Associated with Construction Activity; authorization MTR109190.
Solid Waste	N/A
Cultural Resources	Accessed Montana Cultural Resource Database on February 3, 2025. No historical sites present in project area.
Hazardous Substances	N/A
Reclamation	N/A

Cumulative Impact Considerations	
Past Actions	The construction of the Belt Water Treatment plant was a DEQ action described in the EA for that project (MT DEQ, 2016). The permitted discharge to Belt Creek for the Town of Belt wastewater treatment facility (permit MT0021571) is located approximately 0.75 miles downstream of the proposed discharge. There are no other permitted discharges on Belt Creek between the Town of Belt and the Missouri River. Permit conditions in the proposed permit protect the water quality standards in the immediate receiving water and downstream state waters and would prevent cumulative impacts with past permitted

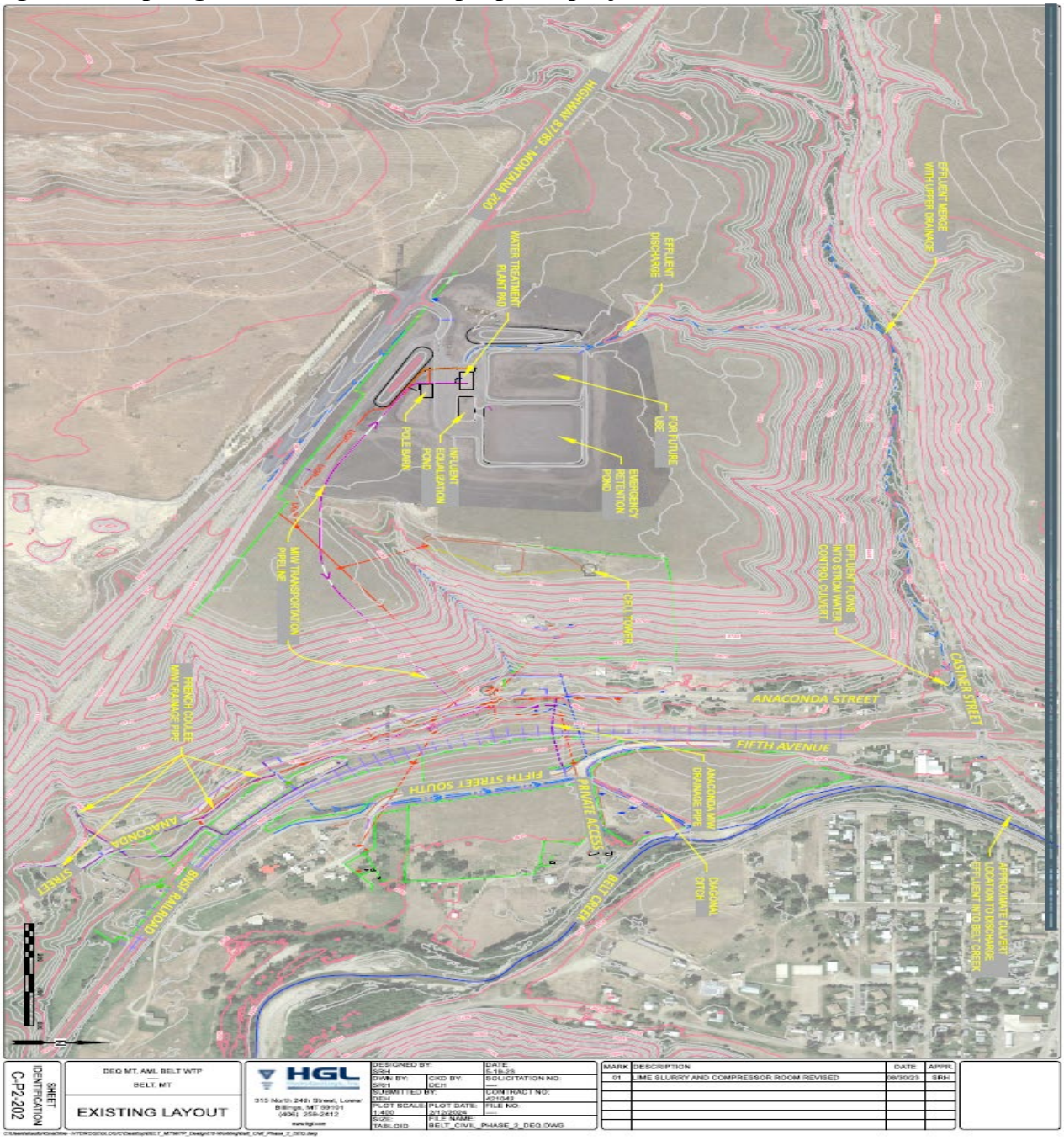
	discharges. See Fact Sheet (MT DEQ, 2025).
Present Actions	No other present DEQ actions.
Related Future Actions	No related future actions.

