

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT (TRD)**

**Air, Energy, & Mining Division
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901**

The Western Sugar Cooperative
NE ¼ of Section 10, Township 1 South, Range 26 East, Yellowstone County
3020 State Avenue
Billings, Montana 59101

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		Methods 1-4, 5, 6, & 9
Ambient Monitoring Required		X	
Continuous Opacity Monitoring System (COMS) Required		X	
Continuous Emission Monitoring System (CEMS) Required Continuous Emission Rate Monitoring System (CERMS) Required	X		Sulfur dioxide (SO ₂) Concentration in Stack Gas, Stack Gas Volumetric
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		Semiannual and Annual
Monthly Reporting Required		X	
Quarterly Reporting Required	X		CEMS/CERMS
Applicable Air Quality Programs			
ARM Subchapter 7 Montana Air Quality Permit	X		Montana Air Quality Permit (MAQP) #2912-04
New Source Performance Standards (NSPS)		X	
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except for 40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63 Subparts CCCCCC and 40 CFR Subparts JJJJJJ
Major New Source Review (NSR) - Includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR	X		Western Sugar (WSC) is a major source as defined by NSR/PSD; however, no actions have occurred that would trigger a review.
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM) Plan	X		Appendix F of OP2912-09
State Implementation Plan (SIP)	X		Billings/Laurel SO ₂ SIP

TABLE OF CONTENTS

SECTION I. GENERAL INFORMATION	3
A. PURPOSE	3
B. FACILITY LOCATION	3
C. FACILITY BACKGROUND INFORMATION.....	3
D. CURRENT PERMIT ACTION	7
E. TAKING AND DAMAGING ANALYSIS	7
F. COMPLIANCE DESIGNATION.....	8
SECTION II. SUMMARY OF EMISSIONS UNITS	9
A. FACILITY PROCESS DESCRIPTION.....	9
B. EMISSIONS UNITS AND POLLUTION CONTROL DEVICE IDENTIFICATION	9
C. CATEGORICALLY INSIGNIFICANT SOURCES/ACTIVITIES	9
SECTION III. PERMIT CONDITIONS	11
A. EMISSION LIMITS AND STANDARDS	11
B. MONITORING REQUIREMENTS.....	11
C. TEST METHODS AND PROCEDURES	11
D. RECORDKEEPING REQUIREMENTS.....	12
E. REPORTING REQUIREMENTS	12
F. PUBLIC NOTICE.....	12
G. MACT COMPLIANCE AND RECORDKEEPING DISCUSSION.....	15
SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS	17
SECTION V. FUTURE PERMIT CONSIDERATIONS.....	23
A. MACT STANDARDS (PART 63).....	23
B. NESHAP STANDARDS (PART 61).....	23
C. NSPS STANDARDS.....	23
D. RISK MANAGEMENT PLAN.....	23
E. CAM APPLICABILITY	23
F. PSD AND TITLE V GREENHOUSE GAS TAILORING RULE	24

SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emissions units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the U.S. Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit, and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based primarily on information provided in the original application submitted by The Western Sugar Cooperative (WSC), formerly Western Sugar Company, on June 7, 1996, and also on stipulated agreements between the Department of Environmental Quality (DEQ) and Western Sugar as documented in the June 1998 Stipulation (STIP). The STIP is discussed in Appendix E of the operating permit and a copy of the STIP is available, upon request, from DEQ. Additional information was also submitted by Western Sugar with respect to the minor modification/administrative amendment requests of April 5, 2002; May 17, 2002; June 23, 2003; February 4, 2008; and April 15, 2019, the de minimis request of May 30, 2008, the significant modification request of July 30, 2003, and the renewal applications submitted on May 18, 2005, February 17, 2010, October 8, 2015, and August 24, 2021.

B. Facility Location

WSC's facility is located at 3020 State Avenue, Billings, Montana. The legal description is Northeast ¼ of Section 10, Township 1 South, Range 26 East, in Yellowstone County, Montana.

C. Facility Background Information

Montana Air Quality Permit (MAQP) Background

On May 11, 1971, **MAQP #286-073071** was issued to Western Sugar Company to install a 2000-gallon per minute wet scrubbing system on the existing cyclone dryer stacks.

On July 10, 1972, **MAQP #485-092672** was issued to Western Sugar Company to install a wet scrubber system on the west drum pulp dryer cyclone.

On June 29, 1976, **MAQP #913** was issued to Western Sugar Company for the conversion of three Riley 100,000 pound per hour natural gas fired steam generators (Riley #2, Riley #3, and Riley #4) to coal stoker firing.

On July 26, 1978, **MAQP #1227** was issued to Western Sugar Company to install Multi-cyclones on the 3 coal-fired boilers (Riley #2, Riley #3, and Riley #4).

On June 9, 1996, Western Sugar Company was issued **MAQP #2912-00** to construct the boiler house stack extension that would extend the stack to at least 51.8 meters above ground level. However, during a routine site visit, DEQ noted an economizer on the boiler house stack that was put there by Western Sugar Company in an effort to minimize the amount of heat that was vented through the stack.

