



Montana Department of
ENVIRONMENTAL QUALITY

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March 17, 2010

Mr. Paul Kukay
Genesis, Inc.
Troy Mine
PO Box 1660
Troy, MT 59935

Dear Mr. Kukay:

Montana Air Quality Permit #1690-02 is deemed final as of March 17, 2010, by the Department of Environmental Quality (Department). This permit is for a silver mining operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #1690-02

Genesis, Inc.
Troy Mine
P.O. Box 1660
Troy, MT 59935

March 17, 2010



MONTANA AIR QUALITY PERMIT

Issued To: Genesis, Inc.
Troy Mine
P.O. Box 1660
Troy, MT 59935

MAQP: #1690-02
Administrative Amendment (AA)
Request Received: 10/1/2009
Department Decision on AA: 3/1/2010
Permit Final: 3/17/2010
AFS #:053-0003

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Genesis, Inc. Troy Mine (Genesis Troy), 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

Genesis Troy operates a silver mine at Section 26, Township 29 North, Range 34 West in Lincoln County, Montana.

B. Current Permit Action

The Department of Environmental Quality – Air Resources Management Bureau (Department), in response to multiple documented complaints of fugitive dust emissions from the Genesis Troy mine, has required the installation, operation, and maintenance of a continuous particulate monitor (to measure particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀)), wind speed sensor, and wind direction sensor north of Genesis Troy's tailings impoundment. The Department developed an Air Monitoring and Tailings Sampling Strategy and published the plan for public comment on September 3, 2009. The public comment period, scheduled to end September 14, 2009, was extended upon request by the public to September 21, 2009. All comments received are on file with the Department. On October 1, 2009, the Final Air Monitoring and Tailings Sampling Strategy was published. Genesis has since installed the required equipment at an agreed location.

The current permit action references the Monitoring and Tailings Sampling Strategy as a part of the permit requirements for this site as Attachment 2 and updates Section II.A.5 to include this attachment. All other conditions and limitations remain the same, with the permit format updated to that currently used by the Department, including an update of rule references. Attachment 1, containing monitoring requirements after closure of the mine and during reclamation, remains. As discussed above, this action includes a monitoring plan for which a public comment period was provided. Inclusion of the monitoring plan in the MAQP was required by the Department. This action is considered an administrative action.

SECTION II: Conditions and Limitations

A. Emission Limitations/Conditions

1. Genesis Troy shall not cause or authorize to be discharged into the atmosphere, from any source installed after November 23, 1968, emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.304).

2. Genesis Troy's particulate emissions from the high efficiency wet scrubbing system shall not exceed 0.05 grains per actual cubic foot per minute (ACFM) or 19.9 pounds per hour (ARM 17.8.752).
3. Genesis Troy 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 (ARM 17.8.308 and ARM 17.8.749).
4. Genesis Troy shall treat all unpaved portions of the haul roads, access roads, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.749).
5. Genesis Troy shall operate an ambient monitoring network as described in Attachment 1 and Attachment 2 of this permit. The monitoring plans will be periodically reviewed by the Department and revised, if necessary (ARM 17.8.749).

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. The Department may require testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Genesis Troy shall supply the Department with annual production information for all emission points, as required by the Department 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 the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. Genesis Troy shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, 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 the Department, in writing, 10 days prior to startup 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. All records compiled in accordance with this permit must be maintained by Genesis Troy 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 the Department, and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Genesis Troy shall allow the Department’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 (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Genesis Troy fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Genesis Troy 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.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department 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 the Department’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 the Department’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, the Department’s decision on the application is final 16 days after the Department’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 the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Genesis 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).