1.4 Purpose, Need, and Benefits

DEQ's purpose in conducting this EA is to act upon DEQ-WMR's application for an MPDES permit. DEQ's action on the permit application is governed by § 75-5-101, et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) Title 17, Chapter 30, Sub-chapters 2, 5, 6, 7, 10, 11, 12, and 13.

The applicant's purpose and need, as expressed to DEQ in seeking this action, is to discharge treat MIW that has passively discharged and polluted Belt Creek for decades. The project will improve water quality, protecting human health and the aquatic environment, in Belt Creek.

Figure 1: Map of general location of the proposed project



1.5 Other Governmental Agencies and Programs With Jurisdiction:

The proposed project would be located on state 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: Environmental Protection Agency, Montana Department of Natural Resources & Conservation, Bureau of Land Management, Montana Department of Fish Wildlife and Parks, United States Forest Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and Cascade

County.

2. EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE

The impact analysis will identify and evaluate direct and secondary impacts to the physical environment and human 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 the human 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.

Cumulative impacts are the collective impacts on the human 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:

- **Short-term**: Short-term impacts are defined as those impacts that would not last longer than the installation and operation of the Facility.
- **Long-term**: Long-term impacts are impacts that would remain or occur following proposed project closure and removal.

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

An Environmental Assessment was completed in 2016, prior to construction of the treatment plant. The following is taken from that EA (MT DEQ, 2016).

- The surface geology of the project area consists of weathered mudstone and sandstone of the Kootenai Formation. Thin soils, containing abundant cobble and boulder-sized tabular slabs of weathered sandstone, are developed on the fractured sandstone beds. The floodplain and alluvial deposits underlying the Belt Creek valley are up to 40 feet thick. The alluvium is composed of yellowish-brown to gray gravel, sand, silt and clay (Reiten et al. 2006).

  Direct Impacts

  The discharge into the receiving river is expected to have no short- or long-term direct impacts on the soil geology, soil quality, or stability. The facility would

discharge directly to surface water. Because the abandoned mines currently discharge to Belt Creek, there is no anticipated change in stream flow.

Secondary Impacts

The proposed discharge into the receiving river is expected to have no short- or long-term secondary impacts on the soil geology, soil quality, or stability.

Cumulative Impacts

The discharge into the receiving river is expected to have no short- or long-term cumulative impacts on the soil geology, soil quality, or stability.

2.2 Water Quality, Quantity, and Distribution

Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels or degradation of water quality?

Surface Water:

The proposed discharge would be directly into Belt Creek adjacent to Castner Park in the Town of Belt. Belt Creek at the proposed discharge location is designated as B-2 according to Montana Water Use Classifications. See Fact Sheet (MT DEQ, 2025) for further information regarding the receiving water.

Direct Impacts

The MPDES permit includes effluent limits, monitoring requirements, and other permit conditions that ensure the water quality standards and beneficial uses are protected. See Fact Sheet (MT DEQ, 2025). The treatment of MIW and discharge back into Belt Creek is expected to improve existing water quality by reducing high dissolved metals concentrations and raising pH from acidic to more neutral concentrations.

The discharge is expected to have no short term or long-term direct impacts to water quantity and distribution.

Secondary Impacts

The conditions and requirements of the permit would protect beneficial uses of the receiving water and downstream uses. See Fact Sheet (MT DEQ, 2025). The discharge into the receiving river is expected to have no short- or long-term secondary impacts on water quality, quantity, and distribution.

