

### PRELIMINARY DETERMINATION ON PERMIT APPLICATION MAQP #2833-08

Date of Posting: April 4, 2025

Name of Applicant: Transco Railway Products Inc.

Source: Miles City Facility

Location: SW1/4 of Section 27, Township 8 North, Range 47 East, Custer County, Montana

<u>Proposed Action</u>: DEQ proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit (MAQP) Application Number 2833-08.

Proposed Conditions: See attached Preliminary Determination of MAQP #2833-08.

<u>Public Comment</u>: Any member of the public desiring to comment must submit comments to <u>DEQAir@mt.gov</u> or to the address below. Comments may address DEQ's analysis and Preliminary Determination, Draft Environmental Assessment, or the information submitted in the application. All comments are due by April 21, 2025. Copies of the application and DEQ's analysis may be requested at <u>https://deq.mt.gov</u> (at the bottom of the home page, select *Request Public Records*). For more information, you may contact DEQ at (406) 444-3490, or DEQAir@mt.gov.

<u>Departmental Action</u>: DEQ intends to make a Decision on the application following the Public Comment period. A copy of the Decision will be available on DEQ's website, <u>https://deq.mt.gov/public/publicnotice</u> (select *AIR*). The permit shall become final on the date stated in the Decision, unless the Board of Environmental Review (Board) orders a stay on the permit.

<u>Procedures for Appeal</u>: Any person who is directly and adversely affected by DEQ's Decision may request a hearing before the Board. The appeal must be filed by the date that will be stated in the Decision. The request for a hearing must contain an affidavit setting forth the grounds for the request. The hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620, or the Board Secretary: <u>DEQBERSecretary@mt.gov</u>.

For DEQ,

Eric Merchant Permitting Services Section Supervisor Air Quality Bureau (406) 444-3626

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Emily Hultin Air Quality Engineering Scientist Air Quality Bureau (406) 444-2049

### MONTANA AIR QUALITY PERMIT

Issued To: Transco Railway Products Inc. Miles City Facility 901 N. Lake Avenue P.O. Box 1222 Miles City, MT 59301 MAQP: #2833-08 Application Complete: 03/14/2025 Preliminary Determination Issued: 04/04/2025 Department's Decision Issued: Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Transco Railway Products Inc. (Transco), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Transco's railcar maintenance facility is located in the SW<sup>1</sup>/<sub>4</sub> of Section 27, Township 8 North, Range 47 East, Custer County, Montana.

B. Current Permit Action

On January 23, 2025, Transco submitted a request for the proposed modification to its existing MAQP. Transco has proposed the replacement of the previously permitted grit blasting units with interior blasting units using SpongeJet and shot/grit, renaming Grit Blasting Unit #2 as Grit Blasting Area, and renaming the 4-Bay Railcar Painting Area as Railcar Lining area. This permitting action modifies the MAQP with the proposed changes and updates the emissions inventory, rule references, and permit format. References to the Department have been changed to DEQ.

SECTION II: Conditions and Limitations

- A. Emission Limitations
  - 1. Transco shall install, operate, and maintain exhaust filter chambers to control particulate emissions from JBI paint booth #1, JBI paint booth #2, and the railcar lining area (ARM 17.8.752).
  - 2. Transco shall install, operate, and maintain an enclosure and a baghouse to control particulate emissions from the grit blasting unit and the two interior blasting areas (ARM 17.8.752).
  - 3. Transco shall use a high-volume, low-pressure (HVLP), an airless, an air assisted airless, or a plural component spray gun when spray painting in JBI paint booth #1 and JBI paint booth #2 (ARM 17.8.749).

- 4. The volatile organic compound (VOC) concentration in any spray coating/paint/thinner mixture (excluding thinner used for the purpose of cleanup of spray coating equipment) shall not exceed a daily weighted average of 4.0 pounds per gallon (lb/gallon) (ARM 17.8.749 and ARM 17.8.1204).
- 5. All cleansers and solvents sprayed for the purpose of cleanup of equipment shall be directed into a covered container and sealed (ARM 17.8.749 and ARM 17.8.1204).
- 6. Transco shall limit the hours of operation and/or facility production such that the emission of VOCs will not exceed 80 TPY (ARM 17.8.749 and ARM 17.8.1204).
- 7. Transco shall limit the hours of operation and/or facility production such that the emission of any individual hazardous air pollutant (HAP) is less than 10 tons during any rolling 12-month time period, and the combined emissions of HAPs are less than 25 tons during any rolling 12-month time period. Any calculations used to establish HAP emissions shall be approved by DEQ (ARM 17.8.749 and ARM 17.8.1204).
- 8. Transco shall not cause or authorize to be discharged into the atmosphere any visible fugitive emissions, from the railcar blasting, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308).
- 9. Transco shall not cause or authorize to be discharged into the atmosphere from any source installed after November 23, 1968, emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 10. Transco shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (PM) (ARM 17.8.308).
- 11. Transco shall treat all unpaved portions of the streets, roads, or parking lots with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.10 (ARM 17.8.752).
- B. Testing Requirements
  - 1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
  - 2. DEQ may require testing (ARM 17.8.105).
- C. Operational and Emission Inventory Reporting Requirements
  - 1. Transco shall supply DEQ with annual production information for all emission points, as required by DEQ in the annual Emission Inventory request. The request will include, but is not limited to, all sources of emissions identified in the Emission Inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to DEQ by the date required in the emission inventory request. Information shall be in

the units required by DEQ. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 2. Transco shall notify DEQ of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include the addition of a new emissions unit, a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to DEQ, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 3. Transco shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Transco as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by DEQ, and must be submitted to DEQ upon request (ARM 17.8.749).
- 4. Transco shall document, by month, the total gallons of coating, paint, and thinner used in spray-painting operations, the VOC content of each coating as applied in lbs/gal, the number of gallons of each coating employed, the total VOC emissions rate for each coating in tons per month, and the annual year-to-date VOC emissions in tons from all coating materials employed (ARM 17.8.749).
- 5. Transco shall document, by month, the total gallons of cleanup material employed, the VOC content of each cleanup material in lbs/gal, the number of gallons of each cleanup material employed, the total VOC emissions rate for all cleanup materials in tons per month, and the annual year to date VOC emissions in tons from all cleanup materials employed (ARM 17.8.749).
- 6. By the 25<sup>th</sup> day of each month, Transco shall total the VOC emissions during the previous 12 months to verify compliance with the limitation in Section II.A.6. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
- 7. Transco shall document, by month, the total emission of any individual HAP. By the 25<sup>th</sup> day of each month, Transco shall total the emissions of any individual HAP and the combined emission of HAPs during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
- 8. All records compiled in accordance with this permit shall be maintained by Transco as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by DEQ, and must be submitted to DEQ upon request (ARM 17.8.749).

9. Transco shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information (ARM 17.8.749 and ARM 17.8.1204).

### SECTION III: General Conditions

- A. Inspection Transco shall allow DEQ's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Transco fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Transco of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by DEQ's decision may request, within 15 days after DEQ renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay DEQ's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of DEQ's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, DEQ's decision on the application is final 16 days after DEQ's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by DEQ personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Transco may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

### Montana Air Quality Permit (MAQP) Analysis Transco Railway Products Inc. MAQP #2833-08

### I. Introduction/Process Description

### A. Permitted Equipment

Transco Railway Products Inc. (Transco) owns and operates the following equipment:

- 2 JBI Paint Booths (Booth #1 and #2)
- 1 Railcar Lining Area
- 1 Curing Oven (Pre-Bake for Booth #1)
- 2 Curing Ovens for Lining Area
- 2 Interior Blasting Units (SpongeJet and Shot/Grit)
- 1 Grit Blasting Area (Booth #2)
- B. Source Description

Transco is a railcar maintenance facility located in the SW<sup>1</sup>/<sub>4</sub> of Section 27, Township 8 North, Range 47 East, in Custer County, Montana.

C. Permit History

On September 22, 1995, **MAQP #2833-00** was issued to Transco Rail Services to operate a railcar maintenance facility.

On April 17, 1997, MAQP #2833-01 was issued to Trinity Industries, Inc. (Trinity). The modification was due to a transfer of ownership from Transco Rail Services to Trinity. **MAQP #2833-01** replaced MAQP #2833-00.

On August 31, 1999, the Department of Environmental Quality (DEQ) received information from Trinity about the replacement of the existing spray painting booth and sandblasting operation at the facility. The permit was updated to allow Trinity to install JBI paint booth #1 and sandblasting unit #1. The permitted changes were accomplished in accordance with Administrative Rules of Montana (ARM) 17.8.145 (previously ARM 17.8.705(1)(r)). **MAQP #2833-02** replaced MAQP #2833-01.

On November 3, 2000, DEQ received a complete Permit Application to alter MAQP #2833-02. The alteration involved the addition of a JBI paint booth, a gritblasting operation, and a sandblasting unit to the previously permitted sources at the facility. **MAQP #2833-03** replaced MAQP #2833-02.

On October 3, 2003, DEQ received a request from Trinity to amend MAQP #2833-03. The permit change involved adding limitation and recordkeeping requirements to the permit to keep Trinity's emissions below 10 tons/year (TPY) of any one Hazardous Air Pollutant (HAP) and 25 TPY of combined HAPs. The limitation made the Trinity facility a synthetic minor source for Title V purposes. MAQP **#2833-04** replaced MAQP **#2833-03**.

On August 12, 2004, DEQ received a letter from Transco requesting DEQ change the corporate name on MAQP #2833-04 from Trinity to Transco. The permitting action changed the corporate name and updated the permit to reflect current permit language and rule references used by DEQ on MAQP #2833-04. **MAQP #2833-04**. MAQP #2833-04.

On January 4, 2012, DEQ received an application to amend MAQP #2833-05, to incorporate limits which maintain potential emissions below 80 tons per year (TPY). The request was made as part of a project created by DEQ to address those sources with existing federally enforceable permit limits that were established to keep potential emissions below major source permitting thresholds. The project encouraged these sources to further reduce emissions to avoid additional monitoring and increased inspections required under the Compliance Monitoring Strategy (CMS) in connection with the U. S. Environmental Protection Agency (EPA). The permitting action amended MAQP #2833-05 to incorporate limits and conditions to maintain potential emissions below 80 TPY. In addition, Transco confirmed that it no longer has an industrial boiler on site; therefore, the condition restricting use of the boiler (II.A.4.) was omitted from the permit. The permit action updated rule references, permit format, and the emissions inventory. **MAQP #2833-06** replaced MAQP #2833-05.

On October 28, 2021, Transco submitted a de minimis notification and associated request to update MAQP #2833-06 via administrative amendment. Transco proposed the addition of two new grit blasting units that can blast tank car interiors, a new 4-bay interior railcar painting area with two curing ovens, and the addition of a curing oven to the JBI #1 Paint Booth. The two grit blasting units would replace the two sandblasting units.

While the requested update maintained existing annual emission limits on volatile organic compounds (VOC) and hazardous air pollutants (HAP), the two new grit blasting units relied on the pollution control efficiency of baghouses in the maximum potential particulate matter emission increase calculations. Upon review, DEQ determined that the new federally enforceable conditions proposed with the change cannot be established without the opportunity for public review; therefore, the proposal would require the submission of a complete MAQP modification application.

Transco provided additional materials, which fulfilled the application completeness requirements. The application materials also identified an error in the emissions inventory calculations for the grit blasting unit. The calculations utilize an emission factor from EPA's AP-42, Chapter 13.2.6, Table 13.2.6-1, for abrasive blasting of metal parts controlled with a fabric filter. DEQ had applied an additional control efficiency to this emission factor in a previous permitting action, when the control efficiency was already built into the value. This permitting action modifies the MAQP with the proposed changes and updates the emissions inventory, rule references, and permit format to current DEQ practices. **MAQP #2833-07** replaced MAQP #2833-06.

### D. Current Permit Action

On January 23, 2025, Transco submitted a request for the proposed modification to its existing MAQP. Transco proposed the replacement of the previously permitted grit

blasting units with interior blasting units using SpongeJet and shot/grit, renaming Grit Blasting Unit #2 as Grit Blasting Area, and renaming the 4-Bay Railcar Painting Area as Railcar Lining area. This permitting action modifies the MAQP with the proposed changes and updates the emissions inventory, rule references, and permit format. References to the Department have been changed to DEQ. **MAQP #2833-08** replaces MAQP #2833-07.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from DEQ. Upon request, DEQ will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
  - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of DEQ, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by DEQ.
  - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by DEQ, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Transco shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from DEQ upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) DEQ must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air

contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to the following:
  - 1. ARM 17.8.204 Ambient Air Monitoring
  - 2. <u>ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide</u>
  - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
  - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
  - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
  - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
  - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
  - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
  - 10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Transco must maintain compliance with all applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  - <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Transco shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne PM.
  - 3. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
  - 4. <u>ARM 17.8.340 Standard of Performance for New Stationary Sources</u>. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of an affected source for any NSPS subpart defined in 40 CFR Part 60.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
  - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the

proper application fee is paid to DEQ. Transco provided the appropriate application fee.

