DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL MINOR PERMIT

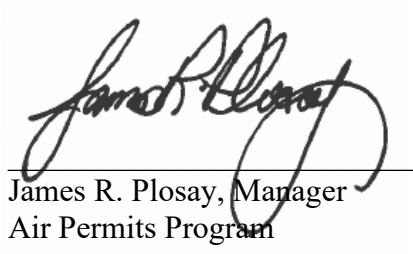
Minor Permit: **AQ1616MSS01** **Preliminary Date – May 18, 2022**

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ1616MSS01 to the Permittee listed below.

Permittee:	**Peak Gold, LLC** P.O. Box 73726 Fairbanks, AK 99707-3726
Stationary Source:	**Manh Choh Project**
Location:	Latitude: 63.186581 N; Longitude: -142.889417 W
Project:	Rock Crusher
Permit Contact:	Bartly Kleven, (907) 490-2207, bartly.kleven@kinross.com

The Permittee submitted an application for Minor Permit AQ1616MSS01 under 18 AAC 50.502(b)(3) for construction, operation, or relocation of a stationary source containing a rock crusher with a rated capacity of at least five tons per hour.

This permit satisfies the obligation of the Permittee to obtain a minor permit under 18 AAC 50. As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this permit.



James R. Plosay, Manager
Air Permits Program

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Table of Contents

Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AOS .....Air Online Services
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
BACT .....best available control technology
bhp .....brake horsepower
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
C.F.R. .....Code of Federal Regulations
CAA.....Clean Air Act
CO .....carbon monoxide
Department .....Alaska Department of Environmental Conservation
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
gph .....gallons per hour
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
hp .....horsepower
ID.....emissions unit identification number
kPa .....kiloPascals
LAER.....lowest achievable emission rate
MACT .....maximum achievable control technology [as defined in 40 C.F.R. 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MR&R .....monitoring, recordkeeping, and reporting
NESHAPs.....National Emission Standards for Hazardous Air Pollutants [as contained in 40 C.F.R. 61 and 63]
NOx .....nitrogen oxides
NRE.....nonroad engine
NSPS .....New Source Performance Standards [as contained in 40 C.F.R. 60]
O & M .....operation and maintenance
O_2.....oxygen
PAL .....plantwide applicability limitation
PM-10.....particulate matter less than or equal to a nominal 10 microns in diameter
PM-2.5.....particulate matter less than or equal to a nominal 2.5 microns in diameter
ppm .....parts per million
ppmv, ppmvd.....parts per million by volume on a dry basis
psia .....pounds per square inch (absolute)
PSD .....prevention of significant deterioration
PTE.....potential to emit
SIC.....Standard Industrial Classification
SIP .....State Implementation Plan
SPC.....Standard Permit Condition or Standard Operating Permit Condition
SO_2 .....sulfur dioxide
The Act.....Clean Air Act
TPH .....tons per hour
tpy.....tons per year
VOC .....volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
VOL.....volatile organic liquid [as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent
wt%S_{fuel} .....weight percent of sulfur in fuel

Section 1 Emissions Unit Inventory

Emissions Unit (EU) Authorization. The Permittee is authorized to install and operate the EUs listed in Table 1 in accordance with the minor permit application and the terms and conditions of this permit. The information in Table 1 is for identification purposes only, unless otherwise noted in the permit. The specific EU descriptions do not restrict the Permittee from replacing an EU identified in Table 1.