Cumulative Impacts

As listed in Table 1, there is one other discharge permit in the vicinity of the proposed discharge. Both permits protect the beneficial uses of the receiving waters at their specific locations. No short- or long-term cumulative impacts to water quality are expected.

2.3 Air Quality

Direct Impacts

No short- or long-term direct impacts to air quality are expected from the discharge

of treated MIW water.

Secondary Impacts

No short- or long-term direct impacts to air quality are expected from the discharge.

Cumulative Impacts

The discharge into the receiving river is expected to have no short- and long-term cumulative impacts on air quality.

2.4 Vegetation Cover, Quantity and Quality

Based on a search of the Natural Heritage Database, there are no vegetative Species of Concern (SOC) in or within one mile of the site. The area with approximately a mile of the facility consists of 46% cultivated crops, 16% Great Plains Mixed grass Prairie, 7% Great Plains Sand Prairie, 6% Great Plains Shrubland, and smaller percentages of riparian areas, road, pasture/hay, roads, developed roads, developed open space, Big Sagebrush Steppe, and low intensity residential development.

Direct Impacts

The facility is constructed and was the subject of a separate EA in 2016. The MPDES permitting action is expected to have negligible short- or long-term direct impact on vegetative communities.

Secondary Impacts

The discharge into the receiving river is expected to have no short- or long-term secondary impacts on vegetation cover, quantity, and quality.

Cumulative Impacts

The discharge into the receiving river is expected to have no short- or long-term cumulative impacts on vegetation cover, quantity, and quality.

2.5 Terrestrial, Avian, and Aquatic Life and Habitats

Based on a search of the Natural Heritage Database, there are 6 animal Species of Concern (SOC), observed or occurring within 1 mile of the site:

- Two (2) mammals: *Lasiurus cinereus* (Northern Hoary Bat), *Ursus Arctos* (Grizzly Bear)
- Four (4) avian species: *Aquila chrysaetos* (Golden Eagle), *Haliaeetus leucocephalus* (Bald Eagle), *Asio flammeus* (Short-eared owl), *Numenius americanus* (Long-billed Curlew)
- One (1) aquatic species: *Sander canadensis* (Sauger)

Direct Impacts

The facility is constructed and was the subject of a separate EA in 2016 (MT DEQ, 2016). Effluent limits and permit conditions would ensure aquatic life beneficial uses are protected. No short- or long-term impacts are anticipated to terrestrial or avian habitats. The treatment of MIW and discharge back into Belt Creek is expected to improve water quality and have positive impacts on aquatic habitats.

Secondary Impacts

Effluent limits and permit conditions protect the beneficial uses of the receiving water. The discharge into the receiving river is expected to have no short- or long-term secondary impacts on terrestrial, avian, and aquatic life and habitats.

Cumulative Impacts

As listed in Table 1, there is one other discharge permit in the vicinity of the proposed discharge. Both permits protect the beneficial uses of the receiving waters at their specific locations. No short- or long-term cumulative impacts to water quality are expected.

2.6 History, Culture and Archeological Uniqueness

The facility is located in an area where historical sites and inventoried areas are present (MT SHPO, 2025).

Direct Impacts

This facility is built and was the subject of a previous EA (MT DEQ, 2016). No short- or long-term impacts to history, culture, or archaeological uniqueness is expected. Should structures need to be altered or if cultural materials be inadvertently discovered, the Montana State Historic Preservation Office (MSHPO) should be contacted for investigation.

Secondary Impacts

The discharge into the receiving river is expected to have no short- or long-term secondary impacts on history, culture, and archeological uniqueness.

Cumulative Impacts

The discharge into the receiving river is expected to have no short- or long-term cumulative impacts on history, culture, and archeological uniqueness.

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

Direct Impacts

The facility would intercept and treat an existing source of MIW currently discharging to Belt Creek. Treatment of MIW would not cause an increase in discharge volume. Treatment would reduce pollutant loading in Belt Creek, resulting in positive direct impacts. Direct impacts to demands on environmental resources of land, air, or energy are not expected with this permitting action.