2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to DEQ by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by DEQ.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. DEQ may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - <u>ARM 17.8.743 Montana Air Quality Permits -- When Required</u>. This rule requires a
    person to obtain an air quality permit or permit modification to construct, modify or
    use any air contaminant sources that have the Potential to Emit (PTE) greater than
    25 TPY of any pollutant. Transco has a PTE greater than 25 TPY of Volatile
    Organic Compounds (VOC); therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
  - 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
  - 5. <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements</u>. (1) This rule requires that a permit application be submitted prior to installation, modification or use of a source. Transco submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Transco submitted an affidavit of publication of public notice for the January 1, 2025, issue of the *Miles City Star*, a newspaper of general circulation in the Town of Miles City in Custer County, as proof of compliance with the public notice requirements.
  - 6. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit.</u> This rule requires that the permits issued by DEQ must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any

conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this Permit Analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by DEQ at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Transco of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes DEQ's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact Statement.
- 11. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to DEQ.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:

- 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
- 2. <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source</u> <u>Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not listed and does not have a PTE greater than 250 TPY of any air pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 TPY of any pollutant;
    - b. PTE > 10 TPY of any one HAP, PTE > 25 TPY of a combination of all HAPs, or lesser quantity as DEQ may establish by rule; or
    - c. PTE > 70 TPY of particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{10}$ ) in a serious  $PM_{10}$  nonattainment area.
  - <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2833-08 for Transco, the following conclusions were made:
    - a. The facility's PTE is less than 100 TPY for any pollutant.
    - b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY for all HAPs.
    - c. This source is not located in a serious  $PM_{10}$  nonattainment area.
    - d. This facility is not subject to any current NSPS.
    - e. This facility is not subject to any current NESHAP.
    - f. This source is not a Title IV affected source,
    - g. This source is not a solid waste combustion unit.
    - h. This source is not an EPA designated Title V source.

- i. As allowed by ARM 17.8.1204(3), DEQ may exempt a source from the requirement to obtain an Air Quality Operating Permit by establishing federally enforceable limitations that limit that source's PTE.
  - i. In applying for an exemption under this section the owner or operator of the source shall certify to DEQ that the source's PTE does not require the source to obtain an Air Quality Operating Permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an Air Quality Operating Permit.

Transco has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and thus a Title V Operating Permit is not required.

DEQ determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. <u>ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness</u>. Transco shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual Emission Inventory information.

Based on these facts, DEQ determined that Transco would be a synthetic minor source of emissions as defined under Title V.

### III. BACT Determination

A BACT determination is required for each new or modified source. Transco shall install on the new, or modified, source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized.

PM BACT – Interior Blasting Areas (SpongeJet and Shot/Grit Emitting Units)

### Step 1: Identify All Control Technologies

Particulate matter (PM) is a complex mixture of small particles and liquid droplets. PM can be made up of a variety of components, including acids, organic chemicals, metals, and soil or dust particles. The blast media used within the blasting areas will be discharged to the control device when the media becomes too small for reuse within the blasting system.

There are two different abrasive blasting materials used in the proposed project: steel shot/grit and SpongeJet. When using steel shot/grit, the interior blasting units are expected to produce PM, with 48.1% less than or equal to 10 micrometers in aerodynamic diameter ( $PM_{10}$ ), of which 4.81% is less than or equal to 2.5 micrometers in aerodynamic diameter ( $PM_{2.5}$ ).<sup>1</sup> When using SpongeJet, the interior blasting units are expected to produce PM, with 23% considered PM10 and  $PM_{2.5}$ .<sup>2</sup> Both emitting units will be operated at ambient temperature and humidity, with an expected exhaust airflow of 48,000 actual cubic feet per

PD: 04/04/2025

minute (acfm) when using steel shot/grit and 10,000 acfm when using SpongeJet. The blasting operations will not generate corrosive or sticky materials. Available technologies for the control of PM emissions from the proposed interior blasting units are presented in Table 1:

Technology	Control Efficiency	Other Considerations
Fabric Filters	99-99.9+% for all PM	Fabric filters are used where
(Baghouses/Cartridge		high-efficiency particle
Collectors)		collection is required and are
		capable of handling fine and
		large particles. The exhaust
		characteristics of the blast
		material are well within
		acceptable parameters for
		control by fabric filter.
Electrostatic Precipitators	90% to 99.9% for plate-wire	Dust characteristics are a
(ESP)	dry ESP for all PM	limiting factor for dry type
		ESPs. The blast material is
		electrically
		conductive and suitable for
		control by a dry type
		ESPs. A wet-type ESP was not
		considered,
		as the blast material is not
		sticky, moist, high resistivity,
		or flammable/explosive.
Wet Scrubbers	70-99% for a venturi	The blast material can be
	scrubber for all PM	controlled by a wet
		scrubber, although only a
		venturi scrubber
		would have a high enough
		level of control for
		consideration in this analysis.
		Wet scrubbers
		generate wastes in the form of
		a sludge which
		requires treatment and/or
		disposal.
Mechanical Separators (such as	PM at 70-90%	Cyclones/multiclones have a
Cyclones or Multiclones)	PM <sub>10</sub> at 30-90%	relatively low PM
	PM <sub>2.5</sub> at 0-40%	collection efficiency,
		particularly for PM less
	nex AP 42: Compilation of Air Emissions F	than 10 μm in size.

## Table 1. Summary of Available Particulate Matter Control Technologies<sup>3</sup>

1. U.S. Environmental Protection Agency. *AP-42: Compilation of Air Emissions Factors from Stationary Sources.* Table 13.2.6-1. Abrasive Blasting. October 1997.

<sup>2.</sup> Midwest Research Institute. Emission Characterization of Foam-Based Abrasive Blasting Media. Table 3-2. January 2006.

<sup>3.</sup> U.S. Environmental Protection Agency. *EPA Air Pollution Control Cost Manual*. Sixth Edition. Section 6. Particulate Matter Controls. January 2002. EPA/452/B-02-001.

### Fabric Filtration (Baghouses/Cartridge Collectors)

A fabric filter unit consists of one or more isolated compartments containing rows of filters in the form of round, flat, or shaped tubes, or pleated cartridges. Particle laden gas passes along the surface of the bags then radially through the fabric. Particles are retained on the upstream face of the bags, and the cleaned gas stream is vented to the atmosphere. The filter is operated cyclically, alternating between relatively long periods of filtering and short periods of cleaning. During cleaning, dust that has accumulated on the bags is removed from the filter surface and gravity deposited in a hopper for subsequent disposal.

Fabric filters are characterized by the type of cleaning cycle: mechanical-shaker, pulsejet, and reverse-air. Fabric filters collect particles with sizes ranging from submicron to several hundred microns in diameter at efficiencies generally in the range of 99 to 99.9+%. The filters are tested by independent laboratories to a certified discharge concentration of filterable particulate, (e.g. 0.01 grains per dry standard cubic foot). The layer of dust, or dust cake, collected on the filter is partially responsible for the high PM collection efficiency. The cake is a barrier with tortuous pores that trap particles as they travel through the cake deposited on the filter. Filters can accommodate gas temperatures up to about 500°F.

Fabric filters are used where high efficiency particle collection is required and can be used in most processes where dust is generated and can be collected and ducted to a central location. Limitations are imposed by gas characteristics (temperature and corrosivity) and particle characteristics (primarily stickiness) that affect the fabric or its operation and that cannot be economically accommodated. Important process variables include particle characteristics, gas characteristics, and fabric properties. The most important design parameter is the air- or gas-to-cloth ratio (the amount of gas in cubic feet (ft<sup>3</sup>) per minute (min) that penetrates one square foot (ft<sup>2</sup>) of fabric) and the usual operating parameter of interest is pressure drop across the filter system. The major operating feature of fabric filters that distinguishes them from other control technologies is the ability to renew the filtering surface periodically by cleaning.

Fabric filters provide high collection efficiency for both coarse  $(PM_{10})$  and fine  $(PM_{2.5})$  particulate matter and are relatively insensitive to fluctuations in gas stream conditions. Typical inlet concentrations to baghouses are 0.5 to 10 grains per cubic foot, but may vary between 0.05 to more than 100 gr per cubic foot. Operation is simple and fabric filters are useful for collecting particles with resistivities either too low or too high for collection with an electrostatic precipitator or ESP. Fabric filters have relatively high maintenance requirements, such as periodic bag replacement.

Cartridge filters are typically used for operations such as abrasive blasting, machining, welding, grinding, cement manufacturing, coal cleaning, asphalt manufacture, and grain milling. Typical inlet concentrations for cartridge filters are 0.5 to 10 grains per cubic foot. Moisture and corrosives content in the gas streams are major design considerations. Transco operates both cartridge and fabric filters for the control of  $PM/PM_{10}/PM_{2.5}$  from interior abrasive blasting operations at all other sites.

### Mechanical Separators (such as Cyclones or Multiclones)

Mechanical collectors use the inertia of the particles within the exhaust air for collection. The particulate-laden gas stream enters the control device and is forced to move in a cyclonic manner, which causes the particles to move toward the outside of the vortex. Large-diameter

particles fall into a hopper below the cyclonic tubes while the gas stream spins, exiting the device through a central outlet.

Cyclones are typically used to remove relatively large particles from gas streams. Conventional single cyclones are estimated to control PM at 70-90%,  $PM_{10}$  at 30-90% and  $PM_{2.5}$  at 0-40%. High efficiency single cyclones are designed to achieve higher control of smaller particles and multiclones may also achieve higher control of smaller particles. Collection efficiency generally increases with particle size and/or density, inlet duct velocity, cyclone body length, number of gas revolutions in the cyclone, ratio of cyclone body diameter to gas exit diameter, dust loading, and smoothness of the cyclone inner wall. Cyclone efficiency will decrease with increases in gas viscosity, body diameter, gas exit diameter, gas inlet duct area, and gas density.

Cyclones are often used for recovery and recycling of material or as pre-cleaners for more expensive final control devices such as fabric filters or ESPs.

The typical gas flow rates for a single cyclone are 1,060 to 25,400 standard cubic feet per minute (scfm). Flows that are higher can use multiple cyclones in parallel. Inlet gas temperatures are only limited by the material of construction of the cyclone. Cyclones perform more efficiently with higher pollutant loadings, typically ranging from 1.0 to 100 grains per standard cubic feet (scf). Cyclones are unable to handle sticky or tacky materials.

### Electrostatic Precipitators (ESP)

An ESP is a particle control device that uses electrical energy to apply an electrical charge to the particles within the flowing gas stream and attracting them to oppositely charged collector plates. The particles are given an electrical charge by passing the exhaust gases through a corona, an electric field generating electrons. Metal plates are given an opposite charge by electrodes maintained at high voltage in the center of the flow lane.

Once the particles are collected on the plates, they must be removed. This is usually accomplished by knocking collected PM from the plates, allowing the collected layer of particles to slide down via gravity into a hopper for disposal. Wet precipitators use water to remove collected PM from the plates. Dust characteristics are a limiting factor for dry-type ESPs. Sticky, moist, high resistivity, or flammable or explosive dusts and particles are not well-suited for dry type ESPs. Wet ESPs are used in situations for which dry ESPs are not suited, such as when the material to be collected is wet, sticky, flammable, explosive, or has a high resistivity. Since none of these conditions are present within the exhaust gas, wet ESPs are not further considered within this analysis.

ESP control efficiencies are very high and can range from 90% to 99.9% due to the strong electrical forces applied to small particles and can handle high temperatures, pressures, and gas flow rates. The PM composition is very important because it influences the conductivity within the dust layers on the collection plate. ESPs in general are not suited for use in processes which are highly variable because they are very sensitive to fluctuations in gas stream conditions (flow rates, temperatures, particulate and gas composition, and particulate loadings). They have high capital costs and require large installation space. Dry ESPs are not recommended for removing sticky or moist particles.

## Wet Scrubbers

A wet scrubber is an air pollution control device that removes PM from waste gas streams primarily through the impaction, diffusion, interception and/or absorption of the pollutant onto droplets of liquid. The liquid containing the pollutant is then collected for disposal.