The economizer influenced the characteristics of the plume emitted from the stack and was installed without notifying DEQ. As a result, the stipulation agreement between DEQ and Western Sugar Company was readjusted to account for the changed characteristics of the exit gas plume. The changed conditions of the stipulation were as follows; the boiler house stack must be raised to a minimum height of 54.9 meters instead of the original 51.8 meters. Originally, the boiler house stack was 120 feet tall, and the extension would add another 60 feet that would produce a total stack height of 180 feet (54.9 meters) above ground level. As part of the 1995 proposed Billings/Laurel SO₂ State Implementation Plan, Western Sugar Company and DEQ stipulated that Western Sugar Company shall extend the height of the boiler house stack to at least 54.9 meters to receive Good Engineering Practices (GEP).

In addition to the proposed boiler house stack extension, Western Sugar Company agreed to accept lower emissions limitations for SO₂ on the pulp dryers as follows:

1. Combined 3-hour emissions of SO₂ from the east pulp dryer stack and west pulp dryer stack shall not exceed 88.5 pounds per 3-hour period
2. Combined daily emissions of SO₂ from the east pulp dryer stack and west pulp dryer stack shall not exceed 708.0 pounds per calendar day
3. Combined annual emissions of SO₂ from the east pulp dryer stack and west pulp dryer stack shall not exceed 148,680 pounds per calendar year

MAQP #2912-00 replaced MAQPs #286, #485, #913, and #1227.

On April 5, 2002, DEQ received a de minimis notification from Western Sugar Company. The change involved replacing the wet scrubber on one of the cooling sugar granulators with a more efficient baghouse. In addition, on May 17, 2002, DEQ received a request from Western Sugar Company to modify MAQP #2912-00 to reflect a name change from Western Sugar Company to WSC. The permit analysis was updated to reflect the change in the control equipment on one of the cooling sugar granulators and the permit was updated to reflect the name change. On August 2, 2002, **MAQP #2912-01** replaced MAQP #2912-00.

On June 23, 2003, DEQ received a de minimis notification from WSC. The change involved replacing the wet scrubber on the second cooling sugar granulator with a more efficient baghouse. The permit analysis was updated to reflect the change in the control equipment on the second cooling sugar granulator and the permit was updated to reflect the new mailing address. In addition, the permit format, language, and rule references were updated to reflect current Department permit format, language, and rule references. **MAQP #2912-02** replaced MAQP #2912-01.

On July 30, 2003, DEQ received an application from Bison Engineering, Inc. on behalf of WSC for the modification of the diffuser at WSC's facility. The modification was for the replacement of the existing slope diffuser with a more efficient tower diffuser. Although the diffuser is not an emitting unit, the diffuser has the potential to affect the downstream emitting units (pressed pulp dryers and pelletizer cooler). Therefore, WSC requested federally enforceable throughput limits on the pressed pulp dryers and the pelletizer cooler that would limit potential emissions levels below Prevention of Significant Deterioration (PSD) significance levels. **MAQP #2912-03** replaced MAQP #2912-02.

On April 14, 2004, DEQ received a complete application from WSC requesting the addition of a federally enforceable permit condition to MAQP #2912-03 requiring the operation of existing coal boiler pollution control equipment. The permit action was not for a physical change to the facility but required WSC to operate the scrubbers whenever the coal boilers are operated. This federally enforceable condition allowed WSC to take credit for the emissions reductions associated with the scrubbers and thereby avoid the Maximum Achievable Control Technology (MACT) standards for Industrial, Commercial and Institutional Boilers, and Process Heaters (40 CFR 63, Subpart DDDDD). On June 22, 2004, **MAQP #2912-04** replaced MAQP #2912-03.

Title V Operating Permit Background

On June 7, 1996, DEQ received an operating permit application from Western Sugar Company for their facility located in Billings, Montana. The permit application was deemed administratively complete on July 17, 1996, after DEQ received additional submittals on June 17, 1996. The permit application was deemed technically complete on August 17, 1996. **Operating Permit #OP2912-00** became final and effective on November 18, 1999.

On April 5, 2002, DEQ received a minor modification request from Western Sugar Company. The minor modification involved replacing the wet scrubber on one of the cooling sugar granulators with a more efficient baghouse. In addition, on May 17, 2002, DEQ received a request for an administrative amendment from Western Sugar Company. The amendment involved a name change from Western Sugar Company to WSC. **Operating Permit #OP2912-01** replaced Operating Permit #OP2912-00 on September 26, 2002.

On June 23, 2003, DEQ received a request for a minor modification to Operating Permit #OP2912-01 from WSC. The minor modification comprised of a de minimis change to replace the wet scrubber on the second cooling sugar granulator (EU007) with a more efficient baghouse. In addition, the mailing address for the facility was updated. Further, the condition requiring the Pulp Dryers (EU004) to comply with the Administrative Rules of Montana (ARM) 17.8.309 (Particulate Matter, Fuel Burning Equipment) was removed from the permit because the condition was applied inappropriately because the pulp drying process does not meet the definition of fuel burning equipment (ARM 17.8.101(17)) because the pulp dryers utilize direct heat transfer to dry the pulp. **Operating Permit #OP2912-02** replaced Operating Permit #OP2912-01 on November 4, 2003.