Secondary Impacts

Construction and operation of the facility may require additional energy consumption.

Cumulative Impacts

Cumulative impacts to demands on environmental resources of land, water, air, or energy are expected to be negligible with this permit action.

2.8 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 construction or operations.

Direct Impacts

Effluent limits and permit conditions would ensure water quality standards are met and human health is protected. See Fact Sheet (MT DEQ, 2025). The discharge into the receiving river is expected to have positive direct impacts on human health and safety by improving water quality for potential recreational use.

Secondary Impacts

The conditions and requirements of the permit would protect beneficial uses of the receiving water and downstream uses. See Fact Sheet (MT DEQ, 2025). The discharge into the receiving river is expected to have no negative short- or long-term secondary negative impacts on human health and safety.

Cumulative Impacts

As listed in Table 1, there is one other discharge permit in the vicinity of the proposed discharge. Both permits protect the beneficial uses of the receiving waters at their specific locations. No negative short- or long-term cumulative impacts to water quality are expected.

2.9 Socioeconomics

Direct Impacts

The project is not expected to add to or alter industrial, commercial, or agricultural activities in the area. The project is within already developed areas and communities, and no increased demand for government services, changes in the density of population and housing, or changes in social structures or mores are expected. The project is not expected to disrupt native or traditional lifestyles and would not add additional demand for housing or create/eliminate recreational opportunities.

Secondary Impacts

The discharge into the receiving river is expected to have no short- or long-term secondary impacts on socioeconomics. The operation of the facility may provide a few new jobs in the area.

Cumulative Impacts

The discharge into the receiving river is expected to have no short- or long-term cumulative impacts on socioeconomics.

2.10 Private Property Impacts

Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category). If not, no further analysis is required. Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required. Does the agency have Legal discretion to impose or not impose the

proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternative.

Direct/Secondary/Cumulative Impacts

The proposed project would take place on state land. DEQ's approval of MT0032247 permit would not affect private property.

3. DESCRIPTION OF ALTERNATIVES

3.1 Additional Alternatives Considered

No Action Alternative: In addition to the proposed action, DEQ must also consider a "no action" alternative. The "no action" alternative would deny the issuance of the MPDES permit. The applicant would lack the authority to conduct the proposed activity. Any potential impacts, positive or negative, 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.

Other Reasonable Alternative(s): No other alternatives were considered.

3.2 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 following websites/databases/personnel:

- Montana Natural Heritage Program
- Montana State Historic Preservation Office
- Clean Water Act Information Center

3.3 Need for Further Analysis and Significance of Potential Impacts

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;
- 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.

4. PUBLIC INVOLVEMENT

A 30-day public comment period for the proposed issuance of the MPDES permit will be held. Public comments on this proposal are invited any time prior to close of business on September 25, 2025. Comments may be directed to

DEQWPBPublicComments@mt.gov or to

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620

All comments received or postmarked prior to the close of the public comment period will be considered in the formulation of the final permit. DEQ will respond to any significant comments received during the comment period.

5. CONCLUSIONS AND FINDINGS

The preferred proposed action is to provide the facility with permit authorization. This action is preferred because the permit program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit.

Environmental Assessment and Significance Determination Prepared By:

Jeff May, DEQ Water Protection Bureau

Environmental Assessment Reviewed By:

Alanna Shaw, MPDES Section Supervisor

Approved By:

SIGNATURE DRAFT Date

Tatiana Davila, Chief
Water Protection Bureau
Department of Environmental Quality

REFERENCES

Montana Natural Heritage Program Environmental Summary Report

MT DEQ. 2016. Final Engineering Evaluation/Cost Analysis and Environmental Assessment for Water Treatment of Acid Mine Discharges in Belt, Montana

MT DEQ. 2025. Fact Sheet for Montana Pollutant Discharge Elimination System Draft Permit MT0032247

State Historic Preservation Office (SHPO, Montana Historical Society. Retrieved 2025 from Montana Cultural Resource Database

II. COMMENT SUMMARY AND RESPONSES TO SUBSTANTIVE COMMENTS

Responses to substantive comments.