There are numerous types of wet scrubbers that remove PM, although a venturi wet scrubber is the only type considered within this BACT analysis, to ensure high collection of PM<sub>2.5</sub>. Collection efficiencies for wet scrubbers vary with the particle size distribution of the waste gas stream. In general, collection efficiency decreases as the PM size decreases. Collection efficiencies also vary with scrubber type. Collection efficiencies range from 40-60% (or lower) for simple spray towers to 50-99% for venturi scrubbers. Wet scrubbers are smaller and more compact than baghouses or ESPs. They have lower capital costs and comparable operation and maintenance (O&M) costs. Wet scrubbers are particularly useful in the removal of PM with the following characteristics:

- Sticky and/or hygroscopic materials (materials that readily absorb water).
- Combustible, corrosive and explosive materials.
- Particles which are difficult to remove in their dry form.
- PM in the presence of soluble gases.
- PM in waste gas streams with high moisture content.

The primary disadvantage of wet scrubbers is that increased collection efficiency comes at the cost of increased pressure drop across the control system. Current wet scrubber designs accommodate air flow rates over 100,000 acfm and temperatures up to 750°F. Another disadvantage is that they generate waste in the form of a sludge, which requires treatment and/or disposal.

Table 2 below lists the BACT approved determinations for similar emitting units permitted between 2000 and the present. Information provided in Table 2 is based on information obtained from a review of the U.S. EPA RACT/BACT/LAER Clearinghouse (RBLC), and electronic versions of permits available at the websites of state permitting agencies. A search of the USEPA's RACT/BACT/LAER Clearinghouse database indicated similar sources using add-on control technologies for PM emissions from abrasive blasting operations. For the RBLC review, process code 99.001 (Abrasive Blasting) and results returned when searching for "abrasive blasting" were reviewed. Returned results were then narrowed to only the most relevant similar sources. Table 2 presents a summary of RBLC and available permit information for similar sources.

EPA RACT/BACT/LEAR Clearinghouse Data: Abrasive Blasting					
RBLC ID	Facility	Issued Date	Process	Limitations	Control Method (Efficiency)
CA-1093	Goodrich	1/30/2001	Abrasive	99.99%	Fabric Filter
	Aerospace		Blasting	Filtration	(Baghouse)
	Rohr, Inc.			Efficiency	(99.99% CE)
	(Division of				
	Goodrich				
	Aerospace)				
SC-0073	Spray	11/26/2001	Abrasive	0.0200	Cartridge Dust
	Forming		Blast	gr/dscf	_

## Table 2. RBLC and Available Permit Information for Similar Sources

	International		Unit		Collector (93% CE)
	Permit BACT determinations for Abrasive Blasting				
Permit Type	Facility	Issued Date	Process	Limitations	Control Method (Efficiency)
BAAQMD- Application #016186	United Spiral Pipe, LLC (Facility B8478)	April 2012	External/ Internal Abrasive Blast Cleaning	0.006 gr/dscf	Cyclone Collector/Baghous e (98% CE)
BAAQMD- Permit Application #21887	BAE Systems San Francisco Ship Repair, Inc. (Facility # A3288)	March 2011	Abrasive Blast Room	0.002 gr/dscf	Cartridge Dust Collector (99.7%)
MAQP- 2930- 07	Montana Air National Guard	11/14/2023	Grit Blasting Room and Glove Boxes	Grit Blasting Room: 0.79 ton/yr. Glove Boxes: 0.20 ton/yr	Cyclone Collector (99.7%) and HEPA Filter (99.7%) (90% CE combined)
ME DEP - Air Emissions License Amendment No. 2	Cianbro Fabrication and Coating Corporation (Cianbro)	2/8/2022	Blast Booth	Visible emissions shall not exceed 10% opacity on a 6-minute block average basis	Baghouse/Filter (99.999% for particles 0.5 microns and larger)

## Step 2: Eliminate Technically Infeasible Control Options

Table 3 presents the technical feasibility of the various PM control technology options for the two new blasting areas.

Table 5. Teenmean reasonity of the TW Control Teenhologies				
PM Control Technology	Discussion of Technical	Technical Feasibility?		
Option	Feasibility			
Fabric Filters	Fabric filters are technically	High		
(Baghouses/Cartridge	feasible for PM <sub>10</sub> and PM <sub>2.5</sub> .			
Collectors)	Baghouses and cartridge			
	collectors have a smaller			

Table 3. Technical Feasibility of the PM Control Technolog	ries
--	------

	footprint than ESPs. Fabric	
	filters are relatively	
	insensitive to fluctuations in	
	gas stream conditions.	
	Cartridge-type collectors	
	have a smaller footprint and	
	are less effective with lager	
	particle sizes than	
	baghouses. Typical inlet	
	concentrations to fabric	
	filters are 0.5 to 10 grains	
	per cubic foot.	
ESPs	Technically feasible, but	Moderate
	control efficiency decreases	
	for lower particle sizes.	
	Larger footprint than fabric	
	filters.	
Mechanical Separators	Relatively low PM <sub>10</sub> and	Low
(such as Cyclones or	$PM_{2.5}$ collection efficiency.	
Multiclones)	Smaller footprint than other	
	controls.	
Wet Scrubbers	Limited to lower waste gas	Low
	flow rates and temperatures	
	than ESPs or baghouses.	
	Wet scrubbers are smaller	
	and more compact than	
	baghouses or ESPs. The use	
	of a wet scrubber is not the	
	best control option for	
	controlling PM from	
	abrasive blasting using steel	
	shot, grit, or sponge jet	
	material due to the low	
	moisture content.	

## Step 3: Rank Remaining Control Technologies by Control Effectiveness

Table 4 presents a summary of effectiveness ranking of feasible control options (those ranked "high" or "moderate" in Table 3.

Table 4. Summary	of Effectiveness	Ranking of C	ontrol Options
2		0	

Control	PM% Control Reduction
Fabric Filters	99-99.9+%
(Baghouses/Cartridge	
Collectors)	
ESPs (Plate-Wire Dry ESP)	90 to 99.9%
Wet Scrubbers (Venturi)	70% to 99%
Mechanical Separators	40 to 90%

### Step 4: Evaluate Most Effective Controls and Document Results

Further evaluation, including economic, energy and environmental impacts, are analyzed for controlling PM emission from the proposed project. Annualized costs were determined in accordance with the EPA guidance (EPA's Office of Air Quality Planning and Standards Control Cost Manual), with other relevant information provided by Transco, Inc. personnel, and engineering judgement. Both blasting areas will be vented to control equipment. The estimated uncontrolled potential-to-emit from both blasting areas vented to control are estimated at 270.1 tpy for PM, 127.4 tpy for PM<sub>10</sub>, and 13.1 tpy for PM<sub>2.5</sub> (assuming 4.81% of the total PM is emitted as PM<sub>2.5</sub>). The following evaluates the cost effectiveness of control based on the estimated uncontrolled potential-to-emit for total PM (270.1 tpy) from both blasting units.

### Fabric Filters

Controlling PM with fabric filters (baghouses/cartridge collectors at 99.9+% control efficiency) is technically feasible and the expected control efficiency is better than other PM control technologies for abrasive blast materials, with a smaller footprint than an ESP. Fabric filters are the most practicable control technology for controlling PM emissions from the blasting areas, as indicated by their exclusive use in other Transco facilities and the RBLC permit review provided in Table 2 above. Cartridge collectors perform best with the fine, dry dust generated by abrasive blasting (i.e., PM<sub>2.5</sub>). Fabric filters are durable and better suited for capturing the PM distribution and heavy dust loads for the proposed project. If collected particles cannot be recycled or sold, collected particles must be landfilled or disposed of in some other manner. An analysis of fabric filter cost effectiveness is included below. The cost effectiveness of control, using the uncontrolled potential-to-emit total PM emissions estimate for both blasting areas routing to a fabric filter is estimated to be \$2,119 per ton of total PM reduced, which is economically feasible. The use of a fabric filter is the highest ranked technology and proposed as BACT under Step 5 below (BACT Selection).

BACT Cost Analysis Fabric Filter - Common Design Transco, Inc. Miles City, MT		CAPITAL COST FOR FABRIC FILTERS
	Data	
Operating Labor		
Operator hourly rates(\$/hr) Hour per shift(h/shft) Shifts per day(shft/day) Days per year(days/yr)	https://www.bls.gov/iag/tgs/iag482.htm#earnings	30.39 1 3 360
Maintenance		
Operator hourly rates(\$/hr) Hour per shift(h/shft) Shifts per day(shft/day) Days per year(days/yr)	https://www.bls.gov/iag/tgs/iag482.htm#earnings	. 30.39 1 3 360
Electricity		
Operates(h/yr)(360 days) Electric rate (kWh) Pressure Drop (assumed)		8640 0.0671 10.3

BACT Cost Analysis		
Fabric Filter - Common Design		CAPITAL COST FOR FABRIC FILTERS
Transco, Inc. Miles City, MT		
Cost Item		Factor
Direct Costs		
Purchased equipment costs		
Fabric filter (EC) + filters + auxiliary equipment	ent (Provided by Transco)	\$375,000
Instrumentation		\$37,500
Sales taxes		\$11,250
Freight		\$18,750
	Purchased Equipment Cost, PEC	\$442,500
Direct installation costs		
Foundations & supports		\$17,700
Handling & erection		\$221,250
Electrical		\$35,400
Piping		\$4,425
Insulation for ductwork		\$30,975
Painting		\$17,700
	Direct installation cost	\$327,450
Site preparation		\$0
Buildings		\$0
	Total Direct Cost, DC	\$1,097,400
Indirect Costs (installation)		
Engineering		\$44,250
Construction and field expense		\$88,500
Contractor fees		\$44,250
Start-up		\$4,425
Performance test		\$4,425
Contingencies		\$13,275
	Total Indirect Cost, IC	\$199,125
	Total Capital Investment = DC +IC	\$1,296,525
	Rounded to the nearest thousand	\$1,297,000

BACT Cost Analysis		
Fabric Filter - Common Design		CAPITAL COST FOR FABRIC FILTERS
Transco, Inc. Miles City, MT		
Cost Item	<u>Calculations</u>	Cost
Direct Annual Costs, DC		
Operating Labor		
Operator	h/yr x \$/hr	\$32,821
Supervisor	15% of operator	\$4,923
Operating Materials		
Maintenance Labor	h/shft x shft/day xdays/yr x \$/hr	\$32,821
Material	100% of maintenance labor	\$32,821
Replacement parts, bags		\$12,945.11
Utilities		
Electricity		\$54,041
Compressed air (dried and filtered)		\$12,960
Waste Disposal	at \$25/ton on-site for essentially 100% collection	
	Total DC (rounded)	\$368,476
Indirect Annual Costs, IC		
Overhead		\$62,032
Administrative charges	2% of Total Capital Investment	\$25,940
Property Tax	1% of Total Capital Investment	\$12,970.00
Insurance	1% of Total Capital Investment	\$12,970.00
Capital recovery	Assume filter replacement every 2 years	\$89,255
	Total IC (rounded)	\$203,167
	Total Annual Cost (TAC) = DC +IC (rounded)	\$571,643
Cost Effectiveness Calculation		

Cost Effectiveness Calculation	
	Total PM
Baseline Emissions (tpy)	270.1
Emissions Reduction (tpy)	269.8
Cost Effectiveness (TAC/Emission Reductions) (\$/ton reduced)	\$2,119

### Electrostatic Precipitators (ESP)

Controlling PM with an ESP (90 to 99.9% control efficiency) is technically feasible, but the expected control efficiency is not as high as fabric filter technologies, particularly for the control of  $PM_{2.5}$  and the ESP technology has a larger footprint than fabric filter control technologies. An analysis of ESP cost effectiveness is included below. The cost effectiveness of control using the uncontrolled potential-to-emit for total PM emissions estimate for both blasting areas routing to a plate-wire dry ESP is estimated to be \$4,368 per ton of total PM reduced, which is economically feasible, but not as cost-effective as a baghouse/fabric filter control.