On July 30, 2003, DEQ received an application from WSC for the modification of the diffuser at WSC's facility. The modification was for the replacement of the existing slope diffuser with a more efficient tower diffuser. Although the diffuser was not an emitting unit, the diffuser has the potential to affect the downstream emitting units (pressed pulp dryers and pelletizer cooler). Therefore, WSC requested federally enforceable throughput limits on the pressed pulp dryers and the pelletizer cooler that limited potential emissions levels below PSD significance levels. DEQ also received a letter on April 1, 2004, requesting that Mr. Ken Bennett, the Billings Factory Manager, be added as an alternate responsible official. **Operating Permit #OP2912-03** replaced Operating Permit #OP2912-02.

On May 18, 2005, WSC submitted a renewal application. The application was deemed administratively complete on May 18, 2005, and technically complete on June 18, 2005. The application requested the following changes to Operating Permit #OP2912-03: Incorporate the MAQP requirement to install, operate, and maintain a wet scrubber on the Riley Boilers; incorporate the Compliance Assurance Monitoring (CAM) Plan (submitted as part of the application) for the particulate control provided by the scrubbers for the Riley boilers into the permit; and incorporate the CAM Plan (submitted as part of the application) for the particulate control provided for the natural gas fired pulp dryers into the permit. In addition, WSC submitted an updated Hazardous Air Pollutant (HAP) emissions inventory, which demonstrates that the facility is not a major source of HAPs. **Operating Permit #OP2912-04** replaced Operating Permit #OP2912-03.

On February 19, 2010, DEQ received a renewal application from WSC (assigned Operating Permit #OP2912-05). The permit action also included the following changes: On January 17, 2007, WSC submitted an updated CAM Plan to DEQ. This CAM Plan update correctly identified the rating for each pulp dryer as 120 million British thermal units per hour (MMBtu/hr). On February 4, 2008, WSC submitted a notification letter to DEQ of a change in the Billings facility's alternate responsible official for the overall operation of the facility. The alternate responsible official is Mr. Ray Bode, Facility Manager. On May 30, 2008, WSC submitted a letter to DEQ with a proposed change to install two sulfur stoves at the Billings Facility. The stoves would be used to generate a disinfection agent, SO₂, with direct injection via an educator to two liquid streams. DEQ determined this change was de minimis on October 7, 2008. **Operating Permit #2912-05** replaced Operating Permit #2912-04.

On August 4, 2014, DEQ received a request from WSC to amend Operating Permit #OP2912-05 to change the responsible official to Rodney Perry. **Operating Permit #OP2912-06** replaced Operating Permit #OP2912-05.

On October 8, 2015, DEQ received a renewal application from WSC that was assigned Operating Permit #OP2912-07. The permit action included: The Responsible Official is now Mr. Ray Bode, the new Billings Factory Manager. The Alternative Responsible Official is now Mr. Mike Skeans, Vice President of Operations. The facility is now subject to two Area Source Maximum Achievable Control Technology (MACT) standards: 40 CFR 63 Subpart CCCCCC and JJJJJJ. The MACT standards were added to the permit as applicable standards the facility is subject to. The permit renewal included the addition of a significant emission unit, EU012 Fuel (Gasoline) Storage Tank, subject to 40 CFR 63 Subpart CCCCCC, added new MACT regulation to EU002 Boiler House Stack, 40 CFR 63 Subpart JJJJJJ and updated the Sugar Dust Collector emission unit number from EU017 to EU011. **Operating Permit #OP2912-07** replaced Operating #OP2912-06.

On April 15, 2019, DEQ received an Administrative Amendment application from The Western Sugar Cooperative requesting the Responsible Official be changed from Ray Bode to Gary Brachtenbach. The application also requested both changing and adding Alternate Responsible Officials to the Operating Permit. **Operating Permit #OP2912-08** replaced Operating #OP2912-07.

D. Current Permit Action

On August 24, 2021, DEQ received a renewal application from WSC. WSC requested the following updates to the Operating Permit: addition of significant emitting unit (EU) EU011 – Coal Handling, EU013 – Beet Hauling, EU014 – Wind Erosion, updated insignificant emissions unit table, redesignation of the Dust Collectors (IEU005-008), addition of a diesel track mobile unit, updated CFR and ARM regulations and requirements, various administrative changes, removal of fuel oil requirements for the Pulp Dryer, removal of the Continuous Emissions Monitoring System (CEMS) requirements for the Boiler House Stack, and increasing the campaign duration from 190 days to 210 days.

DEQ reviewed and completed a majority of the requested changes with the exception of the diesel track mobile unit which is considered a mobile source and not included in the insignificant emitting unit table.

