

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

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**Yellowstone Energy Limited Partnership  
2215 N. Frontage Road  
Billings, Montana 59101-7303**

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

<b>Facility Compliance Requirements</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Source Tests Required	X		Methods 5, 6, 7, 9
Ambient Monitoring Required		X	
COMS Required	X		Opacity
CEMS Required	X		SO <sub>2</sub> , NO <sub>x</sub> and CO
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required		X	
Quarterly Reporting Required	X		Monthly emission reports from the required monitors are to be submitted quarterly.
<b>Applicable Air Quality Programs</b>			
ARM Subchapter 7 – Montana Air Quality Permit (MAQP)	X		Permit #2650-09
New Source Performance Standards (NSPS)	X		Subpart Da, OOO, IIII
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		40 CFR 63, Subpart ZZZZ, 40 CFR 61 Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart UUUUU, Subpart CCCCCC
Major New Source Review (NSR)/ Prevention of Significant Deterioration (PSD)	X		The initial permit issued to YELP was subject to both NSR and PSD. YELP has not triggered a NSR/PSD review since that time.
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)	X		OP2650-09 Appendix F and G
State Implementation Plan (SIP)	X		June 1998, March 2000 Stipulation
Federal Implementation Plan (FIP)		X	

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## GENERAL INFORMATION

### A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the EPA (Environmental Protection Agency) 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 on information that was provided in the renewal applications submitted by Yellowstone Energy Limited Partnership (YELP) on May 28, 2024, May 1, 2019, May 17, 2012, and May 31, 2006, and the original application submitted on June 12, 1996, with additional submittals dated January 29, 1997, and October 13, 1999. Information was also obtained from the Montana Air Quality Permit (MAQP) #2650-09. All references of “the Department” were changed to “DEQ” to match current formatting requirements.

### B. Facility Location

The YELP complex is located in Yellowstone County, Montana, north of Lockwood and approximately 4 miles northeast of downtown Billings. The facility is located within the boundaries of the Exxon Refinery.

The immediate area, within a few hundred meters of the plant, is characterized as flat terrain. The surrounding area is comprised of a valley which runs southwest to northeast. The valley follows the Yellowstone River as it passes to the northwest. Complex terrain effectively parallels the river, mainly to the south of the plant site and follows the same river orientation.

The climate of the area is typical continental and semi-arid. Rainfall in the vicinity of the complex is less than 15 inches per year with most precipitation occurring from spring through early fall. Winds are moderate with the predominate direction from the southwest.

### C. Facility Background Information

#### Montana Air Quality Permit (MAQP)

The original preconstruction **MAQP #2650** was issued to Billings Generation Inc. (BGI) on December 13, 1991, for the construction of an electrical power generating and steam cogeneration facility. The application was originally submitted on July 6, 1990. Because the facility was considered a major source, the application was subject to New Source Review and the requirements of the Prevention of Significant Deterioration (PSD) program. BGI was the application submitter and Bison Engineering Inc. (Bison) was the environmental consultant performing the air quality permitting analyses. The application was deemed complete on November 8, 1991, contingent upon acceptable modifications to existing Exxon Refinery permits because offsets of SO<sub>2</sub> emissions from the Exxon facility were required before construction of the BGI facility could be authorized. Annual SO<sub>2</sub> offset or net SO<sub>2</sub> reduction that can be expected from this overall project is 238 tons (BGI and Exxon coker gas).

The petroleum coke-fired power plant originally had a name plate rating of 49.5 Megawatts and would produce approximately 42 net Megawatts of electrical power generation.

Gaseous emissions and particulates from the Exxon coker process unit are then fired in the combustors. The BGI power plant provides cogenerated steam energy for the Exxon Refinery.

The project included the construction of the BGI facility and some modifications at the Exxon Refinery Coker-CO boiler. The modifications at the Refinery included the installation of flue gas duct work to divert the coker unit process gas from the existing Coker-CO boiler to the BGI facility. In addition, fluid coke was to be diverted from the Coker CO boiler and to be pneumatically fed to the BGI facility and finally steam pipelines between BGI and Exxon facilities were added. An air-cooled condenser (ACC) along with a service cooling water cooling tower is used by the BGI power plant. Water resource demand at the plant is minor with an ACC system. Potable water requirements as well as service cooling water are available from the local water user's association.