Table 1 – EU Inventory

EU #	EU Description	Make/Model	Classification	Fuel	Rating/Max Capacity	Installation Date
1	Jaw Crusher	Metso Urban LT106 or Similar	Portable	N/A	235 tons/hr	TBD
2	Conveyor Transfer Point No. 1		Portable	N/A	235 tons/hr	TBD
3	Conveyor Transfer Point No. 2		Portable	N/A	235 tons/hr	TBD
4	Mobile Crusher Engine		NRE	ULSD	225 bkW	TBD
5	Mine Site Generator Engine No. 1	Caterpillar C18	Stationary	ULSD	560 bkW	TBD
6	Mine Site Generator Engine No. 2	Caterpillar C18	Stationary	ULSD	560 bkW	TBD
7	Mine Site Generator Engine No. 3	Caterpillar C18	Stationary	ULSD	560 bkW	TBD
8	Ore Loadout Facility Primary Generator Engine	John Deere 6090HF484B	Stationary	ULSD	287 bkW	TBD
9	Explosives Storage Pad Generator Engine	KDI 3404T	Stationary	ULSD	70 bkW	TBD
10	Mine Drill Maintenance Boiler	Burnham V907A	Stationary	Diesel	1.3 MMBtu/hr	TBD
11	Ore Loadout Facility Highway Truck Thaw Shed Boiler	Burnham V906A	Stationary	Diesel	1.1 MMBtu/hr	TBD
12	Warehouse/Maintenance Boiler No. 1	Burnham V911A	Stationary	Diesel	2.3 MMBtu/hr	TBD
13	Warehouse/Maintenance Boiler No. 2	Burnham V911A	Stationary	Diesel	2.3 MMBtu/hr	TBD
14	Emulsion Truck Boiler	Burnham V906A	Stationary	Diesel	1.1 MMBtu/hr	TBD
15	Wash Bay Boiler	Burnham V908A	Stationary	Diesel	1.5 MMBtu/hr	TBD
16	Ore Loadout Facility Highway Truck Maintenance Boiler	Burnham V906A	Stationary	Diesel	1.1 MMBtu/hr	TBD
17	Mine Site Fuel Tank No. 1	--	Stationary	--	20,000 gallons	TBD
18	Mine Site Fuel Tank No. 2	--	Stationary	--	20,000 gallons	TBD
19	Mine Site Fuel Tank No. 3	--	Stationary	--	20,000 gallons	TBD
20	Ore Loadout Facility Fuel Tank No. 1	--	Stationary	--	20,000 gallons	TBD
21	Ore Loadout Facility Fuel Tank No. 2	--	Stationary	--	20,000 gallons	TBD

EU #	EU Description	Make/Model	Classification	Fuel	Rating/Max Capacity	Installation Date
22	Ore Loadout Facility Fuel Tank No. 3	--	Stationary	--	20,000 gallons	TBD
23	Gasoline Storage Tank	--	Stationary	--	5,000 gallons	TBD
Nonroad Engines (NREs)						
101	Water Management Pump No. 1	MultiQuip MQ62K	NRE	ULSD	24 hp	TBD
102	Water Management Pump No. 2	MultiQuip MQ62K	NRE	ULSD	24 hp	TBD
103	Water Management Pump No. 3	MultiQuip MQ62K	NRE	ULSD	24 hp	TBD
104	Water Management Pump/Pit Dewatering No. 1	BBA BA80H	NRE	ULSD	75 hp	TBD
105	Water Management Pump/Pit Dewatering No. 2	BBA BA80H	NRE	ULSD	75 hp	TBD
106	Water Management Pump/Pit Dewatering No.3	BBA BA80H	NRE	ULSD	75 hp	TBD
107	Blasthole Drill No. 1	DM45 Epiroc	NRE	ULSD	530 hp	TBD
108	Blasthole Drill No. 2	DM45 Epiroc	NRE	ULSD	530 hp	TBD
109	Blasthole Drill No. 3	DM45 Epiroc	NRE	ULSD	530 hp	TBD
110	Pre-Split Drill	DM65 Pre-Split	NRE	ULSD	540 hp	TBD
Fugitive Sources						
201	Truck Unloading Mobile Crusher	N/A	Fugitive	N/A	235 ton/hr	TBD
202	Truck Loading Mobile Crusher	N/A	Fugitive	N/A	235 ton/hr	TBD
203	Unpaved Roads	N/A	Fugitive	N/A	N/A	TBD
204	Wind Erosion	N/A	Fugitive	N/A	N/A	TBD
205	Truck Loading Mine Site	N/A	Fugitive	N/A	3,900 ton/day	TBD
206	Truck Unloading Ore Loadout Facility	N/A	Fugitive	N/A	3,900 ton/day	TBD
207	Truck Loading Ore Loadout Facility	N/A	Fugitive	N/A	3,900 ton/day	TBD
208	Bulldozing Mine Pit	N/A	Fugitive	N/A	N/A	TBD
209	Bulldozing Ore Loadout Facility	N/A	Fugitive	N/A	N/A	TBD
210	Blasting	N/A	Fugitive	N/A	18,000 ft^2/blast	TBD
211	Drilling	N/A	Fugitive	N/A	210 holes/blast	TBD

1. The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement EU, including any applicable minor or construction permit requirements**.**

2. **Verification of Equipment Specifications and Maintenance of Equipment.** The Permittee shall install and maintain the equipment listed in Table 1 according to the manufacturer's or operator's maintenance procedures. Keep a copy of the manufacturer's or operator's maintenance procedure onsite and make records available to the Department personnel upon request. The records may be kept in electronic format.

Section 2 Fee Requirements

3. **Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-403.