Attachment 1

AMBIENT AIR MONITORING PLAN
GENESIS INC. – TROY MINE
MAQP #1690-02

1. This ambient air-monitoring plan is required by MAQP #1690-02, which applies to Genesis Troy mine located at Section 26, Township 29 North, Range 34 West in Lincoln County, Montana. The Department may modify the requirements of this monitoring plan. All requirements of this plan are considered conditions of the permit.
2. Genesis Troy shall install, operate and maintain two air quality monitoring sites in the vicinity of their tailings pond after closure of the mine and during reclamation of the tailings pond. The exact locations of the monitoring sites must be approved by the Department and meet all the siting requirements contained in the Montana Quality Assurance Manual, including revisions; the EPA Quality Assurance Manual, including revisions; and 40 Code of Federal Regulations (CFR) Part 58, or any other requirements specified by the Department. Genesis Troy shall submit a topographic map to the Department identifying Universal Transverse Mercator (UTM) coordinates, air monitoring site locations in relation to the facility, and the general area present.
3. Genesis Troy shall begin air monitoring within one month after the closure of the mine and continue monitoring until mine reclamation has been completed.
4. Genesis Troy shall monitor the following parameters at the sites and frequencies described below:

<u>Location</u>	<u>Site</u>	<u>Parameter</u>	<u>Frequency</u>
Upwind of Tailings Pond	Site #1	PM ₁₀ ¹ As, Cr, Pb, Zn, Sb ³ Wind Speed, Wind Direction & Sigma Theta	Every third/sixth day ⁴ Every third/sixth day ⁴ Continuous
Downwind of Tailings Pond	Site #2	PM ₁₀ PM ₁₀ ² (collocated) As, Cr, Pb, Zn, Sb	Every third/sixth day ⁴ Every sixth day Every third/sixth day ⁴

¹ PM₁₀ (particulate matter less than 10 microns)

² The requirement for a collocated PM₁₀ sampler may be waived if the monitor operator operates a collocated PM₁₀ sampler at another site.

³ As = arsenic, Cr = chromium, Pb = lead, Zn = zinc, Sb = antimony.

⁴ Every third day during May-October; every sixth day during Nov.-April.

Data recovery for all parameters shall be at least 80 percent computed on a quarterly and annual basis. The Department may require continued monitoring if this condition is not met. (Data Recovery = (Number of data points collected in evaluation period)/(number of scheduled data points in evaluations period)*(100%))

5. Genesis Troy shall provide the Department with strips cut from the exposed PM₁₀ filters after the completion of the gravimetric analysis. Filter strips shall be submitted at least on a quarterly basis and should accompany the quarterly reports.
6. Any ambient air monitoring changes proposed by Genesis Troy must be approved, in writing, by the Department. Within 30 days prior to any changes of the location of the ambient monitors, Genesis Troy shall submit a topographic map to the Department identifying UTM coordinates, air monitoring site locations in relation to the facility, and the general area present.

7. Genesis Troy shall utilize air monitoring and quality assurance procedures which are equal to or exceed the requirements described in the Montana Quality Assurance Manual, including revisions; the EPA Quality Assurance Manual, including revisions; 40 CFR Parts 53 and 58 of the Code of Federal Regulations; and any other requirements specified by the Department.
8. Genesis Troy shall submit quarterly data reports within 45 days after the end of the calendar quarter and an annual data report within 90 days after the end of the calendar year. The annual report may be substituted for the fourth quarterly report if all information in 9 below is included in the report.
9. The quarterly data submittals shall consist of a hard copy narrative data summary and a digital submittal of all data points in AIRS batch code format, or in another format as approved or requested by the Department. The electronic data must be submitted to the Air Monitoring Section as digital text files, or in another format as approved or requested by the Department, readable by an office PC with a Windows operating system.

The narrative data hard copy summary must be submitted to the Air Compliance Section and shall include:

- a. A hard copy of the individual data points;
 - c. The quarterly and monthly means for PM₁₀, wind speed and metals;
 - d. The first and second highest 24-hour concentrations for PM₁₀ and metals;
 - e. The quarterly and monthly wind roses;
 - f. A summary of the data collection efficiency;
 - g. A summary of the reasons for missing data;
 - h. A precision and accuracy (audit) summary;
 - i. A summary of any ambient air standard exceedances; and
 - j. Q/A-Q/C information such as zero/span/precision, calibration, audit forms, and standards information.
10. The annual data report shall consist of a narrative data summary containing:
- a. A topographic map of appropriate scale with UTM coordinates and a true north arrow showing the air monitoring site locations in relation to the mine, the facilities and the general area;
 - b. A pollution trend analysis;
 - c. The annual means for PM₁₀, wind speed and metals;
 - d. The first and second highest 24-hour concentrations for PM₁₀ and metals;
 - e. The annual wind rose;
 - f. An annual summary of data collection efficiency;