**MAQP #2650-01** was issued to BGI on March 11, 1992. BGI requested a modification to support SO<sub>2</sub> emission reductions in conjunction with the Exxon refinery and Permit Modification #1564-03. The modified BGI permit addressed EPA concerns in the original Permit (MAQP #2650). The request was addressed under the provisions of Subchapter 11, ARM 16.8.1113(1)(b). The changes addressed verification of required offsets from the Exxon facility, contingency measures if the offsets are not met and additional modeling performed to verify that the project would not cause significant impacts to the National Ambient Air Quality Standards (NAAQS).

**MAQP #2650-02** was issued March 25, 1993, to change the design of the facility from one main baghouse controlling the boilers exhausting through two stacks to two baghouses exhausting through one stack.

**MAQP #2650-03** was issued on December 23, 1995, to change the name of the facility from BGI to YELP; to allow the burning of other petroleum cokes and cat slurry oil in the boilers as alternative fuels; to make the permit consistent with the stipulation signed between the Department and YELP; to change the description of the facility to include the current plant design which eliminated the parasitic load formerly driven by steam in the plant; to remove the lb/MMBtu requirements from some of the limits contained in Section II.I. of the permit; to clarify the requirements of Section II.I.5; to identify the requirements references more clearly; and to remove the requirement limiting the sulfur content of the petroleum coke.

**MAQP #2650-04** was issued on May 18, 1996, to change the coke sampling and analysis requirements for the facility. Previously, YELP had been required to sample the coke supply to the boilers on a daily basis for sulfur content and heating value. YELP has shown by this sampling that there is little variability in the sulfur content of the coke and the Department has agreed that weekly sampling will be sufficient to demonstrate compliance with applicable requirements. This modification did not result in an increase in the emissions of any pollutant from the facility.

**MAQP #2650-05** was issued on December 26, 1999, for the addition of an enclosed petroleum coke unloading/crushing/processing plant and a processed petroleum coke storage and handling building (Coke Barn) to the existing permitted equipment. Further, YELP requested an extension of time, under the general permit conditions, to install the Cat Slurry oil tank.

**MAQP #2650-06** was issued on February 11, 2000, to correct referencing errors that needed to be corrected prior to the issuance of the Title V operating permit for the YELP facility.

**MAQP #2650-07** The Department received a request to modify MAQP #2650-06 on June 9, 2000. The permit action involved changing the solid petroleum coke sampling frequency (sulfur and heat content) from once per week to once per month, permitting coke processing in the existing Limestone Unloading, Crushing, and Conveying facility, and permitting the unloading and storage of off-site petroleum coke at the Exxon Refinery coke storage area. **MAQP #2650-07** replaced MAQP #2650-06.

**MAQP #2650-08** was issued on May 17, 2012, as a modification to remove reference to Cat Slurry Oil combustion and storage and to add permanent outside storage of 45,000 tons of petroleum coke. In addition, the permit action removed all reference to pneumatic coke truck unloading system, clarified that the limestone unloading system was no longer used to process coke, added 2,000 tons of exterior limestone storage, and added a coke load-out silo with baghouses. **MAQP#2650-08** replaced MAQP#2650-07.

**MAQP #2650-09** was issued on September 4, 2024, as an administrative amendment request from YELP to remove the ambient air quality monitoring requirements from the permit. Additional correspondence was received on July 28, 2020. The permit action updated the permit to reflect the removal of the ambient air quality requirements. **MAQP #2650-09** replaced MAQP #2650-08.

### **Title V Operating Permit**

The original operating permit application was submitted on June 12, 1996, with additional submittals dated January 29, 1997, and October 13, 1999. **Operating Permit #OP2650-00** was effective on November 28, 2001.

On May 31, 2006, YELP submitted an operating permit renewal application. **Operating Permit #OP2650-01** was effective on November 24, 2007, and replaced Operating Permit #OP2650-00.