DEQ did not accommodate the requests to remove the CEMS requirement for monitoring the Boiler House Stack emissions or the increase of the campaign duration. These are applicable requirements of the Stipulation and therefore must be included in the Title V Operating Permit. DEQ does not consider the proposed changes to be minor or clerical and WSC would need to use the process outlined in the Stipulation for modifying the text of the requirements. The modified applicable requirement text could then be reflected in the Title V Operating Permit. The CEMS are required by the 1998 Stipulation to confirm compliance its Section 2(A)(1), (6), (8) and (12). The 190-day campaign duration described at Section 3(C) is the basis for the hourly SO₂ emissions.

Additionally, DEQ changed EU011 from “Warehouse Sugar Dust Collector” to “Coal Handling, Fugitives” in order to maintain numbering conventions throughout the permit. The Warehouse Sugar Dust Collector was removed from the Operating Permit because it is not considered an Emitting Unit (EU).

Operating Permit #OP2912-09 replaces #OP2912-08.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, DEQ is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, MCA, DEQ conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)

YES	NO	
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, DEQ determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation

DEQ last completed a Full Compliance Evaluation at the WSC Billings Facility on March 31, 2021, which covered the period from September 20, 2019, through March 31, 2021. Based upon the information gathered at the time of the facility inspection conducted on 1/28/2021, the observations made during the inspection, the review of reports and compliance certifications submitted by WSC during the review period, DEQ believes that WSC is in compliance with the applicable requirements for the period covered.

SECTION II. SUMMARY OF EMISSIONS UNITS

A. Facility Process Description

This facility processes sugar beets for the production of sugar. Sugar beets are received at the plant by truck at which time they are screened and washed to remove dirt and rocks. The beets are then either fed into the plant for processing or stockpiled to be processed at a later time. Overall, processing of the beets begins by slicing them into long thin strips, referred to as “cossettes”. The cossettes are conveyed into a diffuser where the beet sugar is removed by water and heat. The juice goes through several purifying stages and is sent to the evaporators that remove the liquids and allow crystallization. The two by-products of this process are molasses and pulp, which are mixed together to create pellets to be sold as livestock feed. Shipment of the product from the facility is achieved by both rail and truck.

B. Emissions Units and Pollution Control Device Identification

The emissions units regulated by Operating Permit #OP2912-09 and the pollution control device utilized by each emissions unit are summarized in the following table:

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	Natural Gas Erie City Boiler #1(132 MMBtu/hr)	Natural Gas Fuel Only
EU002	Boiler House Stack, (coal-fired Riley Boilers; #2, #3, #4 - 148 MMBtu/hr each)	Wet Scrubbers (2); Mist Eliminator (1); Multi-cyclones (3) – vented to common stack
EU003	Natural Gas Clever Brooks Boiler #5(17 MMBtu/hr)	Natural Gas Fuel Only
EU004	Pulp Dryers – East and West (120 MMBtu/hr each)	Wet Scrubber, Mist Eliminator, Multi-cyclones
EU005	Pellet Mills/ Conveyor	Multi-cyclones
EU006	Pelletizer Cooler	Multi-cyclones
EU007	Drying Sugar Granulators (2) and Cooling Sugar Granulators (2)	Wet Scrubbers (2); Baghouses (2)
EU008	Lime Slaker Vent	Wet Scrubber
EU009	Burnt Lime Collector	Baghouse
EU010	Truck Hauling-Fugitives	Water Spray
EU011	Coal Handling, Fugitives	40 CFR 60, Subpart Y
EU012	Fuel (Gasoline) Storage Tank	40 CFR 63 Subpart CCCCCC
EU013	Beet Piling, Fugitives	None
EU014	Wind Erosion, Fugitives	None

C. Categorically Insignificant Sources/Activities

ARM 17.8.1201(22) (a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated air pollutant, has the potential to emit less than 500 pounds per year of lead or any HAP, and is not regulated by any applicable requirement other than a generally applicable requirement. Insignificant emitting units at the WSC facility are summarized in the following table:

Emissions Unit ID	Description
IEU001	Lime Kiln
IEU002	Limestone Handling
IEU003	Coke Handling
IEU004	Sulfur Stoves (2)
IEU005	6 th Floor Production Dust Collector
IEU006	Warehouse Dust Collector
IEU007	North Warehouse Dust Collector
IEU008	West Granulator Dust Collector
IEU009	Miscellaneous Gasoline Combustion Sources
IEU010	Miscellaneous Diesel Combustion Sources
IEU011	Natural Gas Space Heater(s)

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

Emission limits and standards for Operating Permit #OP2912-09 were established from the limits and standards contained in WSC's MAQP #2912-04 and the STIP agreement between DEQ and WSC. The September 1979 Stipulation modified the sulfur in fuel rule for WSC. Citing of the modified rule is not listed under each unit, but rather can be found in Section III.A - Facility Wide of the permit. Compliance demonstrations for each unit are listed in a specific section for that unit (i.e., CEMS data, fuel and beet analysis, or by burning of natural gas).

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor for all emission units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for an insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (**i.e., no monitoring**) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, DEQ may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but DEQ has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

Based on the schedule outlined in the June 12, 1998, STIP, WSC must test the boiler house stack and the beet pulp dryer stack that is expected to emit the most sulfur dioxide (SO₂) during the campaign annually for SO₂. Based on DEQ's policy, WSC must test the boiler house stack and the beet pulp dryer stacks for particulate matter every two years with opacity testing being done during each campaign.