#### **BACT Cost Analysis**

Electrostatic Precipitators (Plate-Wire Dry ESP) Transco, Inc. Miles City, MT		CAPITAL COST FOR ESP
	Data	
Operating Labor		
Operator hourly rates (\$/hr) Hour per day (hr/day) Days per year (days/yr) Hours per year (hrs/yr)	https://www.bls.gov/iag/tgs/iag482.htm#earnings	30.39 3 360 8640
Maintenance		
Operator hourly rates(\$/hr) Hours per week (hrs/week) Weeks per year (weeks/yr)	https://www.bls.gov/iag/tgs/iag482.htm#earnings	30.39 15 44
Electricity		
Operates(h/yr)(360 days) Electric rate (kWh) Pressure Drop (assumed)		8640 0.0671 10.3

Electrostatic Precipitators (Plate-Wire Dry Transco, Inc. Miles City, MT	(ESP)	CAPITAL COST FOR ES
Cost Item		Factor
Direct Costs		
urchased equipment costs		
Plate-Wire Dry ESP		\$1,565,21
uxiliary equipment		\$
		\$1,565,21
nstrumentation		\$156,52
ales taxes		\$46,95
reight	Burghan ad Environment Caret DEC	\$78,26
Nive at installation as ats	Purchased Equipment Cost, PEC	\$1,846,95
Direct installation costs Foundations & supports		\$73,87
landling & erection		\$923,4
lectrical		\$147,75
Piping		\$18,4
nsulation for ductwork		\$36,93
Painting		\$36,93
	Direct installation cost	\$1,237,40
Site preparation		:
Buildings		
	Total Direct Cost, DC	\$4,321,8
ndirect Costs (installation)		AC 22 2
ngineering		\$369,39
Construction and field expenses Contractor fees		\$369,3
start-up		\$184,69 \$18,4
Performance test		\$18,4
Iodel study		\$36,9
Contingencies		\$55,40
-	Total Indirect Cost, IC	\$1,052,76
	Total Capital Investment = DC +IC	\$5,374,64
	Total Capital Investment = DC +IC Rounded to the nearest thousand	
		\$5,374,64
BACT Cost Analysis		\$5,374,64
Electrostatic Precipitators (Plate-Wire Dr	Rounded to the nearest thousand	\$5,374,64
Electrostatic Precipitators (Plate-Wire Dr Transco, Inc. Miles City, MT	Rounded to the nearest thousand	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES
Electrostatic Precipitators (Plate-Wire Dr Transco, Inc. Miles City, MT Cost Item	Rounded to the nearest thousand	\$5,374,64 <b>\$5,375,0</b> 0
Electrostatic Precipitators (Plate-Wire Dr Transco, Inc. Miles City, MT Cost Item Direct Annual Costs, DC	Rounded to the nearest thousand	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES
Electrostatic Precipitators (Plate-Wire Dr Transco, Inc. Miles City, MT Cost Item Direct Annual Costs, DC Operating Labor	Rounded to the nearest thousand y ESP) Calculations	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u>
Electrostatic Precipitators (Plate-Wire Dr Transco, Inc. Miles City, MT Cost Item Direct Annual Costs, DC Operating Labor Operator	Rounded to the nearest thousand y ESP)  Calculations h/yr x \$/hr	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item Direct Annual Costs, DC Operating Labor Operator Supervisor Coordinator	Rounded to the nearest thousand y ESP)  Calculations h/yr x \$/hr	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator	\$5,374,6 <b>\$5,375,0</b> <b>CAPITAL COST FOR ES</b> <u>Cost</u> \$32,82 \$4,92 \$10,94
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item Direct Annual Costs, DC Operating Labor Operator Supervisor Coordinator Operating Materials	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs. DC</u> <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i>	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr	\$5,374,6 \$5,375,0 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item Direct Annual Costs, DC Operating Labor Operator Supervisor Coordinator Operating Materials Maintenance Labor Material Replacement parts, bags Utilities Electricity-fan Electricity-operating	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection	\$5,374,6 <b>\$5,375,0</b> <b>CAPITAL COST FOR ES</b> <b><u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67</b>
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs	\$5,374,6 <b>\$5,375,0</b> <b>CAPITAL COST FOR ES</b> <b>Cost</b> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67
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Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item Direct Annual Costs, DC <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal Indirect Annual Costs, IC Overhead	Rounded to the nearest thousand         y ESP         Calculations         Image: h/yr x \$/hr 15% of operator 1/3 of operator 1/3 of operator         h/shft x shft/day xdays/yr x \$/hr 1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection Total DC (rounded)	\$5,374,6 \$5,375,0 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$221,01 \$15,93 \$155,67 \$279,83 \$52,32
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item Direct Annual Costs, DC <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal Indirect Annual Costs, IC Overhead Administrative charges	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr 15% of operator 1/3 of operator         h/shft x shft/day xdays/yr x \$/hr 1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection Total DC (rounded)         2% of Total Capital Investment	\$5,374,6 \$5,375,0 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67 \$279,83 \$2279,83 \$52,32 \$107,50
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> Cost Item Direct Annual Costs, DC <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal Indirect Annual Costs, IC Overhead	Rounded to the nearest thousand         y ESP         Calculations         Image: h/yr x \$/hr 15% of operator 1/3 of operator 1/3 of operator         h/shft x shft/day xdays/yr x \$/hr 1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection Total DC (rounded)	\$5,374,6 <b>\$5,375,0</b> <b>CAPITAL COST FOR ES</b> <b>Cost</b> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$22,05 \$18,47 \$155,67 \$279,83 \$155,67 \$279,83 \$107,50 \$53,750.0
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> <i>Operator</i> Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-fan Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr 15% of operator 1/3 of operator         h/shft x shft/day xdays/yr x \$/hr 1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection Total DC (rounded)         2% of Total Capital Investment 1% of Total Capital Investment	\$5,374,6 \$5,375,00 CAPITAL COST FOR ES Cost \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67 \$279,83 \$155,67 \$279,83 \$155,67 \$279,83 \$107,50 \$53,750.0 \$53,750.0
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> <i>Operator</i> Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax Insurance	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection         Total DC (rounded)         2% of Total Capital Investment         1% of Total Capital Investment         Total IC (rounded)	\$5,374,6 \$5,375,00 CAPITAL COST FOR ES Cost \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67 \$279,83 \$10,50 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,0000 \$53,750,0000 \$53,750,00000 \$53,750,000000000000000000000000000000000
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> <i>Operator</i> Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax Insurance	Rounded to the nearest thousand         y ESP         Calculations         Image: A system of the period of the perio	\$5,374,6 \$5,375,00 CAPITAL COST FOR ES Cost \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67 \$279,83 \$10,50 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,000 \$53,750,0000 \$53,750,0000 \$53,750,0000 \$53,750,0000 \$53,750,00000 \$53,750,000000000000000000000000000000000
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> <i>Operator</i> Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax Insurance Capital recovery	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection         Total DC (rounded)         2% of Total Capital Investment         1% of Total Capital Investment         Total IC (rounded)	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> <i>Operator</i> Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax Insurance	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection         Total DC (rounded)         2% of Total Capital Investment         1% of Total Capital Investment         Total IC (rounded)	\$5,374,64 \$5,375,00 CAPITAL COST FOR ES Cost \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$250,32 \$155,67 \$279,83 \$155,67 \$279,83 \$155,75,00 \$533,750,00 \$534,560 \$200,550,750,00 \$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$533,750,000\$\$\$533,750,000\$\$\$533,750,000\$\$\$533,750,000\$\$\$533,750,0
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> Operator Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax Insurance Capital recovery <u>Cost Effectiveness Calculation</u>	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection         Total DC (rounded)         2% of Total Capital Investment         1% of Total Capital Investment         Total IC (rounded)	\$5,374,6 \$5,375,0 CAPITAL COST FOR ES <u>Cost</u> \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$220,05 \$18,47 \$155,07 \$279,83 \$155,07 \$279,83 \$155,07 \$279,83 \$107,50 \$53,750,0 \$53,750,0 \$631,56 \$898,88 \$1,178,72
Electrostatic Precipitators (Plate-Wire Dr <i>Transco, Inc. Miles City, MT</i> <u>Cost Item</u> <u>Direct Annual Costs, DC</u> <i>Operating Labor</i> <i>Operator</i> Supervisor Coordinator <i>Operating Materials</i> Maintenance Labor Material Replacement parts, bags <i>Utilities</i> Electricity-fan Electricity-operating Waste Disposal <u>Indirect Annual Costs, IC</u> Overhead Administrative charges Property Tax Insurance Capital recovery	Rounded to the nearest thousand         y ESP)         Calculations         h/yr x \$/hr         15% of operator         1/3 of operator         1/3 of operator         h/shft x shft/day xdays/yr x \$/hr         1% of purchase equipment costs         at \$25/ton on-site for essentially 100% collection         Total DC (rounded)         2% of Total Capital Investment         1% of Total Capital Investment         Total IC (rounded)	\$5,374,6 \$5,375,0 CAPITAL COST FOR ES Cost \$32,82 \$4,92 \$10,94 \$20,05 \$18,47 \$21,01 \$15,93 \$155,67 \$279,83 \$155,67 \$279,83 \$53,750.0 \$53,7

### Wet Scrubber

While controlling PM with a venturi wet scrubber (70-99%) is technically feasible, the use of a venturi wet scrubber is better suited for the control of PM in waste gas streams with high moisture content, making it a less practicable control option than a fabric filter or ESP for controlling PM from the proposed project. Venturi wet scrubber systems introduce water into the flue gas stream, creating droplets that interact with particulate matter to form a wet by-product, which creates a waste stream that must be properly disposed of. This creates the need for both wastewater treatment and solid waste disposal which adds to the costs of its use. Additionally, wet particulate cannot be recycled, so collected particulate must be landfilled or disposed of in some other manner. For these reasons, wet scrubbers were not evaluated further. Controlling PM with a mechanical separator (40 to 90%) is technically feasible, but the efficiency for PM would be less unless combined with another PM control option (like those discussed above), particularly for  $PM_{10}$  and  $PM_{2.5}$ , and was therefore not evaluated further.

## Step 5: Identify BACT

Transco proposed the use of fabric filters to control particulate matter emissions from the affected equipment/processes. Among the technically feasible control measures, fabric filters have the highest control efficiency for particulate matter of all sizes (baghouses/cartridge collectors at 99.9+% control efficiency) and constitute the most economically feasible option. Additionally, fabric filters are the control technology used to control PM from abrasive blasting operations at other Transco facilities and constitute BACT for other similar sources identified by the permit review provided in Table 2. For these reasons, the use of fabric filter control (baghouses/cartridges) constitutes BACT for the control of PM emissions from the affected equipment and processes proposed under the current permit action.

## IV. Emission Inventory

	Emissions							NO O	All
EU ID	Unit Description	CO (TPY)	NO <sub>x</sub> (TPY)	PM (TPY)	PM <sub>10</sub> (TPY)	PM <sub>2.5</sub> (TPY)	SO <sub>2</sub> (TPY)	VOC (TPY)	HAPs (TPY)
EUID	<b>_</b>	(111)	(111)	(1 F 1)	(1 + 1)	(1 F 1)	(1 + 1)	(1 + 1)	(111)
	JBI Paint								
JBI-1	Booth #1	0	0	1.21	1.21	1.21	0	44.16	11.4
	JBI Paint								
JBI-2	Booth #2	0	0	1.21	1.21	1.21	0	44.16	11.4
	(4) Rail Car								
	Interior								
4-Car	Lining Area	0	0	2.32	2.32	2.32	0	97.66	43.25
	Grit blasting								
	Area								
GB-2	(JBI#2)	0	0	530	530	376	0	0	0
	Interior								
	Blast Area								
ISB	#1	0	0	263.06	126.53	12.65	0	0	0
	Interior								
	Blast Area								
ISJ	#1	0	0	7	1	1	0	0	0

 Table 5. Uncontrolled Potential to Emit

	(1) Railcar								
	Interior Pre-								
	Bake Heater								
Cure-1	JBI-1	0.9	1.07	0.08	0.08	0.08	0.01	0.06	0.02
	(2) Railcar								
	Interior								
	Curing								
	Heaters-								
Cure-2	Lining	1.8	2.15	0.16	0.16	0.16	0.01	0.12	0.04
	Natural Gas								
	Air Makeup								
AMU3	Units	1.98	2.36	0.18	0.18	0.18	0.01	0.13	0.04
Total		4.68	5.58	805.22	662.69	394.81	0.03	186.29	66.15

### Table 6. Controlled Emissions

	Emissions								
	Unit	CO	NO <sub>x</sub>	PM	$\mathbf{PM}_{10}$	<b>PM</b> <sub>2.5</sub>	$SO_2$	VOC	All HAPs
EU ID	Description	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)
	JBI Paint								
JBI-1	Booth #1	0	0	1.21	1.21	1.21	0		
	JBI Paint								
JBI-2	Booth #2	0	0	1.21	1.21	1.21	0	-	
	(4) Rail Car								
	Interior								
4-Car	Lining Area	0	0	2.32	2.32	2.32	0	-	
	Grit blasting								
	Area	0	0	10.1	6.0	0 1	0		
GB-2	(JBI#2)	0	0	13.1	6.3	0.6	0		
	Interior								
ICD	Blast Area	0	0	10.1	( )	0.4	0		
ISB	#1	0	0	13.1	6.3	0.6	0	-	
	Interior							76	24.9
101	Blast Area #1	0	0	121	( )	0.6	0		
ISJ		0	0	13.1	6.3	0.6	0	-	
	(1) Railcar Interior Pre-								
	Bake Heater								
Cure-1	IBI-1	0.9	1.07	0.2	0.2	0.2	0		
Guit-1	(2) Railcar	0.7	1.07	0.2	0.2	0.2	0	-	
	Interior								
	Curing								
	Heaters-								
Cure-2	Lining	1.8	2.15	0	0	0	0		
	Natural Gas	1.0						-	
	Air Makeup								
AMU3	Units	1.98	2.36	0	0	0	0		
Total		4.68	5.58	44.24	23.84	6.74	0	76	24.9

Notes:

- a The combined facility VOC emissions cannot exceed 76 TPY based on permit conditions.
- Each painting operation can emit up to 10 TPY of an individual HAP and 25 TPY of all HAP combined, but the combined facility HAP emissions cannot exceed 10 TPY of an individual HAP and 25 TPY of all HAP combined based on permit conditions.