- g. An annual summary of precision and accuracy (audit) data;
 - h. An annual summary of any ambient standard exceedance; and
 - i. Recommendations for future monitoring.
11. All records compiled in accordance with this Attachment must be maintained by Genesis Troy 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 the Department, and must be submitted to the Department upon request (ARM 17.8.749).
 12. The Department may audit, or may require Genesis Troy to contract with an independent firm to audit, the air monitoring network, the laboratory performing associated analyses, and any data handling procedures at unspecified times. On the basis of the audits and subsequent reports, the Department may recommend or require changes in the air monitoring network and associated activities in order to improve precision, accuracy and data completeness.
 13. The hard copy reports should be sent to:

Department of Environmental Quality
Attention: Air Compliance Section Supervisor
 14. The electronic data from the quarterly monitoring shall be sent to:

Department of Environmental Quality
Attention: Air Monitoring Section Supervisor

ATTACHMENT 2

AMBIENT AIR MONITORING PLAN

Genesis Inc. – Troy Mine

MAQP #1690-02

1. This ambient air-monitoring plan is required by MAQP #1690-02, which applies to the Genesis Troy mine located at Section 26, Township 29 North, Range 34 West in Lincoln County, Montana. The Department may modify the requirements of this monitoring plan. All requirements of this plan are considered conditions of the permit.
2. The requirements of this attachment shall take effect upon final issuance of MAQP #1690-02, unless otherwise approved in writing by the Department.
3. Genesis Troy shall install, operate, and maintain, as described in the Final Air Monitoring and Tailings Sampling Strategy published October 1, 2009 (AMTSS), one alternating current MetOne e-BAM to measure PM₁₀ and one MetOne EX034 wind speed monitor and one wind direction sensor mounted on an EX-905 tripod at a height of 10 feet (or equivalent monitoring and wind speed and direction equipment, as determined acceptable in writing by the Department).
4. The exact location of the monitoring site must be approved by the Department. The initial location shall be the location described by the AMTSS. Within 30 days after issuance of MAQP #1690-02, Genesis Troy shall submit a topographic map to the Department identifying exact Universal Transverse Mercator (UTM) coordinates, air monitoring site location in relation to the facility, and the general area present.
5. Genesis Troy shall ensure access to the particulate monitor data via a telephone system is maintained at all times for the Air Monitoring Section of the Department.
6. Genesis Troy shall not change the location of the monitoring, wind speed, and wind direction equipment without prior written approval from the Department. A change to the location of the monitoring site must be approved by the Department and meet all the siting requirements contained in the Montana Quality Assurance Manual, including revisions, the EPA Quality Assurance Manual, including revisions, and 40 Code of Federal Regulations (CFR) Part 58, or any other requirements specified by the Department. Genesis Troy shall submit, at least 30 days prior to any proposed changes of the location of the ambient monitors, a topographic map to the Department identifying proposed UTM coordinates, air monitoring site location in relation to the facility, and the general area present.
7. Genesis Troy shall continue air monitoring for at least 2 years after final issuance of MAQP #1690-02. The Department will review air monitoring data and the Department will determine if continued monitoring or additional monitoring is warranted. The Department may require continued air monitoring to track long-term impacts of emissions from the facility or require additional ambient air monitoring or analyses if any changes take place in regard to quality and/or quantity of emissions or the area of impact from the emissions.
8. Genesis Troy, in conjunction with the Department, shall sample and have analyzed, tailings material in the size range most likely to become airborne. Sampling and analysis shall be as described in the AMTSS. The Department may require further testing.
9. Genesis Troy shall monitor the following parameters at the site and frequencies described below:

Location	Site	Parameter	Frequency
As described in the AMTSS	Site #3	PM ₁₀ ¹	Continuous
		Wind Direction	
		Wind Velocity	
	Tailings Impoundment: Cell #1, #3, #4	Pb, Cu, Ag, Sb, As, Ba, Be, Cd, Cr, Hg, Ni, Se, Tl, Zn, Asbestos ²	As described in the AMTSS

1. PM₁₀ = particulate matter with an aerodynamic diameter of 10 microns or less

2. Pb = lead, Cu = copper, Ag = silver, Sb = antimony, As = arsenic, Ba = barium, Be = beryllium, Cd = cadmium, Cr = chromium, Hg = mercury, Ni = nickel, Se = selenium, Tl = thallium, Zn = zinc

10. Data recovery for all parameters shall be at least 80% computed on a quarterly and annual basis. The Department may require continued monitoring if this condition is not met.
11. Any ambient air monitoring plan changes proposed by Genesis Troy must be approved, in writing, by the Department.
12. Genesis-Troy shall utilize air monitoring and Quality Assurance (QA) procedures that are equal to or exceed the requirements described in the Montana Quality Assurance Manual, including revisions, the EPA Quality Assurance Manual, including revisions, 40 CFR Parts 50 and 58 of the Code of Federal Regulations, the AMTSS, and any other requirements specified by the Department.
13. Genesis Troy shall notify the Air Compliance Section of the Department via telephone or e-mail within 72 hours of the occurrence of a one-hour average reading of wind speed of 10 miles per hour or greater. The Department may modify, in writing, the conditions requiring this notification. Email notifications shall be directed to the Department's Air Compliance Officer assigned to the site.
14. Genesis Troy shall download and submit to the Department, via emailed attachment as an Excel spreadsheet (or equivalent); the following data obtained using MetOne Air Plus or equivalent software:
 - a. Wind speed
 - b. Wind direction
 - c. Hourly average PM₁₀ concentration values

The data report shall be submitted to the Department on an every two week interval.

15. Genesis Troy shall submit two hard copies of quarterly data reports within 30 days after the end of the calendar quarter. The hard copy data reports shall include wind speed, wind direction, standard deviation of the horizontal wind direction, ambient temperature, flow rate, and PM₁₀ hourly concentration data, as well as copies of all quality control check forms and standards certificates.
16. All records compiled in accordance with this Attachment must be maintained by Genesis Troy 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 the Department, and must be submitted to the Department upon request (ARM 17.8.749).

17. The Department may audit (or may require Genesis Troy to contract with an independent firm to audit) the air monitoring network, the laboratory performing associated analyses, and any data handling procedures at unspecified times. The Department intends to conduct the required quarterly audits, including reviewing all quality control; checking data; conducting a cursory review of the meteorological sensors, and auditing the e-bam once every quarter.
18. The hard copy reports should be sent to:
 - a. Department of Environmental Quality
Attention: Air Compliance Section Supervisor
 - b. Department of Environmental Quality
Attention: Air Monitoring Section Supervisor
19. The electronic data report required by 14. above shall be sent via email to:
 - a. The Air Monitoring Section Supervisor
 - b. The Air Resources Compliance Officer assigned to this site

Montana Air Quality Permit (MAQP) Analysis
Genesis Inc. – Troy Mine
MAQP #1690-02

I. Introduction/Process Description

Genesis, Inc – Troy Mine (Genesis Troy) operates a silver mine at Section 26, Township 29 North, Range 34 West in Lincoln, Montana.

A. Permitted Equipment

Genesis Troy operates an underground silver mine. Equipment under this permit is described in the Permit History, Section I.C., of this Permit Analysis.

B. Source Description

Genesis Troy mines ore from an underground silver mine, mills the ore, concentrates the ore at the site, and then transports the concentrate to Libby for shipment to a smelter in Canada.

C. Permit History

On May 16, 1979, **MAQP #1316** was issued to Asarco, Inc. for a secondary crushing plant with five baghouses.