The permit action was a renewal of YELP's Title V Operating Permit, for which the Department received an administratively complete application for renewal on May 17, 2012. **Operating Permit #OP2650-02** replaced Operating Permit #OP2650-01.

On May 28, 2024, YELP submitted a renewal of YELP's Title V Operating Permit, for which DEQ received an administratively complete application for renewal on May 2, 2018. Included in the permit renewal is the addition of a 560-horsepower diesel engine. **Operating Permit #OP2650-03** replaced Operating Permit #OP2650-02

## **D. Current Permit Action**

The current permit action is a renewal of YELP's Title V Operating Permit, for which DEQ received an administratively complete application for renewal on May 28, 2024. Included in the permit renewal is the removal of the ambient air quality monitoring requirements that were removed in the permitting action in MAQP #2650-04. The conditions from the Consent Orders from August 23, 2019 and June 2, 2021, were included in this renewal. DEQ also updated references from "the Department" to "DEQ" throughout the permit. DEQ updated the emergency provisions language. **Operating Permit #OP2650-04** replaces Operating Permit #OP2650-03.

## 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 105, MCA, DEQ has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications.

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)
	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)

## **F. Compliance Designation**

DEQ conducted a Full Compliance Evaluation (FCE) on July 6, 2023. The FCE included compliance reports/records submitted by YELP for the review period of June 1, 2021, through May 31, 2023. During the review, YELP was found to be in compliance with all observable emissions limits and record keeping requirements of the MAQP and OP. A review of the notifications, reports, and certifications submitted by YELP indicated that YELP had been in compliance during the review period with two exceptions.

No warning letters or violation letters were issued to YELP during the review period of June 1, 2023, through May 31, 2023.

On August 23, 2019, YELP and DEQ signed a Consent Decree (CD) following enforcement of violations detailed in Violation Letter #VL-20180521-00289, dated May 22, 2018. The CD required submission of an updated mercury (Hg) source test protocol and incorporation of the CD provisions requiring use of a CaBr<sub>2</sub> injection system for the control of Hg emissions into YELP's Operating permit. With this renewal of the Operating Permit all applicable requirements of the 2019 CD have been incorporated. See Section III.B of the Title V Operating Permit Renewal #OP2650-04.

On June 3, 2021, DEQ sent an Administrative Order on Consent (AOC) to YELP for review. The AOC was signed and stipulated penalties paid by YELP on June 22, 2021. The AOC was executed June 28, 2021. On September 13, 2021, DEQ received the AOC required written procedure.

The Consent Order issued to YELP pursuant to the authority vested in the State of Montana, acting by and through DEQ under the CAA, specifically Section 75-2-401, MCA. DEQ ORDERS and YELP AGREES as follows:

YELP shall develop written procedures for monitoring, recording, and analyzing the data supplied by the continuous PM monitors installed on the EU 03 and EU 07 baghouse stacks and develop an operations manual for the PM monitors which shall include procedures for the responding to alarms, a preventative maintenance schedule, and calibration procedures.

DEQ has now incorporated the provisions of this Consent Order into YELP's Title V Operating Permit renewal application, which was due on May 30, 2024. YELP's renewal application was received by DEQ on May 28, 2024. With this renewal of the Operating Permit all applicable requirements of the 2021 AOC have been incorporated. See Section III.D of the Title V Operating Permit Renewal #OP2650-04.

## SUMMARY OF EMISSION UNITS

### A. Facility Process Description

The primary operation of the YELP complex is the production of energy in the form of steam. The plant, a 65-Megawatt electric generating facility uses both petroleum coke and coker gas as the primary fuels to fire two circulating fluidized bed combustion (CFBC) boilers. These boilers in turn produce steam of which a portion is provided to the Exxon Refinery, a small portion is used to run various fans and pumps at the site and the remainder is used to generate electricity through a steam turbine. The facility consumes approximately 224,300 tons per year of coke.