DEQ may require particulate testing for the Erie City and the Clever Brooks boilers as well as for the pellet mill/conveyor, pelletizer cooler, granulators, and the lime slaker vent.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least five years following the date of the generation of the record.

E. Reporting Requirements

In accordance with ARM 17.8.1232, a public notice was published in the *Billings Gazette* newspaper on or before October 8, 2022. DEQ provided a 30-day public comment period on the draft operating permit from October 8, 2022, to November 8, 2022. ARM 17.8.1232 requires DEQ to keep a record of both comments and issues raised during the public participation process. The comments and issues received by October 14, 2022, will be summarized, along with DEQ's responses, in the following table. All comments received during the public comment period will be promptly forwarded to WSC so they may have an opportunity to respond to these comments as well.

F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in the *Billings Gazette* newspaper on or before October 6, 2022. DEQ provided a 30-day public comment period on the draft operating permit from *October 6, 2022, to November 7, 2022*. ARM 17.8.1232 requires DEQ to keep a record of both comments and issues raised during the public participation process. The comments and issues received by *November 7, 2022*, will be summarized, along with DEQ's responses, in the following table. All comments received during the public comment period will be promptly forwarded to WSC so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Draft Permit Comments

Person/Group Commenting	Comment	DEQ Response
No Public Comments Submitted		

Summary of Permittee Comments

Permit Reference	Permittee Comment	DEQ Response
Title V Operating Permit – Permit Table of Contents	EU017 should be removed from the table of contents since it was determined to be an insignificant activity. EU011 through EU014 need to be added to table of contents. WSC prefers that EU011 be relabeled to EU015 to prevent confusion based on past EU labels.	DEQ made the requested change with the exception of renaming EU011 to the Operating Permit. DEQ believes renaming EU011 to the requested EU015 has the potential to cause confusion. The Technical Review Document was updated to provide an explanation for the current numbering.

Title V Operating Permit – Section I	Please change the Facility Contact to Joe Vesey, Environmental Manager	DEQ made the requested change to the Operating Permit.
Title V Operating Permit – Section II, Summary of Emission Units	Please correct misspelling of handling in “Coal Handling Fugitives”	DEQ made the requested change to the Operating Permit.
Title V Operating Permit – Section II, Summary of Emission Units	EU013 and EU014 [are] not listed in the summary table. WSC requests EU013 and EU014 are added for completeness	DEQ made the requested change to the Operating Permit
Title V Operating Permit, Section III A – Facility Wide Condition Table and A.14	STIP requirement left in permit. This was requested to be removed but was not removed. Working with EPA to remove requirement. WSC requests that the MTDEQ allow the EPA time to complete their review prior to issuing a final permit instead of reopening the Permit at a later date.	DEQ <i>cannot</i> allow additional time for USEPA to complete their review. Any changes to Operating Permit conditions after the initial Public Comment period require a new Permit Action with the associated Public Comment period.
Title V Operating Permit, Section III, A – Facility Wide Condition Table and Section III.A.15	WSC requests that Condition A.15 of the draft permit is removed. Additional discussion is provided in the comment letter.	DEQ did not make the requested change because language associated with Section III.A.15 is standard language in all Montana Title V Operating Permits.
Title V Operating Permit - Section C.III.9	STIP requirement left as-is in permit. This was requested to be modified to remove CEMs requirements. Working with EPA to remove requirement. WSC requests that the MTDEQ allow the EPA time to complete their review prior to issuing a final permit instead of reopening the Permit at a later date.	DEQ <i>cannot</i> allow additional time for USEPA to complete their review. Any changes to Operating Permit conditions after the initial Public Comment period require a new Permit Action with the associated Public Comment period.
Title V Operating Permit – Section C.14.a	WSC requests that the newly added language incorporates a reference that the written procedures (as referenced) may be incorporated into the facility's existing Site Specific Monitoring Plan (SSMP) as depicted in the permit redline in Attachment B. This will prevent confusion going forward that these procedures aren't necessarily a separate document.	DEQ made the requested change to the Operating Permit.