4. **Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of the stationary source's:

   4.1 potential to emit of 301 TPY; or

   4.2 projected annual rate of emissions, in TPY, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from one or more of the following methods:

      a. an enforceable test method described in 18 AAC 50.220;

      b. material balance calculations;

      c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

      d. other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

5. **Assessable Emission Estimates.** The Permittee shall comply as follows:

   5.1 No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 4.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

   5.2 The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

   5.3 If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero TPY and provides estimates for when construction or operation will commence.

5.4 If no estimate or waiver letter is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 4.1.

6. **Annual Compliance Fee.** For a stationary source not classified as needing a Title V permit, the Permittee shall pay an annual compliance fee as set out in 18 AAC 50.400(d), to be paid for each period from July 1 through the following June 30.

Section 3 State Emission Standards

7. **Visible Emissions for Industrial Process and Fuel-Burning Equipment.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EUs 5 through 16 to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

8. **Particulate Matter for Industrial Process and Fuel-Burning Equipment.** The Permittee shall not cause or allow particulate matter emitted from EUs 5 through 16 to exceed 0.05 grains per dry standard cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

9. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EUs 5 through 16, to exceed 500 parts per million (ppm) averaged over three hours.

State Emission Standards for Rock Crusher

10. **Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EUs 1 through 3 to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

    10.1 **Monitoring for Rock Crusher.** The Permittee shall identify emission points capable of producing fugitive emissions and use the point with the highest continuous opacity for monitoring fugitive emissions from EUs 1 through 3.

        a. Observe the exhaust for visible emissions in accordance with 40 C.F.R. 60, Appendix A, Method 9 for 18 minutes to obtain 72 consecutive 15-second observations, and as follows:

            (i) Select an observe position at least 15 feet from the emission unit.

            (ii) When possible, select an observer position that minimizes interference from other fugitive emissions sources while maintaining the observer position relative to the sun, as required by Method 9.

            (iii) If water mist is present, make the observation at a point in the plume where the mist is no longer visible.

        b. Conduct observations at a load typical of the maximum operation during the reporting period described in Condition 19.

        c. Conduct the observations:

            (i) within two days of initial startup;

            (ii) within two days after startup at each new location; and

            (iii) at least once in every 30 days of operation.

    10.2 Include results of all visible emissions observations conducted under Condition 10.1 in the operating report required by Condition 19.

    10.3 Report in accordance with Condition 18 if the limit in Condition 10 is exceeded or the requirements of Conditions 10.1 and 10.2 are not met.

11. **Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from EUs 1 through 3 to exceed 0.05 grains per dry standard cubic food of exhaust gas corrected to standard conditions and averaged over three hours.

Fugitive Dust Control Requirements

12. **Fugitive Dust.** The Permittee shall take reasonable precautions to prevent the release of airborne particulate matter and fugitive dust from rock crusher operations.

    12.1 Reasonable precautions for rock crushers to prevent particulate matter from becoming airborne include, but are not limited to:

        a. clean-up of loose material on work surfaces; and

        b. minimizing drop distances on conveyor systems and lowering loader buckets to be in contact with the surface of the soil or ground before dumping.

    12.2 Unless utilizing a baghouse (i.e., dust collector) on the crusher, the Permittee shall only crush material that is wet and shall ensure compliance by:

        a. wetting materials using one or more of the following:

            (i) naturally occurring conditions such as precipitation;

            (ii) spraying with water prior to being fed into the crusher; or

            (iii) installation and use of built in spray nozzles; and

        b. applying enough water to minimize any dust seen during rock crushing operations.

    12.3 During the material transfer to storage piles, when visiual observations indicate the presence of fugitive dust, the Permittee shall use watering and/or chemical wetting agents[1] to control fugitive dust. These activities include;

        a. loading of aggregate onto storage piles (batch or continuous drop operation);

        b. equipment traffic in storage area;

        c. wind erosion of pile surfaces and ground areas around piles; and

        d. loadout of aggregate for shipment or for return to the process stream (batch or continuous drop operation).

    12.4 Monitor using visual observations to ensure that dust is continuously controlled (e.g. apply water if rock crusher operations are generating dust).

    12.5 Report in each operating report required by Condition 19, a statement that reasonable precautions and mitigative actions were implemented for the rock crusher and storage piles to prevent the release of airborne particulate matter and fugitive dust.

    12.6 Report in accordance with Condition 18 if any of the requirements of Conditions 12.1 through 12.5 were not met.

[1] Application of water and/or chemical wetting agents shall not be required when freezing conditions exist.

Section 4 Ambient Air Quality Protection

13. The Permittee shall not operate EUs 1 through 4 within 400 feet of the nearest occupied structure off the work site.

Section 5 Recordkeeping, Reporting, and Certification Requirements

14. **Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

    14.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature

        a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and

        b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.