On August 25, 1980, **MAQP #1446** was issued to Asarco, Inc. for the operation of a gravel crusher.

On June 15, 1982, **MAQP #1690** was issued to Asarco, Inc. for a high efficiency wet scrubbing system (Ducon Dynamic Scrubber type UW-4, model IV-HE) to control emissions from the secondary crusher area.

On January 27, 1992, **MAQP #1316-01** was issued to Asarco, Inc. which modified MAQP #1316 for the underground mine and milling operations.

ASARCO, Inc. requested that the Troy mine permits be transferred to Genesis, Inc. ASARCO, Inc. held three active permits for the Troy mine: MAQP #1690 was for the operation of a high efficiency wet scrubbing system; MAQP #1446 was for a gravel crusher; and MAQP #1316-01 was for the operation of the underground mine and mill and the operation of the air quality monitoring system. The permits were combined, but the conditions remained the same. **MAQP #1690-01** replaced **MAQP #1690, #1446, and #1316-01.**

D. Current Permit Action

The Department of Environmental Quality – Air Resources Management Bureau (Department), in response to multiple documented complaints of fugitive dust emissions from the Genesis Troy mine, has required the installation, operation, and maintenance of a continuous particulate monitor, wind speed sensor, and wind direction sensor north of Genesis Troy's tailings impoundment. The Department developed an Air Monitoring and Tailings Sampling Strategy and published the plan for public comment on September 3, 2009. The public comment period, scheduled to end September 14, 2009, was extended upon request by the public to September 21, 2009. All comments received are on file with the Department. On October 1, 2009, the Final Air Monitoring and Tailings Sampling Strategy was published. Genesis has since installed the required equipment at an agreed location.

The current permit action references the Monitoring and Tailings Sampling Strategy as a part of the permit requirements for this site as Attachment 2 and updates Section II.A.5 of the MAQP to include this attachment. All other conditions and limitations remain the same, with the permit format updated to that currently used by the Department, including an update of rule references. Attachment 1, containing monitoring requirements after closure of the mine and during reclamation, remains. As discussed above, this action includes a monitoring plan for which a public comment period was provided. Inclusion of that monitoring plan in the MAQP was required by the Department. This action is considered an administrative action. **MAQP #1690-02** replaces MAQP #1690-01.

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 Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department 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. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, 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 the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, 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).

Genesis Troy 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 the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department 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. ARM 17.8.111 Circumvention. (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. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
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 PM₁₀
11. ARM 17.8.230 Fluoride in Forage

Genesis Troy must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. 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.
2. ARM 17.8.308 Particulate Matter, Airborne. 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.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. 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 any NSPS subpart defined in 40 CFR Part 60.
8. ARM 17.8.341 Emission Standards for Hazardous Air Pollutants. This source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. 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 the Department. A permit fee is not required for the current permit action because it is considered an administrative permit change
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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. The Department 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 prorate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. 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 tons per year of any pollutant. Genesis - Troy has a PTE greater than 25 tons per year of particulate matter; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application is not required for the current permit action because it is considered an administrative permit change. (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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department 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. ARM 17.8.752 Emission Control Requirements. 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. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Genesis Troy 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. ARM 17.8.762 Duration of Permit. 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.
 11. ARM 17.8.763 Revocation of Permit. 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).
 12. ARM 17.8.764 Administrative Amendment to Permit. 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.
 13. ARM 17.8.765 Transfer of Permit. 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 the Department.
- F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. 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 this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

III. BACT Determination

A BACT determination is required for each new or modified source. Genesis Troy 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.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

IV. Emission Inventory

Any emission inventories completed for the source are on file with the Department.

V. Existing Air Quality

The current permit action is an administrative change and does not change limitations or conditions which affect allowed emissions. The current permit action requires the source to adhere to the Final Air Monitoring and Tailings Sampling Strategy, for which the purpose is, in part, to further determine the existing air quality in the immediate area.

VI. Ambient Air Impact Analysis

The current permit action is an administrative action and does not change limitations or conditions which affect allowed emissions.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	XX	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

VIII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

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