Title V Operating Permit - Section C.III.15	STIP requirement left in permit. Requested to be removed. Working with EPA to address. WSC requests that the MTDEQ allow the EPA time to complete their review prior to issuing a final permit instead of reopening the Permit at a later date.	DEQ <i>cannot</i> allow additional time for USEPA to complete their review. Any changes to Operating Permit conditions after the initial Public Comment period require a new Permit Action with the associated Public Comment period.
Title V Operating Permit - Section C.III.21	STIP requirement left in permit. Requested to be removed. Working with EPA to address. WSC requests that the MTDEQ allow the EPA time to complete their review prior to issuing a final permit instead of reopening the Permit at a later date.	DEQ <i>cannot</i> allow additional time for USEPA to complete their review. Any changes to Operating Permit conditions after the initial Public Comment period require a new Permit Action with the associated Public Comment period.
Title V Operating Permit - Section C.III.21	In an email exchange, dated January 25, 2022, between WSC consultant Emma Williams of Bison Engineering and Jamin Grantham of MTDEQ, Mr. Grantham confirmed that electronic reports sent to DEQ-ARMB-Admin@MT.gov were the most appropriate form of submission. In this submission, the electronic-magnetic reports are no longer required. If this condition must stay in the permit due to its association with the Stipulation Agreement, WSC requests additional language is added to this condition, clarifying how the reports must be submitted and what information is required.	DEQ made the requested change to the Operating Permit.
Title V Operating Permit – Section III, E – Condition Table	In light of several conditions being removed as a result of the equipment losing its capability to combust fuel oil, WSC suggests that a condition be incorporated for the pulp dryers stating that only natural gas shall be combusted at this source.	DEQ did not make the requested addition of “burn natural gas only” language to the conditions table because the use of natural gas is not a specific condition listed in Section III.E, Pulp Dryers.
Title V Operating Permit – Section III.L	WSC appreciates the Division adding this source as requested. However, in the old permit EU011 was used to identify "Warehouse Sugar Dust Baghouse/Collector". For the sake of preventing confusion, WSC requests a new identifier be used for Coal Handling, such as EU015.	DEQ did not make the requested change in order to maintain continuity with the current numbering convention. DEQ believes renaming EU011 to the requested EU015 has the potential to cause confusion. The Technical Review Document was updated to provide an explanation for the current numbering.

Title V Operating Permit – Section III.N – Condition Summary Table	Referenced conditions are missing from the EU013 Condition Table. WSC requests that MDEQ list the applicable conditions for completeness.	DEQ made the requested change to the Operating Permit.
Appendix F – Compliance Assurance Monitoring Plan	WSC submitted a revised CAM Plan in the renewal application. The draft permit does not include the revised CAM Plan. WSC requests that the MTDEQ replace the CAM Plan in the draft permit with the revised Plan.	DEQ made the requested change to the Operating Permit.
Technical Resource (Review) Document, Section III.E, Paragraphs E and F	Paragraph E incorrectly references Sidney Sugars, please correct to Western Sugar Cooperative. Paragraph F references an incorrect public notice period. Please revise to correct period.	DEQ made the requested change to the Operating Permit.

Summary of EPA Comments

Permit Reference	EPA Comment	DEQ Response
No Comments from EPA		

G. MACT Compliance and Recordkeeping Discussion

This subsection is intended to provide clarity on regulations and requirements specified in 40 CFR 63, Subpart JJJJJJ in regard to compliance demonstration and recordkeeping, as applicable to EU002 Boiler House Stack – (3) Riley Boilers. The language presented is a summary of the requirements referencing 40 CFR 63, Subpart JJJJJJ amended version at 78 FR 7512, February 1, 2013, the current version at the time of issuance of Title V Operating Permit #OP2912-09. It is the responsibility of the source to be familiar with all applicable requirements and to be aware of amendments to the rule and to comply with the most recent version of 40 CFR 63, Subpart JJJJJJ.

Compliance demonstration:

Once every 3 years (but not to exceed 37 months) WSC shall perform an EPA Reference Method 10 source test with a minimum of 1-hour sampling time per run to measure CO concentrations. During the CO performance test, WSC must monitor the O2 at the same location as the CO sampling location. WSC must collect O2 data from the installed oxygen analyzers every 15 minutes for the entire period of the performance test.

WSC shall continuously monitor O2 and maintain a 30-day rolling average O2 concentration at or above the minimum level established during most recent CO performance test.

Recordkeeping:

WSC must maintain:

- Records of fuel analysis or types and amounts of fuel burned since last fuel analysis to show compliance with Hg emission limits.
- Records of operating load showing load less than 110% of most recent performance test.
- Records of 30-day rolling O₂ level at or above minimum determined during the most recent performance test.

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Section IV of the operating permit discussing “Non-applicable Requirements” contains the requirements of that WSC identified as non-applicable and for which a permit shield was granted DEQ under the current operating permit renewal application (ARM 17.8.1214).

The following table summarizes the requirements that WSC identified as non-applicable in the renewal application but for which DEQ did not grant a permit shield or with the applicability determination.

Requirements not Identified in the Operating Permit

Applicable Requirement	Reason
Subchapter 1 General Provisions	
ARM 17.8.120 Variance Procedures ARM 17.8.131 Enforcement Procedures – Appeal to Board ARM 17.8.140 Rehearing Procedures – Form and Filing of Petition ARM 17.8.141 Rehearing Procedures – Filing Requirements	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
ARM 17.8.130 Enforcement Procedures – NOV ARM 17.8.142 Rehearing Procedures – Board Review	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
Subchapter 2 Ambient Air Quality	
ARM 17.8.202- Definitions and Incorporation by Reference	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.204 Ambient Air Monitoring	These rules are always applicable to a major source and may contain specific requirements for compliance.
Subchapter 3 Emission Standards	
ARM 17.8.301 and 302 Definitions and Incorporation by Reference ARM 17.8.330 Emissions Standards for Aluminum Plants - Definitions	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.326 Prohibited Materials for Wood or Coal Residential Stoves	These are rules that are always applicable to a major source and may contain specific requirements for compliance