	Act	ual Emissi	ons	Pot	ential Emis	sions	Allowable	Emissions	
	lbs./hour		tpy	Ibs./hour	-	tpy	lbs./hour	tpy	
со									
NOx									
PM	0.13		0.001	121	1	530		13.06	
PM <sub>10</sub>	0.13		0.001	121		530		6.29	
PM2.5	0.09		0.001	86		376		0.63	
SO <sub>2</sub>									
voc									
AILHAP									
Xvlenes									
Ethlbnzn					-				
Hexane									
Tiexaile									
Givens:			Units				Source		
	al Gritblast 1			lbs. grit/ho		From MAQP #2833-06			
	al Gritblast 7			200 lbs. grit/year 4320 lb/hr×8,760 hr/yr					
	al Gritblast T					Estimate from existing Grit Blast (2019)			
Gritblas	sting Emissi					AP-42 Tbl 13.2.6-1 (+1 to fit stack test)			
		I Efficiency				From Baghouse Manufacturer (for all PM) 28 lb PM/1000 lb grit×(100%-99.9%)			
Gritblas	sting Emissi					28 lb PM/1000 lb grit×(100%-99.9%) 0.028 lb/1000 lb grit×4320 lb/hr			
		PM Actual							
		PM Actual	0.001						
		M Potential M Potential	121.0	lbs./hour			) lb grit×4320 lb/hr ) lb grit×37843200		
		1 Allowable	529.8			28 lb/100	0 ID GFIT×37843200	ID/yr+2000 ID/	
		10 Content	100%			Internal stack testing of similar sources			
		M10 Actual	10010			0 13 lb/hr×100%			
PM10 Actual PM10 Actual			0.0010 tpy			0.001 tov×100%			
				121.00 lbs./hour			121 lb/hr×100%		
PM10 Potential			529.80			529.8 tpy×100%			
PM10 Allowable			6.29			Permit 28			
PM2.5 Content			71%			Internal stack testing of similar sources			
PM2.5 Actual			0.09	lbs./hour		0.13 lb/hr×71%			
PM2.5 Actual			0.00071			0.001 tpy×71%			
	PM2.	5 Potential		lbs./hour		121 lb/hr×71%			
		5 Potential	376.2			529.8 tpy×71%			
	PM2.5	5 Allowable	0.63	tpy		Permit 28	33-07		

V. Existing Air Quality

Transco is located in the SW<sup>1</sup>/<sub>4</sub> of Section 27, Township 8 North, Range 47 East, in Custer County, Montana. The air quality of this area is classified as either Better than National Standards or unclassifiable/attainment of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The amount of controlled emissions from the proposed permit changes will not cause an exceedance of any ambient air quality standard.

VI. Ambient Air Impact Analysis

DEQ determined that there will be no negative impacts from this permitting action because there will be either no change or a net decrease in allowable levels of most pollutants. Therefore, DEQ believes this action will not cause or contribute to a violation of any ambient air quality standard. VII. Taking or Damaging Implication Analysis

As required by 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
Λ		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)
	Х	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?
	Х	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?
		7c. Has government action lowered property values by more than 30% and necessitated the
	X	physical taking of adjacent property or property across a public way from the property in
		question?
		Takings or damaging implications? (Taking or damaging implications exist if YES is
	Х	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.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.



# **DRAFT ENVIRONMENTAL ASSESSMENT**

April 4, 2025

# Air Quality Bureau Montana Department of Environmental Quality

PROJECT/SITE NAME: <u>Miles City Facility</u>			
APPLICANT/COMPANY NAME: Transco Railway Products, Inc.			
PROPOSED PERMIT/LICENSE NUMBER: 2833-08			
LOCATION: Section 27, Township 8 North, Range 47 East COUNTY: <u>Custer</u>			
PROPERTY OWNERSHIP: FEDERAL STATE PRIVATE _X			

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7. Historical and Archaeologic	cal Sites	
8. Aesthetics		
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2833-08	2	Draft EA: 04/04/2025

# **PROJECT OVERVIEW**

Railway Products, Inc.
025
y Facility
23, 2025

### Location

Township 8 North, Range 47 East, Section 27County: CusterPROPERTY OWNERSHIP: FEDERALSTATEPRIVATE X

## **Compliance with the Montana Environmental Policy Act**

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The proposed action is considered a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This Draft Environmental Assessment (EA) will examine the proposed action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608. DEQ may not withhold, deny, or impose conditions on the Permit based on the information contained in this EA (§ 75-1- 201(4), MCA).

# **Proposed Action**

Transco Railway Products, Inc. (Transco) has applied for a modification of its Montana Air Quality Permit (MAQP) under the Clean Air Act of Montana. The MAQP regulates an existing facility with the addition of two new blasting areas that can blast tank car interiors, a new railcar lining area, and two curing ovens. The state law that regulates air quality permitting in Montana is the Clean Air Act of Montana, §§ 75-2-101, et seq., (CAA) Montana Code Annotated (MCA). DEQ may not approve a proposed project contained in an application for an air quality permit unless the project complies with the requirements set forth in the CAA of Montana and the administrative rules adopted thereunder, ARMs 17.8.101 et. seq. The proposed action would be located on privately owned land, in Custer County, Montana. All information included in this EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

## **Purpose and Need**

Under MEPA, Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The Proposed Action is considered to be a state action that may have an impact on the human environment; therefore, DEQ must prepare an environmental review. This EA will examine the proposed

2833-08

action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in ARM 17.4.608.

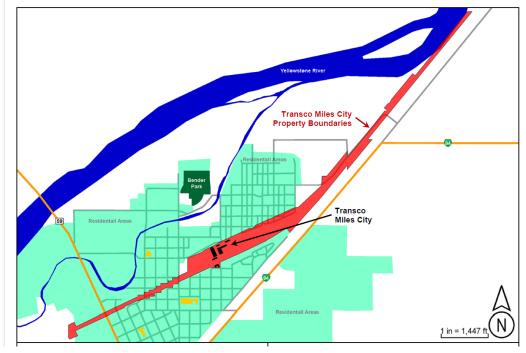
## Table 1: Summary of Proposed Action

	Proposed Action
General Overview	This permitting action regulates an existing facility with the replacement of two blasting areas that can blast tank car interiors.
Duration & Hours of Operation	Construction: Approximately one year Operation: Continuous operation
Estimated Disturbance	Minor land disturbance (less than 1 acre) would occur from this permitting action with addition of new rail lines to provide rail access to the existing buildings.
Construction Equipment	The following equipment will be utilized, but is not limited to: one skidsteer, one tractor trailer, approximately 50 diesel trucks, one crane, and twelve light duty trucks.
Personnel Onsite	<b>Construction:</b> Approximately 12 construction personnel will be onsite for the duration of the construction. <b>Operation:</b> Full time operation.
Location and Analysis Area	Location: Section 27, Township 8 North, Range 47 East, in Custer County, Montana Analysis Area: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.
The applicant is required to co pertaining to the following res	omply with all applicable local, county, state, and federal requirements source areas.
Air Quality	This permitting action regulates an existing facility with the replacement of two blasting areas that can blast tank car interiors.
Water Quality	This permitting action would not affect water quality. Transco is required to comply with the applicable local, county, state and federal requirements pertaining to water quality.
Erosion Control and Sediment Transport	This permitting action would not affect erosion control and sediment transport. Transco is required to comply with the applicable local, county, state and federal requirements pertaining to erosion control and sediment transport.
Solid Waste	This permitting action would not affect solid waste in the area. Transco is required to comply with the applicable local, county, state and federal requirements pertaining to solid waste.

Cultural Resources	This permitting action would not affect cultural resources. Transco is required to comply with the applicable local, county, state and federal requirements pertaining to cultural resources.
Hazardous Substances	This permitting action would not contribute to any hazardous substances. Transco is required to comply with the applicable local, county, state and federal requirements pertaining to hazardous substances.
Reclamation	This permitting action would not require any reclamation.

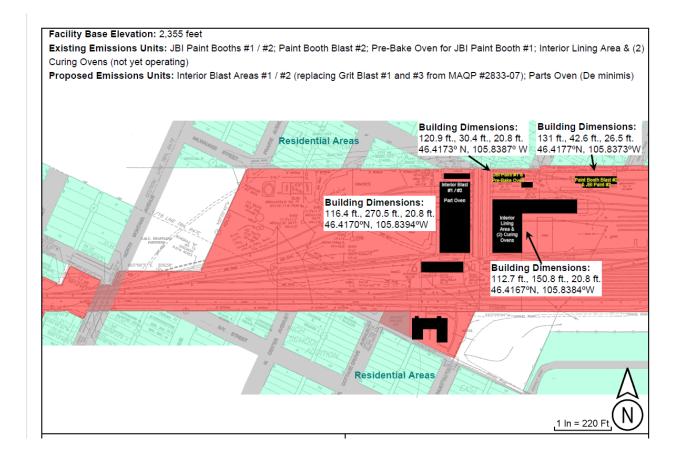
Cumulative Impact Considerations	
Past Actions	Past actions are detailed in the permit, Section 1. C. Permit History.
Present Actions	This permitting action regulates an existing facility with the addition of two new blasting areas that can blast tank car interiors and renaming existing emitting units.
Related Future Actions	DEQ is not currently aware of any future projects from Transco for this facility. Any future projects would be subject to a new permit application.

See Figures 1 and 2 below for the project location of the Transco site and permitting action.



## Figure 1: Site Location Map

### Figure 2. Project Site



# **EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE:**

The impact analysis will identify and evaluate whether the impacts are direct or secondary impacts to the physical environment and human population in the area affected by the proposed project. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are a further impact to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action (ARM 17.4.603(18)). Where impacts would occur, the impacts will be described.

Cumulative impacts are the collective impacts on the human environment within the borders of Montana that could result from the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future impacts must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. The activities identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource. The duration is quantified as follows:

- Construction Impacts (short-term): These are impacts to the environment during the construction period. When analyzing duration, please include a specific range of time.
- Operation Impacts (long-term): These are impacts to the environment during the operational period. When analyzing duration, please include a specific range of time.

The intensity of the impacts is measured using the following:

++No impact: There would be no change from current conditions.

- Negligible: An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- Minor: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- Moderate: The effect would be easily identifiable and would change the function or integrity of the resource.
- Major: The effect would alter the resource.

# 1. Geology and Soil Quality, Stability, and Moisture

The Transco facility area is characterized by the Montana Bureau of Mines and Geology (MBMG) as being an Alluvial terrace deposit (Montana Geological Maps). This permitting action is not considered first-time disturbance. This site is an existing industrial facility with multiple industrial facilities nearby.

# Direct Impacts:

The permit application included additional information like analysis of aerial photography, topographic maps, information provided by Transco and other research tools. This permitting action would not be considered first-time, as the land is an existing industrial facility. Therefore, minor direct impacts would be expected because of the proposed project due to existing industrial nature of the facility with the new addition of rail lines to provide access to the existing buildings.

# Secondary Impacts:

No secondary impacts to geology, stability, and moisture would be expected because this action is occurring within the existing Transco property boundary and first-time disturbance is not occurring.

# **Cumulative Impacts:**

Negligible cumulative impacts to geology, stability, and moisture would be expected because of this permitting action, as it will be taking place within an already existing structures at the Transco facility. This is not considered first-time disturbance and the area is industrial in nature.

# 2. Water Quality, Quantity, and Distribution

The Transco facility is located approximately 2 miles from the Yellowstone River and approximately 5 miles from Branum Lake and Spotted Eagle Lake. No other fragile water resources or values are present.

# Direct Impacts:

Transco has not submitted any other permit applications that DEQ is aware of related to this proposed permitting action.

While the Yellowstone River is located nearby, it is not located in the area affected by the proposed project. Further, no water uses or any form of discharge to surface or groundwater would occur because of the proposed project. Therefore, no direct impacts to water quality, quantity or distribution would be expected because of the proposed project.

# Secondary Impacts:

During operations, discharges would not be released to ground or surface water because of

the proposed project. Further, as permitted, the proposed project would not be expected to cause or contribute to a violation of the applicable primary or secondary NAAQS. See permit analysis for more detailed information regarding air quality impacts. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, no secondary impacts to water quality would be expected because of the proposed project. No new water resources would be required for normal operations of the affected new equipment. No secondary impacts to water quality, quantity, and distribution would be expected from this permitting action.