SO<sub>2</sub> emissions are controlled through limestone injection into the CFBC boilers. Limestone injection fits well with the design of a CFBC boiler and provides for a substantial reduction in these emissions. The limestone upon reaching a high enough temperature calcines to lime. Lime reacts with SO<sub>2</sub> to form calcium sulfites and calcium sulfates. These compounds are contained in the gas stream as particulates. The system is designed to remove a minimum of 92% of the incoming sulfur compounds.

Particulate emissions from the CFBC units are controlled via baghouses. The baghouses are downstream of the CFBC boilers just prior to the stack. The baghouses serve the purpose of removing over 99% of the incoming particulate stream, including sulfur particulate.

Nitrogen dioxide (NO<sub>2</sub>), volatile organic compounds (VOC) and carbon monoxide (CO) emissions are controlled through the CFBC design. The CFBC system, by design, operates at lower temperatures than a standard pulverized coal/coke system. One of the primary mechanisms that produces NO<sub>2</sub> is a high combustion temperature. The CFBC system operates at a lower temperature and thus produces less NO<sub>2</sub> than its counterpart systems. The CFBC boiler by its own design is a “low NO<sub>x</sub>” burner.

Limestone is delivered to this facility from the quarry by truck. The material is unloaded (bottom dumped) inside an enclosed area, crushed, then conveyed into a storage silo. From the silo, limestone is added to the boiler thorough a closed system. Particulate emissions are controlled by the baghouse system.

Petroleum coke (coke) is supplied to the plant from two sources. The first is production coke from the Exxon refinery’s coker unit. As coke is manufactured at the refinery, it will be pneumatically conveyed from a storage silo at the Exxon property to the coke storage silos at YELP. If the storage silos are full, the coke can be transferred to an open storage pile. The coke can then be supplied from the existing coke inventory by pneumatically conveying the coke from the silos, or from the open storage pile by using a front-end loader and transferring the coke to a hopper at the storage silo. In addition, petroleum coke may be delivered by truck from other suppliers. Coke from suppliers not requiring screening and sizing is unloaded from the trucks pneumatically via a truck fill line, particulate emissions from this activity are controlled by baghouses at the two coke silos.

Coke from suppliers requiring additional crushing or screening is delivered in bottom dump trucks. These trucks use the same unloading facility used by the limestone delivery trucks. Coke is resized using the limestone crushing equipment before it is pneumatically conveyed from the crusher to the pneumatic header.



Emissions from the truck unloading and crushing are controlled by the baghouse system. All baghouses at the site are either a fabric or cartridge type filter unit.

Bottom ash is collected at the boiler and conveyed to a storage silo equipped with a baghouse. Baghouse solids are also transferred to this silo. The ash and solids are transported via covered trucks to the limestone quarry for disposal.

## B. Emission Units and Pollution Control Device Identification

The following table lists the significant emission units located at the YELP facility.

Emissions Unit ID	Description	Pollution Control Device/Practice
EU01	Circulating Fluidized Bed Combustion (CFBC) Boilers (2)	Particulate emissions are controlled by baghouse; sulfur is controlled by injection of limestone into the boiler; NO <sub>2</sub> , VOC and CO emissions are controlled by lower operating temperature and a recirculation of fuel and ash particles through the combustion boiler; and Mercury (Hg) is controlled by a CaBr <sub>2</sub> injection system.
EU02	Limestone Unloading, Handling, and Crushing	The unloading of limestone to the hopper takes place in an enclosed area and the limestone is transferred via an enclosed conveyor, controlling fugitive emission. The crushing activity is enclosed, and the air is exhausted through a baghouse.
EU03	Limestone Storage	Particulate emissions from the filling of the limestone storage silo are controlled by a baghouse.
EU04	Coke Storage and Handling at Exxon	Particulate emissions from the use of the coke storage silo at Exxon are controlled by a baghouse.
EU05	Coke Loading to Stockpile	None
EU06	Loading Coke from Stockpile to Hopper	None
EU07	Coke Storage and Handling	From the hopper, the coke is pneumatically fed to a surge bin, which is also fed from the fluid coker process at Exxon. The surge bin contains a bag filter for exhausted displacement air.
EU08	Coke Unloading/Crushing/Processing Facility	This building houses a crusher system, which includes a scalper (screen), a crusher, and a belt delivery system to existing coke silos. The particulate emissions are controlled by a baghouse.
EU09	Coke Barn	This building stores coke and is enclosed.
EU10	Ash Handling and Storage	Ash generated by the boilers is removed from the boiler as bottom ash and from