Applicable Requirement	Reason
Subchapter 4 Stack Heights and Dispersion Techniques	
ARM 17.8.401 Definitions	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.403 Exemptions	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees	
ARM 17.8.501 Definitions	These are rules that consist of either a statement of purpose, applicability statement, regulatory definitions or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.510 Annual Review	This rule contains requirements for the regulatory authorities and not major sources; however, it can be used as authority to impose specific requirements on a major source.
ARM 17.8.511 Air Quality Permit Application/Operation Fee Assessment Appeal Procedures ARM 17.8.514 Air Quality Open Burning Fees ARM 17.8.515 Air Quality Open Burning Fees for Conditional, Emergency, Christmas Tree Waste, and Commercial Film Production Open Burning Permits	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
Subchapter 6 Open Burning	
ARM 17.8.601 and 602 Definitions & Incorporation by Reference	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.611 Emergency Open Burning Permits ARM 17.8.612 Conditional Air Quality Open Burning Permits ARM 17.8.613 Christmas Tree Waste Open Burning Permits ARM 17.8.614 Commercial Film Production Open Burning Permits ARM 17.8.615 Firefighter Training	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.

Applicable Requirement	Reason
Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources	
ARM 17.8.740 Definitions ARM 17.8.767 Incorporation by Reference	These rules consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirement associate with them.
ARM 17.8.743 Montana Air Quality Permit-When Required ARM 17.8.744 Montana Air Quality Permit-General Exclusions 17.8.745 Montana Air Quality Permits- Exclusion for De Minimis Changes 17.8.748 New of Modified Emitting Units – Permit Application Requirements 17.8.762 Duration of Permit 17.8.764 Administrative Amendment to Permit 17.8.765 Transfer of Permit	These are procedure rules that have specific requirements that may become relevant to major source during the permit span.
17.8.755 Inspection of Permit 17.8.756 Compliance with Other Requirements	These are rules that are always applicable to a major source and may contain specific requirements for compliance.
Subchapter 8 Prevention of Significant Deterioration	
ARM 17.8.801 Definitions ARM 17.8.802 Incorporation by Reference	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.804 Ambient Air Increments ARM 17.8.805 Ambient Air Ceilings ARM 17.8.828 Innovative Control Technology	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
ARM 17.8.806 Restrictions on Area Classifications ARM 17.8.807 Exclusions from Increment Consumption ARM 17.8.808 Redesignation ARM 17.8.825 Sources Impacting Federal Class I Areas – Additional Requirements ARM 17.8.826 Public Participation	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
Subchapter 9 Permit Requirements for Major Stationary Sources or Major Modifications Located Within Nonattainment Areas	
ARM 17.8.901 Definitions ARM 17.8.902 Incorporation by Reference ARM 17.8.904 When Montana Air Quality Permit Required	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.

Applicable Requirement	Reason
ARM 17.8.905 Additional Conditions of Montana Air Quality Permit ARM 17.8.906 Baseline for Determining Credit for Emissions and Air Quality Offsets	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
Subchapter 10 Preconstruction Permit Requirements for Major Stationary Sources or Major Modifications Located Within Attainment or Unclassified Areas	
ARM 17.8.1001 Definitions ARM 17.8.1002 Incorporation by Reference ARM 17.8.1004 When Montana Air Quality Permit Required	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.1005 Additional Conditions of Air Quality Preconstruction Permit ARM 17.8.1006 Review of Specified Sources for Air Quality Impact ARM 17.8.1007 Baseline for Determining Credit for Emissions and Air Quality Offsets	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.
Subchapter 11 Visibility Impact Assessment	
ARM 17.8.1101 Definitions ARM 17.8.1102 Incorporation by Reference ARM 17.8.1103 Applicability – Visibility Requirements	These are rules that consist of either a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.1108 Notification of Permit Application ARM 17.8.1109 Adverse Impact and Federal Land Management	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.

Applicable Requirement	Reason
Subchapter 12 Operating Permit Program	
ARM 17.8.1201 Definitions ARM 17.8.1202 Incorporation by Reference ARM 17.8.1203 Air Quality Operating Permit Program Overview ARM 17.8.1234 Acid Rain – Permit Regulations	These are rules that consist of either: a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.1210 General Requirements for Air Quality Operating Permit Content ARM 17.8.1211 Requirements for Air Quality Operating Permit Content Relating to Emission Limitations and Standards, and other Requirements ARM 17.8.1212 Requirements for Air Quality Operating Permit Content Relating to Monitoring, Recordkeeping, and Reporting ARM 17.8.1213 Requirements for Air Quality Operating Permit Content relating to Compliance ARM 17.8.1214 Requirements for Air Quality Operating Permit Content Relating to the Permit Shield and Emergencies ARM 17.8.1215 Requirements for Air Quality Operating Permit Content Relating to Operational Flexibility ARM 17.8.1222 General Air Operating Permits ARM 17.8.1223 Temporary Air Quality Operating Permits ARM 17.8.1225 Additional Requirements for Air Quality Operating Permit Amendments ARM 17.8.1228 Additional Requirements for Air Quality Operating Permit Revocation, Reopening, and Revision for Cause ARM 17.8.1231 Notice of Termination, Modification, or Revocation and Reissuance by the Administrator for Cause	These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.
ARM 17.8.1224 Additional Requirements for Operational Flexibility and Air Quality Operating Permit Changes that Do Not Require Revisions	These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.