# **Cumulative Impacts:**

No major cumulative impacts to water quality, quantity, and distribution are anticipated from this permitting action. Transco has not submitted any other permit applications that DEQ is aware of. Further, DEQ is unaware of any related actions under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures.

# 3. Air Quality

For details about the existing air quality, see Section V of the Permit Analysis. This facility is located in the Unclassifiable/Attainment category in Custer County, Montana.

# Direct Impacts:

Expected emissions from the construction and operation of this permitting action are shown in the Permit Analysis Section within the Emission Inventory. An assessment of greenhouse gases (GHGs) is described in Section 23 of this draft EA.

Air quality standards, set by the federal government and DEQ are enforced by DEQ's Air Quality Bureau (AQB) and allow for air pollution at the levels permitted by the MAQP. The Transco facility has emissions including particulate matter (PM) species, oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOCs), Hazardous Air Pollutants (HAPs), and GHG emissions.

Air pollution control equipment must be operated at the maximum design for which it is intended. ARM 17.8.752(2). Limitations would be placed on the allowable emissions for the new emission sources. DEQ conducted a Best Available Control Technology (BACT) analysis and made a BACT determination for each emitting unit related to this permitting action. The proposed emission limits were reviewed by DEQ and incorporated into MAQP #2833-08, if necessary, as federally enforceable conditions. These permit limits cover NO<sub>X</sub>, CO, SO<sub>2</sub>, VOCs, PM, and HAPs with associated ongoing compliance demonstrations, as determined by DEQ.

Air quality standards are regulated by the federal Clean Air Act, 42 U.S.C. 7401 *et seq.* and the Montana CAA, § 50-40-101 *et seq.*, MCA, and are implemented and enforced by DEQ's AQB. As stated above, Transco is required to comply with all applicable state and federal

laws. Minor air quality impacts would be anticipated from the proposed action.

#### Secondary Impacts:

Impacts to air quality from the operation of the Transco facility are to be restricted by an MAQP and therefore should have minor secondary air quality impacts.

#### **Cumulative Impacts:**

Cumulative impacts to air quality from the operation of the Transco facility are to be restricted by an MAQP and therefore should have minor air quality impacts. Minor impacts are anticipated from this permitting action. The nearby area also has other stationary sources, Quala Services, MAQP #2832-08, MDU-Miles city, MAQP #0901-02, Big Sky Cremation Services, MAQP #5260-00, and Eastern Montana Pet Crematory, MAQP #5019-02, that contributes to the air quality in the area.

# 4. Vegetation Cover, Quantity, and Quality

No fragile or unique resources of values, or resources of statewide or societal importance, are present in the affected area that DEQ is aware of. The area around the Transco facility is industrial/commercial.

DEQ conducted research using the Montana Natural Heritage Program (MTNHP) website and ran a query titled "Environmental Summary Report" dated January 27, 2025, which identified the following plant Potential Species of Concern (SOC) located in or near the affected facility: Nine-anther prairie clover, Dwarf woolly-heads, Platte Cinquefoil, Geyer's Milkvetch, Schweinitz's Flatsedge, Double Bladderpod, Smooth Goosefoot, Bush morning-glory, and Long-sheath Waterweed.

The proposed action would be located within the existing footprint of the Transco property.

The polygon area analyzed using the MTNHP website produces an area inherently larger than the specific disturbance area, so some additional species may be reported that are not necessarily present in the affected area, but nearby.

No important plant areas are present in the area (NHP Mapviewer).

## **Direct Impacts:**

The information provided above is based on the information that DEQ had available at the time of draft EA preparation and information provided by the applicant. The permit application provided an analysis of aerial photography, topographic maps, geologic maps, soil maps, and other research tools. Since the proposed action would occur within the Transco facility property boundary, minor impacts to vegetation cover are anticipated, as this permitting action is not considered first time disturbance on the property. This permitting action will be occurring in already existing structures and therefore would have

little to no impact on vegetation in the area. Minor land area (less than 1 acre) will be converted to rail lines to provide access to the existing buildings. This is not first-time disturbance on the property.

#### Secondary Impacts:

Minor secondary impacts to vegetation cover, quantity, and quality are expected since this permitting action is not considered first time disturbance.

#### **Cumulative Impacts:**

Minor cumulative impacts to vegetation cover, quantity, and quality are expected from this permitting action as is not considered first-time disturbance on the property and all new emitting units will be added within already existing structures, and new rail lines will be added to provide access to the existing buildings.

## 5. Terrestrial, Avian, and Aquatic Life and Habitats

As described in Section 4., Vegetation Cover, the affected area is represented by residential and industrial operations and DEQ conducted research using the MTNHP website and ran the query titled "Environmental Summary Report" dated January 27, 2025, which identified the following animal Species of Concern (SOC), Other Observations, and Potential Species of Concern (PSOC): Blue Sucker, Paddlefish, Pallid Sturgeon, Sauger, Sicklefin Chub, Sturgeon Chub, Black-billed Cuckoo, Snapping Turtle, Monarch, Great Blue Heron, Little Brown Myotis, Bald Eagle, Northern Hoary Bat, Spiny Softshell, Long-eared Myotis, Red-headed Woodpecker, Swift Fox, Greater Sage-Grouse, Burrowing Owl, Ferruginous Hawk, Bat Roost (Non-Cave), Burbot, Plains Minnow, Eastern Screech-Owl, Chimney Swift, Black-and-white Warbler, Ovenbird, American White Pelican, Eastern Bluebird, Veery, Northern Leopard Frog, Common Poorwill, Sharp-tailed Grouse, Greater Short-horned Lizard, Black-tailed Prairie Dog, Cassin's Kingbird, Long-billed Curlew, Great Plains Toad, Golden Eagle, Shortnose Gar, A Flat-headed Mayfly, American Bittern, Brewer's Sparrow, Mountain Plover, Evening Grosbeak, Gray-crowned Rosy-Finch, Alder Flycatcher, Black-crowned Night Heron, Franklin's Gull, Horned Grebe, Tennessee Warbler, Trumpeter Swan, Brassy Minnow, Creek Chub, Yellow-billed Cuckoo, Western Milksnake, Least Tern, Plains Hog-nosed Snake, Eastern Red Bat, Dickcissel, Whooping Crane, Dwarf Shrew, Merriam's Shrew, North American Porcupine, Spotted Bat, Suckley's Cuckoo Bumble Bee, Plumbeous Vireo, Townsend's Big-eared Bat, Long-legged Myotis, Prairie Shrew, Silver-haired Bat, Loggerhead Shrike, Bobolink, Fringed Myotis, Meadow Jumping Mouse, Pinyon Jay, Black Tern, Green-tailed Towhee, Sage Thrasher, Sprague's Pipit, and Northern Myotis.

The polygon area analyzed using the MTNHP website produces an area inherently larger than the specific disturbance area, so some additional species may be reported that are not necessarily present within the Transco property, but nearby. Further, because the proposed action would occur within the footprint of the existing Transco facility, and the affected area is industrial/commercial in nature, the identified Species of Concern and Potential Species of Concern, would not be expected to locate within or use the affected area for any part of their life cycle.

No important bird areas are present on the Transco property (NHP Mapviewer).

### Direct Impacts:

The potential impact to terrestrial, avian and aquatic life and habitats would be negligible, due to the long-term industrial natural of the area.

## Secondary Impacts:

Because the proposed action would occur within the existing footprint of the Transco facility, no secondary impacts to terrestrial, avian and aquatic life and habitats would be stimulated or induced by the direct impacts analyzed above as all actions are occurring within property boundaries and this is not considered first time disturbance

## **Cumulative Impacts:**

No cumulative impacts to terrestrial, avian and aquatic life and habitats would be stimulated or induced by the direct impacts analyzed above. The Transco facility is located on land that has already been disturbed by industrial activities and this is not considered first-time disturbance.

# 6. Unique, Endangered, Fragile, or Limited Environmental Resources

As described in Section(s) 4 and 5 above, DEQ conducted a search using the MTNHP webpage. The search used a polygon that overlapped the site and produced the list of species of concern identified in Section 5. The project would not be in core, general, or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: <u>http://sagegrouse.mt.gov</u>. This project is located in an area designated as "Exempt Community Borders" by the Montana Sage Grouse Habitat Conservation Program.

## Direct Impacts:

Among the SOC identified by the MTNHP, these species would not be expected to be displaced by the proposed action as the land where the permitting action would occur is owned by Transco and already has had industrial activities occurring on this property. Therefore, any potential direct impacts would be short-term and negligible.

## Secondary Impacts:

The proposed action would have no secondary impacts to the identified species of concern because the permit conditions are protective of human and animal health and welfare, and the affected area is currently used by Transco and would not change the effect to existing habitats that may be present in the affected area. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

## **Cumulative Impacts:**

The proposed action would have minor cumulative impacts to environmental resources because the permit conditions are protective of human and animal health and all lands involved in the proposed action have already been disturbed by industrial activities and would not change the effect to the environment outside of the original construction of the facility.

## 7. Historical and Archaeological Sites

The Montana State Historic Preservation Office (SHPO) was contacted to conduct a file search for historical and archaeological sites within Section 27, Township 8 North, Range 47 East, which includes the area affected by the proposed project. SHPO provided a letter dated January 27, 2025, stating there have been six previously recorded sites: Historic District with an Undetermined NR status, Historic Religion with an NR Listed NR status, two Historic Railroad sites both with Eligible NR status, Historic Log Structure with an Ineligible NR status, and a Historic Road with an Eligible NR Status. There have also been seven previously conducted cultural resource inventories done within the designated search location between 1980 and 2015. As long as there will be no disturbance or alteration to structures over fifty years of age, it is SHPO's determination that there will be no cultural or historic properties affected by this permitting action. It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are within the Area of Potential Effect, and are over fifty years old, SHPO recommends that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

However, should structures need to be altered, or if cultural materials are inadvertently discovered during this proposed action, SHPO requests their office be contacted for further investigation.

#### **Direct Impacts:**

The search conducted by SHPO identified several previously recorded cultural sites/resources in the search area and several reports for this area, located on or near the Transco property. According to SHPO, as long as there will be no disturbance or alteration to structures over fifty years of age, it is SHPO's determination that there will be no cultural or historic properties affected by this permitting action. Therefore, no impacts to the identified sites would be expected because of the proposed project. Further, because the proposed project would occur within the footprint of the existing Transco operations, the proposed project would not be expected to impact any new, previously unrecorded cultural resources that may exist in the affected area. Therefore, no direct impacts to historical and archaeological sites would be expected because of the proposed project.

## Secondary Impacts:

No secondary impacts to historical and archaeological sites are anticipated since the proposed action is located on land currently in use by Transco and will not impact any previously recorded sites.

## **Cumulative Impacts:**

No cumulative impacts to historical and archaeological sites are anticipated since the proposed action is located on land currently in use by Transco with no disturbance to previously recorded sites in the permitting action area.

# 8. Aesthetics

The proposed action would occur on private land owned by Transco and in an area mostly surrounded by other industrial/commercial entities. The closest structure is located approximately 350 feet away from the facility. Approximately 1.25 miles from the facility is a railcar and container cleaning service and approximately 2 miles from the site is a generating station. Construction of the proposed project would last for approximately one year.

## **Direct Impacts:**

Transco's visual profile would not change with this permitting action as all new additions will be occurring within already existing structures. There would be no increase in noise levels from this permitting action as there are currently blasting and painting occurring in this area already. Less than one acre of land will be converted to rail lines to provide access to existing structures. Once construction was completed, noise levels would return to their normal level of daily operation. Therefore, any direct impacts would be long-term and minor, and consistent with existing impacts.

## Secondary Impacts:

There would be minor secondary impacts from this permitting action as all new emitting units are going within already existing structures. Less than one acre of land will be converted to rail lines to provide access to existing structures. Impacts would be long-term and negligible.

## **Cumulative Impacts:**

Long-term impacts will occur with the addition of the new emitting units. Minor and longterm cumulative impacts are anticipated from this permitting action as all new emitting units will be in already existing structures. Less than one acre of land will be converted to rail lines to provide access to existing structures. This is not considered first time disturbance as the property has already been disturbed by industrial activities prior to this permitting action.

## 9. Demands on Environmental Resources of Land, Water, Air, or Energy

The site is located on land owned by Transco. See Sections 2, 3, and 4 of this EA for details regarding land, water, and air impacts.

#### Direct Impacts:

There would be a minor increase in demand for the environmental resources of land, air, and energy for these actions. There will be minor impacts on air and energy with the addition of new emitting units, therefore the energy usage also increased with these actions. Less than one acre of land will be converted to rail lines to provide access to existing structures. Any direct impacts would be long-term and minor.