		the baghouse as fly ash by a pneumatic system and conveyed to a temporary storage silo. A bag filter on the silo controls particulate emissions.
EU11	Ash Unload to Trucks	Baghouse
EU12	Fugitive Emissions: Paved Roads	None
EU14	Gasoline Storage and Dispensing	Submerged fill
EU15	560 hp Backup Diesel Engine	Good Work Practices/Routine Maintenance

### C. Categorically Insignificant Sources/Activities

The following table lists the insignificant emission units located at the YELP facility.

Emissions Unit ID	Description
IEU01	Fuel Usage: Diesel Fuel
IEU02	Emergency Generators
IEU03	Repair and Maintenance Activities
IEU04	Welding
IEU06	Space Heating
IEU07	Wind Erosion of Stockpile
IEU08	Exterior Limestone Storage Pile ( $\leq 2,000$ Tons)
IEU09	Coke Load-Out Silo
IEU10	#2 Coke Belt Dust Collector
IEU11	17,000 Ton Coke Storage Pile

## **PERMIT CONDITIONS**

### **A. Emission Limits and Standards**

There are no emission limits or standards identified in this permit that were not previously applicable to the facility either by rule, permit or by the Board of Environmental Review (BER) Order signed on June 12, 1998. The rule citations for all emission limits are included in the operating permit.

#### **Opacity**

This permit requires that a Continuous Emissions Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) be installed on the main stack for the two CFBC boilers. For the remainder of sources included in the operating permit a Method 9 or visual survey are required as requested by DEQ. The remaining sources include baghouses and fugitive sources. It was determined that these sources are not likely to violate the opacity limits and thus a Method 9 test would not provide any environmental benefit.

#### **Particulate Matter**

This permit requires annual Method 5 tests for the main stack. Method 5 tests are required every 4 years for the baghouses with 0.01 gr/dscf emission limits. For the remaining fugitive sources, Method 9 testing or visual surveys would be performed as requested by DEQ.

#### **SO<sub>2</sub> Emission Limits**

YELP has established emission limits for the Main stack where the CFBC boiler emissions are vented. These limits are the result of the permit, Stipulation, and 40 CFR 60, Subpart Da. YELP is required to operate a SO<sub>2</sub> CEMS and perform annual testing (Method 6/6C) to demonstrate compliance with the emission limits.

#### **NO<sub>x</sub> Emission Limits**

YELP has established emission limits for the Main stack where the CFBC boiler emissions are vented. These limits are the result of the permit and 40 CFR 60, Subpart Da. YELP is required to operate a NO<sub>x</sub> CEMS and perform annual testing (Method 7/7E) to demonstrate compliance with the emission limits.

#### **CO Emission Limits**

YELP has established emission limits for the Main stack where the CFBC boiler emissions are vented. These limits are the result of the permit and the 40 CFR 60, Subpart Da. YELP is required to operate a CO CEMS and perform annual testing (Method 3/3B) to demonstrate compliance with the emission limits.

## 40 CFR 63, Subpart UUUUU – Mercury & Air Toxic Standards

The circulating fluidized bed combustion (CFBC) boiler at YELP is subject to 40 CFR Part 63, Subpart UUUUU – *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units*, also referred to as the Mercury & Air Toxics Standard (MATS), and the applicable requirements of the 2019 Consent Decree.

### 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 do not require the permit to impose the same level of rigor for all emission units. Furthermore, it does not require extensive testing or monitoring to assure compliance with the applicable requirements for emission 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 emission 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.

### D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least 5 years following the date of the generation of the record.