15. **Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.

    15.1 Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/.

16. **Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the Federal Administrator.

17. **Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

    17.1 Copies of all reports and certifications submitted pursuant to this section of the permit; and

    17.2 Records of all monitoring required by this permit, and information about the monitoring including

        a. the date, place, and time of sampling or measurements;

b. the date(s) analyses were performed;

c. the company or entity that performed the analyses;

d. the analytical techniques or methods used;

e. the results of such analyses; and,

f. the operating conditions as existing at the time of sampling or measurement.

18. **Excess Emissions and Permit Deviation Reports.** The Permittee shall report excess emissions and permit deviations as follows:

18.1 **Excess Emissions Reporting.** Except as provided in Condition 21, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit as follows:

a. In accordance with 18 AAC 50.240(c), as soon as possible, report

(i) excess emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable.

b. In accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology-based emission standard.

c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 18.1d.

d. Report all other excess emissions not described in Conditions 18.1a, 18.1b, and 18.1c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 19 for excess emissions that occurred during the period covered by the report, whichever is sooner.

(i) If requested by the Department, the Permittee shall provide a more detailed written report to follow up on an excess emissions report.

18.2 **Permit Deviations Reporting.** For permit deviations that are not "excess emissions," as defined under 18 AAC 50.990:

a. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 19 for permit deviations that occurred during the period covered by the report, whichever is sooner.

18.3 **Notification Form.** When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option, or, if the Permittee prefers, the form contained in Attachment 2 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

19. **Operating Reports.** The Permittee shall submit to the Department an operating report in accordance with Conditions 14 and 15 by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year. The report shall be submitted under a cover letter certified in accordance with Condition 14.

19.1 The operating report must include all information required to be in operating reports by other conditions of this permit, for the period covered by the report.

19.2 When excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 19.1, the Permittee shall identify

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

d. a description of the excess emissions or permit deviation; and

e. any corrective action or preventative measures taken and the date of such actions; or

19.1 When excess emissions or permit deviations have already been reported under Condition 18 the Permittee shall cite the date or dates of those reports.

20. **Annual Affirmation.** The Permittee shall submit to the Department by March 31 of each year an affirmation certified according to Condition 14 of whether the stationary source is still accurately described by the application and this permit, and whether any changes have been made to the stationary source that would trigger the requirement for a new permit under 18 AAC 50.

21. **Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

21.1 **Monitoring.** The Permittee shall monitor as follows:

a. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 21.

b. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 21; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 21.

21.2 **Recordkeeping.** The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 21; and

d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

21.3 **Reporting.** The Permittee shall report as follows:

a. With each stationary source operating report under Condition 19, the Permittee shall include a brief summary report which must include the following for the period covered by the report:

(i) the number of complaints received;

(ii) the number of times the Permittee or the Department found corrective action necessary;

(iii) the number of times action was taken on a complaint within 24 hours; and

(iv) the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

b. The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 18.

Section 6 Standard Permit Conditions

22. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

    22.1 an enforcement action; or

    22.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.

23. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

24. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

25. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

26. The permit does not convey any property rights of any sort, nor any exclusive privilege.

27. The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

    27.1 enter upon the premises where an emissions unit subject to this permit is located or where records required by the permit are kept;

    27.2 have access to and copy any records required by this permit;

    27.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

    27.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

Section 7 Permit Documentation

Date	Document Details
December 31, 2021	Application Received

Attachment 1 – Visible Emissions Form

VISIBLE EMISSION OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources." Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under additional information. Following are brief descriptions of the type of information that needs to be entered on the form: for a more detailed discussion of each part of the form, refer to "Instructions for Use of Visible Emission Observation Form."

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where VE observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clineometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, is Plume…: check "attached" if water droplet plume forms prior to exiting stack, and "detached" if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.
- Wet Bulb Temperature: can be measured using a sling psychrometer
- RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.
- Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.
- Sun's Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen's shadow crosses the observer's position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.
- Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.
- Range of Opacity: note highest and lowest opacity number.
- Observer's Name: print in full.
- Observer's Signature, Date: sign and date after performing VE observation.
- Organization: observer's employer.
- Certified By, Date: name of "smoke school" certifying observer and date of most recent certification.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM

Page No.