#### Secondary Impacts:

No secondary impacts to demands on land, water, air, and energy are anticipated as a result of this permitting action due to this site already being disturbed by industrial activities.

#### **Cumulative Impacts:**

Minor cumulative impacts to demands on land, water, air, and energy are anticipated as a result of this permitting action. Minor cumulative impacts are anticipated with the addition of new emitting units and land that is converted to rail lines, in terms of land, air, and energy, as this causes an increase demand on all of those areas.

#### **10. Impacts on Other Environmental Resources**

The site is currently an existing industrial area. There is a railcar and container cleaner service approximately 1.25 miles from the facility. There is also a generating station approximately 2 miles from the facility. This area is industrial in nature.

#### Direct Impacts:

No other environmental resources are known to have been identified in the area beyond those discussed above. Therefore, there is no impact to other environmental resources anticipated from this permitting action.

#### Secondary Impacts:

No secondary impacts to other environmental resources are anticipated as a result of the proposed permitting action. No secondary impacts to human health and safety are anticipated as a result of the proposed permitting action due to the industrial nature of the facility. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

#### **Cumulative Impacts:**

No cumulative impacts to other environmental resources are anticipated as a result of the proposed permitting action as the area is industrial in nature and this is not considered first time disturbance.

# **11. Human Health and Safety**

The applicant would be required to adhere to all applicable state and federal safety laws. The Occupational Safety and Health Administration (OSHA) has developed rules and guidelines to reduce the risks associated with this type of labor. Members of the public would not be allowed in the immediate proximity to the project during operations and access to the public would continue to be restricted to this property.

## Direct Impacts:

Negligible changes in impacts to human health and safety are anticipated as a result of this project action due to the industrial nature of the facility.

#### Secondary Impacts:

No secondary impacts to human health and safety are anticipated as a result of the proposed permitting action due to the nature of the facility. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

## **Cumulative Impacts:**

No cumulative impacts to human health and safety are anticipated as a result of the proposed permitting action due to the nature of the facility and this not being considered first-time disturbance to the property.

# 12. Industrial, Commercial, and Agricultural Activities and Production

This site is used by Transco, it is privately owned land by Transco, and the property has had previous disturbance from industrial activities. Approximately 1.25 miles from the property is a railcar and container cleaning service; as well as approximately 2 miles from the property is a generating station.

## Direct Impacts:

Any impacts on industrial, commercial, and agricultural activities and production in the area would be long-term and minor from this permitting action, which would increase industrial production of the facility and the affected area. Due to the industrial nature of the facility, these impacts would be long-term and negligible.

## Secondary Impacts:

Negligible secondary impacts to industrial, commercial, and agricultural activities and production are anticipated as a result of the proposed permitting action due to the industrial nature of the facility and this not being first-time disturbance on the property.

#### **Cumulative Impacts:**

The cumulative impacts are negligible with this permitting action as this facility is already an operational industrial site. This is not considered first-time disturbance.

# 13. Quantity and Distribution of Employment

There are approximately 67 current employees at this Transco site. No new full-time jobs will result from this permitting action. Construction would take approximately one year to occur with this permitting action. Approximately 12 construction personnel will be onsite to complete the construction.

## Direct Impacts:

The proposed action would be expected to have negligible impact on the overall distribution of employment as there are no new full-time employment because of this permitting action. Therefore, there would be minor direct impacts.

#### Secondary Impacts:

Negligible secondary impact to the quality and distribution of employment is expected on long-term employment from the proposed action as no new employees are being added from this permitting action.

## **Cumulative Impacts:**

There would be negligible cumulative impacts on employment for this permitting action because no new employees would be added as a result of this permitting action. Once construction was completed, the construction personnel onsite would no longer be onsite.

## 14. Local and State Tax Base and Tax Revenues

Local, state, and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, from the companies, employees, or landowners benefiting from this operation.

## Direct Impacts:

The proposed action would be expected to have long-term, minor impacts on the local and state tax base and tax revenues from this permitting action.

## Secondary Impacts:

Transco would continue to be responsible for accommodation of any increased taxes associated with the operation of the modified facility. Minor secondary impacts to local and state tax base and tax revenues are anticipated as a result of the proposed permitting action.

### **Cumulative Impacts:**

Minor impacts to local and state tax base and tax revenues are anticipated with the construction and operation of a new facility in the area. Transco would continue to be responsible for accommodation of any increased taxes associated with the operation of the modified facility. Local, state, and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, from the companies, employees, or landowners benefiting from this operation. Therefore, any cumulative impacts would be minor and long-term, consistent with existing impacts in the affected area.

# **15. Demand for Government Services**

The area surrounding the Transco site consists of other industrial facilities, such as a railcar and container cleaning service, and a generating station.

## Direct Impacts:

The air quality permit has been prepared by state government employees as part of their day-to-day, regular responsibilities. Therefore, any direct impacts to demands for government services would be short-term, consistent with existing impacts, and negligible. Compliance review and assistance oversight by DEQ AQB would be conducted in concert with other area activity when in the vicinity of the proposed project. Therefore, any direct impacts would be long-term and negligible to minor, mainly through increased regulatory oversight by DEQ.

#### Secondary Impacts:

Initial and ongoing compliance inspections of facility operations would be accomplished by state government employees as part of their typical, regular duties and required to ensure the facility is operating within the limits and conditions listed in the air quality permit. Therefore, any secondary impacts to demands for government services would be long-term, consistent with existing impacts, and negligible.

## **Cumulative Impacts:**

The air quality permit has been prepared by state government employees as part of their day-to-day, regular responsibilities. Following construction of the proposed facility, initial and ongoing compliance inspections of facility operations would be accomplished by state government employees as part of their typical, regular duties and required to ensure the facility is operating within the limits and conditions listed in the air quality permit. Therefore, any cumulative impacts to demands for government services would be short- and long-term, consistent with existing impacts, and negligible. Minor cumulative impacts are anticipated on

government services with the proposed action and a minimal increase in impact would occur from the permitting and compliance needs associated with this permitted facility.

### **16. Locally-Adopted Environmental Plans and Goals**

A review was conducted on January 27, 2025, to identify any locally adopted environmental plans or goals. A Miles City Growth Policy was located on the Miles City of Montana Website. This serves as an update to the existing Growth Policy from 2015, to tie in multiple planning projects and define the community's objectives for the next five years, until the next recommended update. It consists of 8 sections: Goals and Objectives, Population Characteristics and Economy, Housing, Local Services, Public Facilities and Infrastructure, Natural and Cultural Resources, Land Use, and Implementation (Council Packets).

## **Direct Impacts:**

Transco's facility is on property owned by Transco. This permitting action would not affect any current locally adopted environmental plans or goals in the affected area; it would only aid in the community goal to continue to foster economic growth within Miles City. Therefore, no direct impacts would be expected because of the proposed project.

#### Secondary Impacts:

No locally adopted environmental plans and goals in the area will be affected by the proposed action. Therefore, no secondary impacts would be expected because of the proposed project.

#### **Cumulative Impacts:**

DEQ conducted a search of the Miles City of Montana website on January 27, 2025. A Miles City Growth Policy 2025 was located and there would be no affect to any environmental plans or goals from this permitting action. Therefore, no cumulative impacts to locally adopted environmental plans and goals are anticipated as a result of the proposed permitting action (Council Packets).

# 17. Access to and Quality of Recreational and Wilderness Activities

The Transco facility is located approximately one mile from Bender Park. The closest wilderness area is the Terry Badlands Wilderness Study Area, approximately 40 miles from the Transco facility.

#### **Direct Impacts:**

There would be no impacts to the access to wilderness activities as none are in the vicinity of the proposed action. Therefore, no direct impacts to access to and quality of wilderness activities would be expected because of the proposed project. The affected area is an existing industrial area with little to no recreational opportunities exist in the area affected by the proposed project. Therefore, no direct impacts would be expected. Access to the

wilderness areas would not change with this permitting action.

## Secondary Impacts:

No wilderness areas are located nearby or accessed through this land owned by Transco. The nearest designated wilderness area is the Terry Badlands Wilderness Study Area located approximately 40 miles from the affected site. Therefore, no secondary impacts to access to and quality of wilderness activities would be expected because of the proposed project. No secondary impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed permitting action which is wholly contained within the boundary of the Transco property.

## **Cumulative Impacts:**

No wilderness areas are located nearby or accessed through this land owned by Transco. The nearest designated wilderness area is the Terry Badlands Study Area, located approximately 40 miles from the affected site. Therefore, no cumulative impacts to access to and quality of wilderness activities would be expected because of the proposed project. No cumulative impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed permitting action which is wholly contained within the boundary of the Transco property.

# 18. Density and Distribution of Population and Housing

The City of Miles City, Montana has approximately 8,438 residents (U.S. Census Bureau).

## Direct Impacts:

Transco employs approximately 67 full time employees at this facility. This permitting action would be expected to have a negligible increase in employment at the Transco facility, as this permitting action will not result in any new full-time employees at this facility. This permitting action will not add to the existing population of nearby town of Miles City and/or the surrounding area. With it being a negligible increase in potential population, it would not require additional housing in the surrounding area. Therefore, negligible direct impacts to density and distribution of population and housing are anticipated because of the proposed action.

#### Secondary Impacts:

Transco would not hire new staff to operate the facility and the proposed project would not be expected to otherwise result in an increase or decrease in the local population. No secondary impacts to density and distribution of population and housing are anticipated as a result of the proposed permitting action.

## **Cumulative Impacts:**

Transco would not hire new staff to operate the facility, therefore the proposed project would not be expected to otherwise result in an increase or decrease in the local population.

Therefore, the proposed project would not be expected to result in an increase or decrease in the local population. No cumulative impacts to density and distribution of population and housing are anticipated as a result of the proposed permitting action as no new employees would be added as result of this permitting action.

### **19. Social Structures and Mores**

Based on the required information provided by Transco, DEQ is not aware of any native cultural concerns that would be affected by the proposed action on this existing facility. This facility is located approximately 55 miles from the Northern Cheyenne Reservation.

## Direct Impacts:

The proposed action is located on an existing industrial site and no changes to or disruption of native or traditional lifestyles would be expected because of the proposed project due to the existing industrial nature of the site. Therefore, no impacts to social structure and mores are anticipated.

## Secondary Impacts:

No secondary impacts to social structures and mores are anticipated as a result of the proposed actions due to the existing industrial nature of the area.

## **Cumulative Impacts:**

No cumulative impacts to social structures and mores are anticipated as a result of the proposed actions. Cumulative impacts are anticipated to be negligible as the location is already in use as an industrial facility, and this is not considered first-time disturbance.

## 20. Cultural Uniqueness and Diversity

Based on the required information provided by Transco, DEQ is not aware of any unique qualities of the area that would be affected by the proposed action at this existing facility.

#### **Direct Impacts:**

Transco would employ existing staff to accommodate the proposed action. However, the proposed project would not be expected to result in an increase or decrease in the local population as this facility. Therefore, no direct impacts to the existing cultural uniqueness and diversity of the affected population would be expected because of the proposed project and the existing industrial nature of the site.

## Secondary Impacts:

The existing nature of the area affected by the proposed project is industrial. Further, Transco would employ existing staff to accommodate changes under the proposed action, but the proposed project would not be expected to result in an increase or decrease in the local population. Therefore, no secondary impacts to the existing cultural uniqueness and diversity of the affected population are anticipated as a result of the proposed action.

#### **Cumulative Impacts:**

Transco would use existing staff to accommodate changes under the proposed action, but the proposed project would not be expected to result in an increase or decrease in the local population. Therefore, no cumulative impacts to the existing cultural uniqueness and diversity of the affected population are anticipated as a result of the proposed action.

# **21. Private Property Impacts**

The proposed action would take place on privately-owned land. The analysis below in response to the Private Property Assessment Act indicates no impact. DEQ does not plan to deny the application or impose conditions that would restrict the regulated person's use of private property so as to constitute a taking. Further, if the application is complete, DEQ must take action on the permit pursuant to § 75-2-218(2), MCA. Therefore, DEQ does not have discretion to take the action in another way that would have less impact on private property—its action is bound by a statute.

There are private residences in the nearby area of the proposed action. The closest residence, including homes or structures, is located approximately 350 feet from the project site.

YES	NO	
Х		1. Does the action pertain to land or water management or environmental regulation
		affecting private real property or water rights?
	Х	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	Х	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	Х	4. Does the action deprive the owner of all economically viable uses of the property?
	Х	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?
	Х	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	Х	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?
	Х	7a. Is the impact of government action direct, peculiar, and significant?
	Х	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	Х	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

YES	NO	
		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.

## 22. Other Appropriate Social and Economic Circumstances

#### **Direct Impacts:**

DEQ is unaware of any other appropriate short-term social and economic circumstances in the affected area that may be directly affected by the proposed project. Therefore, no further direct impacts would be anticipated.