### E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit and Section V of the operating permit "General Conditions" explains the reporting requirements. However, the permittee is required to submit semiannual and annual monitoring reports to DEQ and to annually certify compliance with the applicable requirements contained in the permit. The

reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

#### **F. Public Notice**

In accordance with ARM 17.8.1232, a public notice was published in the *Billings Gazette* newspaper on or before April 6, 2025. DEQ provided a 30-day public comment period on the draft operating permit from April 7, 2025, to May 7, 2025. ARM 17.8.1232 requires DEQ to keep a record of both comments and issues raised during the public participation process. Any comment(s) received during the public comment period will be promptly forwarded to YELP so they have an opportunity to respond to these comments as well.

## NON-APPLICABLE REQUIREMENT ANALYSIS

Pursuant to ARM 17.8.1221, YELP requested a permit shield for all non-applicable regulatory requirements and regulatory orders identified in the tables in Section 8 of the permit application. In addition, the YELP permit application identified a permit shield request for applicable requirements for both the facility and for certain emission units. DEQ has determined that the requirements identified in the permit application for the individual emissions units are non-applicable. These requirements are contained in the permit in Section IV- Non-applicable Requirements.

The following table outlines those requirements that YELP had identified as non-applicable in the permit application but are not included in the operating permit as non-applicable. The table includes both the applicable requirement and reason that DEQ did not identify this requirement as non-applicable.

Applicable Requirement		Reason
<b>Subchapter 3 Emission Standards</b>		
ARM 17.8.301 Definitions ARM 17.8.302 Incorporation by Reference		These rules consist of either a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.325 Motor Vehicles ARM 17.8.326 Prohibited Materials for Wood or Coal Residential Stoves		These regulations may not be applicable to the source at this time; however, they may become applicable during the life of the permit.
ARM 17.8.330 Definitions		This rule consists of either a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
<b>Subchapter 4 Stack Heights</b>		
ARM 17.8.401 Definitions		This rule consists of either a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.402 Requirements 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.
<b>Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees</b>		

Applicable Requirement		Reason
ARM 17.8.501	Definitions	This rule consists of either a statement of purpose, applicability statement, regulatory definition 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 does not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, this rule can be used as authority to impose specific requirements on a major source.
ARM 17.8.511 ARM 17.8.514 ARM 17.8.515	Air Quality Permit Application/Operation Fee Assessment Appeal Procedures Air Quality Open Burning Fees 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.
<b>Subchapter 6 Open Burning</b>		
ARM 17.8.601 ARM 17.8.602	Definitions Incorporation by Reference	These rules consist of either a statement of purpose, applicability statement, regulatory definition or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.
ARM 17.8.611 ARM 17.8.612 ARM 17.8.613 ARM 17.8.614 ARM 17.8.615	Emergency Open Burning Permits Conditional Air Quality Open Burning Permits Christmas Tree Waste Open Burning Permits Commercial Film Production Open Burning Permits Firefighter Training	The following regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
<b>Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources</b>		
ARM 17.8.740 <i>et seq.</i>	Permit, construction and operation of air contaminant sources	The following regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
<b>Subchapter 8 Prevention of Significant Deterioration</b>		
ARM 17.8.801	Definitions	These rules consist of either a statement of

Applicable Requirement		Reason
ARM 17.8.802	Incorporation by Reference	purpose, applicability statement, regulatory definition 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	The following regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit
ARM 17.8.805	Ambient Air Ceilings	
ARM 17.8.806	Restrictions on Area Classifications	
ARM 17.8.807	Exclusions from Increment Consumption	
ARM 17.8.808	Redesignation	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.
ARM 17.8.825	Sources Impacting Federal Class I Areas Additional Requirements	
ARM 17.8.826	Public Participation	
ARM 17.8.828	Innovative Control Technology	This regulation is a state regulation, which may not be applicable to the source at this time; however, this regulation may become applicable during the life of the permit.
Subchapter 9 Permit Requirements for Major Stationary Sources or Major Modifications Located Within Nonattainment Areas		
ARM 17.8.901	Definitions	These rules consist of 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 17.8.902	Incorporation by Reference	
ARM 17.8.904	When Air Quality Preconstruction Permit Required	
ARM 17.8.905	Additional Conditions of Air Quality Preconstruction Permit	These regulations are state regulations, which may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
ARM 17.8.906	Baseline for Determining Credit for Emissions and Air Quality Offsets	
Subchapter 10 Montana Air Quality Permit Requirements for Major Stationary Sources or Major Modifications Located Within Attainment or Unclassified Areas		
ARM 17.8.1001	Definitions	These rules consist of 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 17.8.1002	Incorporation by Reference	
ARM 17.8.1004	When Air Quality Preconstruction Permit Required	
ARM 17.8.1005	Additional Conditions of Air Quality Preconstruction Permit	These regulations may not be applicable to the source at this time; however, these regulations may become applicable during
ARM 17.8.1006	Review of Specified Sources for	