Stationary Source Name	Type of Emission Unit	
Emission Unit Location		
City	State	Zip
Phone # (Key Contact)	Stationary Source ID Number	
Process Equipment	Operating Mode	
Control Equipment	Operating Mode	
Describe Emission Point/Location		
Height above ground level	Height relative to observer	Clinometer Reading
Distance From Observer Start / End	Direction From Observer Start / End	
Describe Emissions & Color Start	End	
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read: No / Yes		
Point in Plume at Which Opacity Was Determined		
Describe Plume Background Start / End	Background Color Start / End	
Sky Conditions: Start	End	
Wind Speed Start / End	Wind Direction From Start / End	
Ambient Temperature	Wet Bulb Temp	RH percent

SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From
3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks

Observation Date	Start Time	End Time

Min \ Sec	0	15	30	45	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Range of Opacity	
Minimum	Maximum
I have received a copy of these opacity observations	Print Observer's Name
Print Name:	
Signature:	Observer's Signature / Date
	Observer's Affiliation:
Title / Date	Certifying Organization
	Certified By: / Date

Data Reduction:

Duration of Observation Period (minutes):	Duration Required by Permit (minutes):
Number of Observations:	Highest Six–Minute Average Opacity (%):
Number of Observations exceeding 20%:	
In compliance with six-minute opacity limit? (Yes or No)	Highest 18-Consecutive –Minute Average Opacity (%)(engines and turbines only)

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

Attachment 2 - ADEC Notification Form

Excess Emissions and Permit Deviation Reporting
State of Alaska Department of Environmental Conservation
Division of Air Quality

Manh Choh Project	AQ1616MSS01
Stationary Source Name	**Air Quality Permit**
Peak Gold, LLC	
Company Name	**Date**

When did you discover the Excess Emissions/Permit Deviation?

Date: _____ / _____ / _____ Time: _____ :/ _____

When did the event/deviation?

Begin Date: _____ / _____ / _____ Time: _____ : _____ (Use 24-hr clock.)

End Date _____ / _____ / _____ Time: _____ : _____ (Use 24-hr clock.)

What was the duration of the event/deviation? ____ : ____ (hrs:min) or _____ days

(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for notification: (please check only 1 box and go to the corresponding section)

☐ Excess Emissions Complete Section 1 and Certify

☐ Deviation from permit conditions complete Section 2 and certify

☐ Deviation from COBC, CO, or Settlement Agreement Complete Section 2 and certify

Section 1. Excess Emissions

(a) **Was the exceedance** ☐ Intermittent or ☐ Continuous

(b) **Cause of Event (Check one that applies):**

☐ Start Up/Shut Down ☐ Natural Cause (weather/earthquake/flood)

☐ Control Equipment Failure ☐ Scheduled Maintenance/Equipment Adjustments

☐ Bad fuel/coal/gas ☐ Upset Condition ☐ Other

(c) **Description**

Describe briefly, what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) **Emission unit(s) Involved:**

Identify the emission units involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

EU ID	EU Name	Permit Condition Exceeded/Limit/Potential Exceedance

(e) **Type of Incident** (please check only one):

☐ Opacity % ☐ Venting (gas/scf) ☐ Control Equipment Down
☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Record Keeping Failure
☐ Marine Vessel Opacity ☐ Failure to monitor/report ☐ Flaring
☐ Other:

(f) **Unavoidable Emissions:**

Do you intend to assert that these excess emissions were unavoidable? ☐ YES ☐ NO
Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐ YES ☐ NO

Certify Report (go to end of form)

Section 2. Permit Deviations

(a) **Permit Deviation Type** (check only one box corresponding with the section in the permit)

☐ Emission Unit Specific
☐ General Source Test/Monitoring Requirements
☐ Recordkeeping/Reporting/Compliance Certification
☐ Standard Conditions Not Included in Permit
☐ Generally Applicable Requirements
☐ Reporting/Monitoring for Diesel Engines
☐ Insignificant Emission Unit
☐ Stationary Source-Wide
☐ Other Section: (title of section and section # of your permit)

(b) **Emission unit(s) Involved:**

Identify the emission unit involved in the event, using the same identification number and name as in the permit. List the corresponding Permit condition and the deviation.

EU ID	Emission Unit Name	Permit Condition /Potential Deviation

(c) **Description of Potential Deviation:**

Describe briefly, what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) **Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j)*

To submit this report:

1. Department's Air Online Services using the Permittee Portal option:
   http://dec.alaska.gov/applications/air/airtoolsweb
   If submitted online, report must be submitted by an authorized E-Signer for the stationary source.

Or

2. Fax to: 907-451-2187

Or

3. Email to: DEC.AQ.Airreports@alaska.gov

Or

4. Mail to: ADEC
   Air Permits Program
   610 University Avenue
   Fairbanks, AK 99709-3643

Or

5. Phone Notifications: 907-451-5173
   Phone notifications require a written follow-up report.