MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

Air, Energy & Mining Division
Air Quality Bureau
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Montana Silversmiths, Inc.
Section 28, Township 2 South, Range 20 East, Stillwater County
1 Sterling Lane
Columbus, MT 59019

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	
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Semiannual Compliance Certification and Semiannual Reporting Required	X		As applicable
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 Air Quality Permitting		X	
New Source Performance Standards (NSPS)		X	
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart T
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-Attainment Area (NAA) NSR		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

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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 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 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 on information provided in the original application submitted by Montana Silversmiths, Inc. (Montana Silversmiths) on February 4, 2005; administrative amendment requests received September 12, 2010, and February 3, 2011; the Title V renewal application received September 4, 2012, the administrative amendment request received August 15, 2014, and July 15, 2015; the Title V renewal application received October 28, 2019, and the supporting requested potential to emit documentation submitted March 4, 2020.

B. Facility Location:

The Montana Silversmiths facility is located in Section 28, Township 2 South, Range 20 East, Stillwater County. The physical address is 1 Sterling Lane, Columbus, Montana.

C. Facility Background Information:

On February 4, 2005, the Montana Silversmiths submitted the original Title V Permit Application. **Operating Permit #OP3395-00** was issued effective April 15, 2008. Montana Silversmiths was not required to obtain a Montana Air Quality Permit because the facility does not emit 25 tons per year of any regulated pollutant. However, Montana Silversmiths is subject to the Title V Operating Permit program because it is a major source of Hazardous Air Pollutants (HAPs).

On September 12, 2010, and February 3, 2011, the Department received two administrative amendment requests for Montana Silversmiths. Due to both administrative amendment requests being changes to the Responsible Official, only the request received February 3, 2011, incremented the permit. **Operating Permit #OP3395-01** replaced Operating Permit #OP3395-00.

On September 10, 2012, the Department received a Title V renewal application from Montana Silversmiths. No changes in emitting units or production processes have occurred since the previous permit issuance. **Operating Permit #OP3395-02** replaced Operating Permit #OP3395-01.

On August 14, 2014, the Department received a letter from Montana Silversmiths requesting a Responsible Official change in which Mr. Dave Stimmel replaced Mr. Kevin Johnson. **Operating Permit #OP3395-03** replaced Operating Permit #OP3395-02.

On July 15, 2015, the Department received a letter from Montana Silversmiths requesting a Responsible Official change in which Mr. Matt Weinmann replaces Mr. Dave Stimell. **Operating Permit #OP3395-04** replaces Operating Permit #OP3395-03.

D. Current Permit Action

On October 29, 2019, the Department received an air quality permit application for renewal of Operating Permit #OP3395-04. On January 22, 2020, the Department requested additional information including a demonstration of the facility's potential to emit methylene chloride. On March 4, 2020, Montana Silversmiths provided the requested information demonstrating the facility's potential to emit methylene chloride is 18.58 tons per year. **Operating Permit #OP3395-05** replaces Operating Permit #OP3395-04.

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, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, MCA, the Department 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)
	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, the Department determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation:

On January 5, 2017 Department completed a full compliance evaluation of Montana Silversmiths for the time period from December 4, 2014, through January 5, 2017. Montana Silversmiths appeared to be in compliance with all applicable requirements during that time period.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description:

The facility includes a process building where tanks of methylene chloride are used in the manufacturing process. HAPs emissions result from the product manufacturing process. Methylene chloride is a listed HAP in the Federal Clean Air Act.

B. Emission Units and Pollution Control Device Identification:

The emission units regulated by this permit are the exhaust fans. Currently, Montana Silversmiths is not required to install or operate any air pollution control equipment.

C. Categorically Insignificant Sources/Activities:

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by an applicable requirement other than a generally applicable requirement.

Montana Silversmiths did not provide a list of insignificant sources and/or activities. Therefore, this permit identifies no insignificant activities. Because there are no requirements to update such a list, the status of such emission units and/or activities may change.

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards:

Montana Silversmiths is required to comply with the requirements of 40 Code of Federal Regulations (CFR) 63, Subpart T.

Per §63.465(e), an owner or operator of a source shall determine their potential to emit from all solvent cleaning operations using the procedures described in this section. A facility's total potential to emit is the sum of all solvent cleaning operations, plus all Hazardous Air Pollutant emissions from other sources within the facility. The potential to emit from an individual solvent cleaning machine is found using Equation 4.

$$PTE_i = H_i \times W_i \times SAI_i \quad \text{Eqn (4)}$$

Where:

PTE_i = the potential to emit for the solvent cleaning machine i (kg/year)

H_i = hours of operation for solvent machine i (hours/year)

=8760 hours, unless otherwise restricted by Federally enforceable requirement

W_i = the working mode uncontrolled emission rate (kg/m^2 × hour)

= 1.95 kg/m^2 × hour for batch cold cleaning machines

SAI_i = the solvent/air interface area of machine I (square meters)

= 0.987 square meters for Montana Silversmiths' machine

The potential to emit calculation is performed below:

$$PTE_i = 8760(hrs/year) \times 1.95(kg/m^2 \times hr) \times 0.987(m^2) = 16{,}859.9(kg)$$

As shown, the total calculated potential to emit for Montana Silversmiths is 16,589.9 kilograms per year. This converts to 18.58 US tons which exceeds the 10 ton per year threshold for a major source of HAPs.

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, record keeping, 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, 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 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 record keeping for each applicable requirement. The information obtained from the monitoring and record keeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department 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 the Department 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. Record keeping 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 monitoring reports to the Department and to semiannually 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 June 11, 2020. The Department provided a 30-day public comment period on the draft operating permit from June 11, 2020 to July 13, 2020. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. No comments were received during this public comment period.

G. Draft Permit Comments

No comments on the Draft Operating Permit #OP3395-05 were received by EPA or the Montana Silversmiths.

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Montana Silversmiths did not request a shield from any of the air quality Administrative Rules of Montana (ARM) or federal regulations (pursuant to ARM 17.8.1214). Therefore, no further analysis of non-applicable requirements is necessary.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards:

As of the date of issuance of this permit, the Department is unaware of any currently applicable or future MACT Standards, other than 40 CFR 63, Subpart T, that may be promulgated that will affect this facility.

B. NESHAP Standards:

As of the date of issuance of this permit, the Department is unaware of any currently applicable or future NESHAPS Standards, other than 40 CFR 63, Subpart T, that may be promulgated that will affect this facility.

C. NSPS Standards:

As of the date of issuance of this permit, the Department is unaware of any currently applicable or future NSPS Standards that may be promulgated that will affect this facility.

D. Risk Management Plan:

As of the date of issuance of this 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 is 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 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which 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 (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 emission of the applicable regulated air pollutant that is greater than major source thresholds.

This facility does not have any emitting units that meet these criteria; therefore, CAM is not applicable.

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_2e) 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_2e 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_2e 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_2e 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_2e 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.