<b>Applicable Requirement</b>		<b>Reason</b>
ARM 17.8.1007	Air Quality Impact Baseline for Determining Credit for Emissions and Air Quality Offsets	the life of the permit.
<b>Subchapter 11 Visibility Impact Assessment</b>		
ARM 17.8.1101 ARM 17.8.1102 ARM 17.8.1103	Definitions Incorporation by Reference Applicability --Visibility Requirements	These rules consist of 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 ARM 17.8.1109	Notification of Permit Application Adverse Impact and Federal Land Management	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.
<b>Subchapter 12 Operating Permit Program</b>		
ARM 17.8.1201 ARM 17.8.1202 ARM 17.8.1203 ARM 17.8.1234	Definitions Incorporation by Reference Air Quality Operating Program Overview Acid Rain – Permits Regulation	These rules consist of 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 17.8.1210	General Requirements for Air Quality Permit Content	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.
ARM 17.8.1211	Requirements for Air Quality Operating Permit Content Relating to Emission Limitations and Standards, and other Requirements Monitoring	
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 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 Quality 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	
ARM 17.8.1232	Public Participation	

Applicable Requirement		Reason
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.
ARM 17.8.1226	Additional Requirements for Minor Air Quality Operating Permit Modifications	
ARM 17.8.1227	Additional Requirements for Significant Air Quality Operating Permit Modifications	
Federal Requirements		
40 CFR 51	Requirements for Preparation, Adoption, and Submittal of Implementation Plans	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source
40 CFR 54	Prior Notice of Citizen Suits	
40 CFR 56	Regional Consistency	
40 CFR 52	Approval and Promulgation of Implementation Plans	These rules contain requirements for regulatory authorities and not major sources; these rules can be used to impose specific requirements on a major source.
40 CFR 62	Approval and Promulgation of State Plans for Designated Facilities and Pollutants	
40 CFR 70 and 71	State Operating Permit Programs and EPA Regulations on Federal Operating Permit Programs	
40 CFR 81	Designation of Areas for Air Quality Planning Purposes	
40 CFR 60.11	Compliance with Standards and Maintenance Requirements	These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.
40 CFR 60.14	Modification	
40 CFR 60.15	Reconstruction	

## **FUTURE PERMIT CONSIDERATIONS**

### **A. MACT Standards**

As of the issuance of this action, DEQ is not aware of any future MACT standards to be promulgated that may affect the facility.

### **B. NESHAP Standards**

As of the date of the operating permit, DEQ is unaware of any future requirement that may be promulgated during the permit term for which this facility must comply, other than Subpart M for Asbestos.

### **C. NSPS Standards**

As of the issuance of this action, DEQ is not aware of any future NSPS to be promulgated that may affect the facility, outside of those already stated in the permit.

### **D. Risk Management Plan**

As of the date of the draft permit, 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 was not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on that a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

### **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 (other than emission limits or standards proposed after November 15, 1990, since these regulations contain specific monitoring requirements,
- 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.

YELP meets the above criteria for PM<sub>10</sub> and SO<sub>2</sub>. The CAM Plan are located within Appendix F and G, respectively, of Operating Permit #OP2650-03.

### **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 (CO<sub>2</sub>e) 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 GHG may still be required to comply with BACT for GHG emissions.