## Secondary Impacts:

The proposed project would allow for the existing industrial operations of the facility to continue. Any impacts to air quality would be long-term and minor.

DEQ is unaware of any other appropriate short-term social and economic circumstances in the affected area that may be directly affected by the proposed project. Therefore, no further secondary impacts would be anticipated.

## **Cumulative Impacts:**

DEQ is unaware of any other appropriate short-term social and economic circumstances in the affected area that may be directly affected by the proposed project. Therefore, no further cumulative impacts would be anticipated.

# 23. Greenhouse Gas Assessment

Issuance of this permit would authorize Transco to operate the two new blasting areas that can blast tank car interiors and renaming existing emitting units, which would emit a limited amount of greenhouse gases.

The analysis area for this resource is limited to the activities regulated by the issuance of MAQP#2833-08, which is to permit the modification of the facility with the addition of two new blasting areas that can blast tank car interiors and renaming existing emitting units. The amount of fuel utilized at this site for construction may be impacted by a number of factors including seasonal weather impediments and equipment malfunctions. To account for these factors DEQ has calculated the maximum amount of emissions using 8760 hours per year of operation.

For the purpose of this analysis, DEQ has defined greenhouse gas emissions as the following gas species: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and many species of fluorinated compounds. The range of fluorinated compounds includes numerous chemicals which are used in many household and industrial products. Other pollutants can have some properties that also are similar to those mentioned above, but the EPA has clearly identified the species above as the primary GHGs. Water vapor is also technically a greenhouse gas, but its properties are controlled by the temperature and pressure within the atmosphere, and it is not considered an anthropogenic species.

The combustion of fuel at the site for construction would release GHGs primarily being carbon dioxide ( $CO_2$ ), nitrous oxide ( $N_2O$ ) and much smaller concentrations of uncombusted fuel components including methane ( $CH_4$ ) and other volatile organic compounds (VOCs).

DEQ has calculated GHG emissions using the EPA Simplified GHG Calculator version May 2023, for the purpose of totaling GHG emissions. This tool totals carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), and methane (CH<sub>4</sub>) and reports the total as CO<sub>2</sub> equivalent (CO<sub>2</sub>e) in metric tons CO<sub>2</sub>e. The calculations in this tool are widely accepted to represent reliable calculation approaches for developing a GHG inventory.

## **Direct Impacts:**

Construction of the new rail lines at the Transco facility would produce exhaust fumes containing GHGs.

DEQ estimates that approximately 59 metric tons of CO2e would be produced during construction. To account for variability due to the factors described above, DEQ has calculated the maximum amount of emissions from construction. Using the Environmental Protection Agency's (EPA) simplified GHG Emissions Calculator for mobile sources, approximately 59 metric tons of CO<sub>2</sub>e would be produced during construction.

## Secondary Impacts:

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM 2021).

Per EPA's website "Climate Change Indicators", the lifetime of carbon dioxide cannot be represented with a single value because the gas is not destroyed over time. The gas instead moves between air, ocean, and land mediums with atmospheric carbon dioxide remaining in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments. Methane remains in the atmosphere for approximately 12 years. Nitrous oxide has the potential to remain in the atmosphere for about 109 years (EPA, Climate Change Indictors). The impacts of climate change throughout

the southeastern area of Montana include changes in flooding and drought, rising temperatures, and the spread of invasive species (BLM 2021).

#### **Cumulative Impacts:**

Montana recently used the EPA State Inventory Tool (SIT) to develop a greenhouse gas inventory in conjunction with preparation of a possible grant application for the Community Planning Reduction Grant (CPRG) program. This tool was developed by EPA to help states develop their own greenhouse gas inventories, and this relies upon data already collected by the federal government through various agencies. The inventory specifically deals with carbon dioxide, methane, and nitrous oxide and reports the total as CO<sub>2</sub>e. The SIT consists of eleven Excel based modules with pre-populated data that can be used with default settings or in some cases, allows states to input their own data when the state believes their own data provides a higher level of quality and accuracy. Once each of the eleven modules is filled out, the data from each module is exported into a final "synthesis" module which summarizes all of the data into a single file. Within the synthesis file, several worksheets display the output data in a number of formats such as GHG emissions by sector and GHG emissions by type of greenhouse gas.

DEQ has determined the use of the default data provides a reasonable representation of the greenhouse gas inventory for the various sectors of the state, and the estimated total annual greenhouse gas inventory by year. The SIT data from EPA is currently only updated through the year 2021, as it takes several years to validate and make new data available within revised modules. DEQ maintains a copy of the output results of the SIT.

DEQ has determined that the use of the default data provides a reasonable representation of the GHG inventory for all of the state sectors, and an estimated total annual GHG inventory by year. At present, Montana accounts for 47.77 million metric tons of  $CO_2e$  based on the EPA SIT for the year 2021. This project may contribute up to 59 metric tons per year of CO2e from construction. The estimated emission of 59 metric tons of CO2e from this project would contribute 0.00012% of Montana's annual CO2e emissions.

GHG emissions that would be emitted as a result of the proposed activities would add to GHG emissions from other sources. The No Action Alternative would not contribute approximately any GHG emissions, as the proposed No Action Alternative would be to deny the permit and not allow the operation of the emitting units on site. The current land use of the area is residential.

#### Reference

Bureau of Land Management (BLM) 2021. Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends from Coal, Oil, and Gas Exploration and Development on the Federal Mineral Estate. Available at: https://www.blm.gov/content/ghg/2021/. Accessed February 28, 2024.

#### **PROPOSED ACTION ALTERNATIVES:**

#### No Action Alternative:

In addition to the analysis above for the proposed action, DEQ is considering a "no action" alternative. The "no action" alternative would deny the approval of the proposed permitting action. The applicant would lack the authority to conduct the proposed activity. Any potential impacts that would result from the proposed action would not occur. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

#### Other Ways to Accomplish the Action:

In order to meet the project objective to permit this facility with the addition of the emitting units has no other way to accomplish this action outside of not having the replacement of the two new blasting areas that can blast tank car interiors.

If the applicant demonstrates compliance with all applicable rules and regulations as required for approval, the "no action" alternative would not be appropriate. Pursuant to, § 75-1-201(4)(a), (MCA) DEQ "may not withhold, deny, or impose conditions on any permit or other authority to act based on" an environmental assessment.

#### CONSULTATION

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff. External scoping efforts also included queries to the following websites/databases/personnel:

Application for MAQP #2833-08, EPA State Inventory Tool, the EPA GHG Calculator Tool, the Montana Natural Heritage Program Website, the Montana Cadastral Mapping Program, the State of Montana GIS Mapping Program, the City of Miles City of Montana website, and the State Historical Preservation Office.

#### PUBLIC INVOLVEMENT:

The public comment period for this permit action will occur from April 4, 2025, through April 21, 2025.

#### OTHER GOVERNMENTAL AGENCIES WITH JURSIDICTION:

The proposed project would be located on private land. All applicable state and federal rules must be adhered to, which, at some level, may also include other state, or federal agency jurisdiction.

This environmental review analyzes the proposed project submitted by the Applicant. The project would be minor at the conclusion of the project and thus would have a minor contribution to the long-term cumulative effects of air quality in the area.

#### NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact;
- The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts identify the parameters of the proposed action;
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
- The importance to the state and to society of each environmental resource or value that would be affected.
- Any precedent that would be set as a result of an impact of the proposed action that would commit DEQ to future actions with significant impacts or a decision in principle about such future actions; and
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

#### CONCLUSIONS AND FINDINGS

DEQ finds that this action results in minor impacts to air quality and GHG emissions in Custer County, Montana.

The severity, duration, geographic extent and frequency of the occurrence of the impacts associated with the proposed air quality project would be limited. The proposed action would not result in first time disturbance at the Transco facility.

As discussed in this EA, DEQ has not identified any significant impacts associated with the proposed actions for any environmental resource. DEQ does not believe that the proposed activities by the Applicant would have any growth-inducing or growth-inhibiting aspects, or contribution to cumulative impacts.

There are no unique or known endangered fragile resources in the project area. The Yellowstone River is located approximately 2 miles from the site but is not within the project area. No underground disturbance would be required for this project.

There would be negligible impacts to view-shed aesthetics as all new addition emitting units and changes will occur in already existing structures. However, because the emitting

units would be installed within the footprint of the existing Transco facility property, any impacts would be consistent with existing impacts.

Demands on the environmental resources of land, water, air, or energy would not be significant.

Impacts to human health and safety would not be significant as access roads would be closed to the public and because the site is on Privately Owned Land. The public is not allowed on the Transco site.

As discussed in this EA, DEQ has not identified any significant adverse impacts on any environmental resource associated with the proposed activities.

Issuance of a Montana Air Quality Permit to the Applicant does not set any precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions If the Applicant submits another modification or amendment, DEQ is not committed to issuing those revisions. DEQ would conduct an environmental review for any subsequent permit modifications sought by the Applicant that require environmental review. DEQ would make permitting decisions based on the criteria set forth in the Clean Air Act of Montana.

Issuance of the Permit to the Applicant does not set a precedent for DEQ's review of other applications for Permits, including the level of environmental review. The level of environmental review decision is made based on case-specific consideration of the criteria set forth in ARM 17.4.608.

Finally, DEQ does not believe that the proposed air quality permitting action would have any growth-inducing or growth inhibiting impacts that would conflict with any local, state, or federal laws, requirements, or formal plans.

Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed project is not predicted to significantly impact the quality of the human environment. Therefore, preparation of an EA is the appropriate level of environmental review pursuant to MEPA.

#### **Environmental Assessment and Significance Determination Prepared By:**

Emily Hultin, Air Quality Engineering Scientist Air Permitting Services Section

#### **Environmental Assessment Reviewed By:**

Eric Merchant, Supervisor Air Permitting Services Section

#### **Environmental Assessment Approved By:**

Eric Merchant, Supervisor Air Permitting Services Section Date: March 28, 2025

#### REFERENCES

- 1. Transco Railway Products, Inc. (Transco) application for the permit modification of MAQP#2833-08, received January 23, 2025
- 2. Transco response letter to DEQ's Incompleteness letter received on 03/14/2025
- 3. Quala Services, MAQP #2832-08
- 4. MDU-Miles city, MAQP #0901-02
- 5. Big Sky Cremation Services, MAQP #5260-00
- 6. Eastern Montana Pet Crematory, MAQP #5019-02
- US Census Bureau. (2021). City and Town Population Totals: 2020-2021. Census.gov. https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-cities-and-towns.html
- 8. Bureau of Land Management (BLM) 2021. Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends from Coal, Oil, and Gas Exploration and Development on the Federal Mineral Estate. Available at: https://www.blm.gov/content/ghg/2021/. Accessed February 28, 2024.
- (n.d.). Montana Geological Maps [Review of Montana Geological Maps]. Montana Bureau of Mines and Geology. Retrieved January 27, 2025, from https://gis-data-hubmbmg.hub.arcgis.com/apps/53bf38cf17fd45dbbcf93b6cafaa3365/explore
- 10. (2014). Mtdeq.us. https://gis.mtdeq.us/portal/home/webmap/viewer.html?webmap=bb443b5b50d74f1d83f04049 7010882e
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- Council Packets City of Miles City. (2025). Milescity-Mt.org. <u>https://milescity-mt.org/council-packets/</u> Council Packet 2025

#### ABBREVIATIONS and ACRONYMS

AQB – Air Quality Bureau

ARM - Administrative Rules of Montana

BACT – Best Available Control Technology

**BMP** - Best Management Practices

CAA – Clean Air Act of Montana

CFR - Code of Federal Regulations

CO - Carbon Monoxide

DEQ – Department of Environmental Quality

DNRC – Department of Natural Recourses and Conservation

EA – Environmental Assessment

EIS – Environmental Impact Statement

EPA - U.S. Environmental Protection Agency

FCAA- Federal Clean Air Act

MAQP – Montana Air Quality Permit

MCA – Montana Code Annotated

MEPA – Montana Environmental Policy Act

MTNHP - Montana Natural Heritage Program

NO<sub>X</sub> - Oxides of Nitrogen

PM - Particulate Matter

PM<sub>10</sub> - Particulate Matter with an Aerodynamic Diameter of 10 Microns and Less

PM<sub>2.5</sub> - Particulate Matter with an Aerodynamic Diameter of 2.5 Microns and Less

PPAA - Private Property Assessment Act

Program - Sage Grouse Habitat Conservation Program

PSD - Prevention of Significant Deterioration

SHPO - Montana State Historic Preservation Office

SOC - Species of Concern

SO<sub>2</sub> - Sulfur Dioxide

TPY – Tons Per Year

Transco – Transco Railway Products, Inc.

U.S.C. - United States Code

VOC - Volatile Organic Compound