Applicable Requirement	Reason
<p>40 CFR 61, Subpart A- General Provisions 40 CFR 60, Appendix B, Test Methods 40 CFR 60, Appendix C, Determination of Emission Rate Change 40 CFR 60, Appendix F, Quality Assurance Procedures 40 CFR 63, Subpart B, Requirements for Control Technology Determination for Major Sources in Accordance with Clean Air Act Sections, Section 112(g) and 112 (j) 40 CFR 63, Subpart D, Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants</p>	<p>These are procedural rules that have specific requirements that may become relevant to a major source during the permit span.</p>
<p>40 CFR 50, National Primary and Secondary Ambient Air Quality Standards 40 CFR 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans 40 CFR 53, Ambient Air Monitoring Reference and Equivalent Methods 40 CFR 54, Prior Notice of Citizen Suits 40 CFR 56, Regional Consistency 40 CFR 58, Ambient Air Quality Surveillance 40 CFR 63, Subpart E, Approval of State Programs and Delegation of Federal Authorities 40 CFR 64, Compliance Assurance Monitoring 40 CFR 67, EPA Approval of State Noncompliance Penalty Program 40 CFR 71, Federal Operating Permit Programs 40 CFR 81, Designation of Areas for Air Quality Planning Purposes</p>	<p>These rules contain requirements for the regulatory authorities and not major sources; however, they can be used as authority to impose specific requirements on a major source.</p>
<p>40 CFR 52, Appendices D, E and F- Approval and Promulgation of Implementation Plans 40 CFR 62, Approval and Promulgation of State Plans for Designated Facilities and Pollutants 40 CFR 66, Assessment and Collection of Noncompliance Penalties by EPA 40 CFR 70, State Operating Permit Programs</p>	<p>These rules do not have specific requirements but may or may not be relevant to a major source.</p>

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards (Part 63)

As of the date of issuance of this permit, for Operating Permit #OP2912-09, DEQ is not aware of any new MACT standard applicable to this facility.

B. NESHAP Standards (Part 61)

As of the date of issuance of this permit, for Operating Permit #OP2912-09, the facility is not a major source of HAPs.

C. NSPS Standards

As of the date of issuance of this permit, for Operating Permit #OP2912-09, DEQ is not aware of any NSPS standards that are applicable to this facility. The steam generation boilers were all installed prior to the applicability dates for the designated NSPS standards.

D. Risk Management Plan

Currently, this facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

E. CAM Applicability

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to Subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant, unless the limitation or standard that is exempt under ARM 17.8.1503(2);
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emissions of the applicable regulated air pollutant that is greater than major source thresholds.

WSC currently has one emitting unit, EU002 (coal-fired Riley boilers), which meets all the applicability criteria in ARM 17.8.1503 under Operating Permit #OP2912-09. Therefore, WSC is required to develop a CAM Plan for the Billings Facility. The CAM Plan provided by WSC can be found in Appendix F of Operating Permit #OP2912-09.

F. PSD and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the “light duty vehicle rule” (Docket # EPA-HQ-OAR- 2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG “Tailoring Rule” (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that would become final on or after January 2, 2011 would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO₂e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities which hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision occurring on or after January 2, 2011.

Starting on July 1, 2011, PSD permitting requirements would be triggered for modifications that were determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, sources that are not considered PSD major sources based on criteria pollutant emissions would become subject to PSD review if their facility-wide potential emissions equaled or exceeded 100,000 TPY of CO₂e and 100 or 250 TPY of GHG on a mass basis depending on their listed status in ARM 17.8.801(22) and they undertook a permitting action with increases of 75,000 TPY or more of CO₂e and greater than 0 TPY of GHG on a mass basis. With respect to Title V, sources not currently holding a Title V permit that have potential facility-wide emissions equal to or exceeding 100,000 TPY of CO₂e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

The Supreme Court of the United States (SCOTUS), in its *Utility Air Regulatory Group v. EPA* decision on June 23, 2014, ruled that the Clean Air Act neither compels nor permits EPA to require a source to obtain a PSD or Title V permit on the sole basis of its potential emissions of GHG. SCOTUS also ruled that EPA lacked the authority to tailor the Clean Air Act’s unambiguous numerical thresholds of 100 or 250 TPY to accommodate a CO₂e threshold of 100,000 TPY. SCOTUS upheld that EPA reasonably interpreted the Clean Air Act to require sources that would need PSD permits based on their emission of conventional pollutants to comply with BACT for GHG. As such, the Tailoring Rule has been rendered invalid and sources cannot become subject to PSD or Title V regulations based on GHG emissions alone. Sources that must undergo PSD permitting due to pollutant emissions other than PSD may still be required to comply with BACT for GHG emissions.