DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL MINOR/CONSTRUCTION PERMIT

Minor Permit: AQ1616MSS02 **Preliminary Date – February 4, 2025**
Revises: AQ1616MSS01 Revision 1

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ1616MSS02 to the Permittee listed below.

Permittee:	**Peak Gold, LLC** P.O. Box 73726 Fairbanks, AK 99707-3726
Stationary Source:	**Manh Choh Project**
Location:	63.186581 N, -142.889417 W
Project:	Owner Requested Limit for EU ID 7
Permit Contact:	Bartly Kleven, (907)490-2207, Bartly.Kleven@kinross.com

The Permittee submitted an application for Minor Permit AQ1616MSS02 under 18 AAC 50.508(5) for an Owner Requested Limit (ORL) to avoid a minor permit under 18 AAC 50.502(c)(4)(A)(iii) for oxides of nitrogen (NO_X) as an existing stationary source with emissions less than or equal to those listed in 18 AAC 50.502(c)(1).

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.

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James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAAQS .....Alaska Ambient Air Quality Standards
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
kWe .....Kilowatt-electric
lb/kW-hr .....pounds per kilowatt-hour.
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
N/A .....Not Applicable
NESHAPs.....National Emission Standards for Hazardous Air Pollutants [as contained in 40 C.F.R. 61 and 63]
NO_X .....nitrogen oxides
NRE.....nonroad engine
NSPS .....New Source Performance Standards [as contained in 40 C.F.R. 60]
O & M .....operation and maintenance
ORL.....Owner Requested Limit
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 operate the EUs listed in Table 1 in accordance with 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[1]

EU ID	EU Description	Make/Model	Fuel	Rating/Max Capacity	Installation Date
Mobile Crusher					
1	Mobile Crusher	Metso Urban LT106 or Similar	N/A	235 tons/hr	N/A
2	Mobile Crusher Conveyor Transfer Point		N/A	235 tons/hr	N/A
3	Mobile Crusher Conveyor Transfer Point		N/A	235 tons/hr	N/A
4	Mobile Crusher Engine		ULSD	225 bkW	N/A
Stationary Units					
5	Mine Site Generator Engine No. 1	Caterpillar C18 – Tier 4	ULSD	779 bhp	9/2023
6	Mine Site Generator Engine No. 2	Caterpillar C18 – Tier 4	ULSD	779 bhp	9/2023
7[2]	Backup Mine Site Generator Engine No. 3	Caterpillar C15 – Tier 2	ULSD	693 bhp	2/2024
8	Ore Loadout Facility Primary Generator Engine	Shindaiwa DGK100 – Tier 4	ULSD	120 bkW	9/2023
17	Mine Infrastructure Pad Diesel Tank No. 1	N/A	N/A	20,000 gallons	12/2023
18	Mine Infrastructure Pad Diesel Tank No. 2	N/A	N/A	20,000 gallons	12/2023
19	Mine Infrastructure Pad Diesel Tank No. 3	N/A	N/A	20,000 gallons	12/2023
23	Mine Infrastructure Pad Gasoline Tank	N/A	N/A	5,000 gallons	12/2023
24	Mine Infrastructure Pad Diesel Tank No. 4	N/A	N/A	5,000 gallons	12/2023
25	Lab Downdraft Table (w/ pre-filter and HEPA filter)	N/A	N/A	4,300 cfm	6/2024
26	Warehouse Used Oil Furnace	Clean Burn CB-3500	Used Oil	350,000 Btu/hr	3/2024
27	Ambulance Bay Used Oil Furnace	Clean Burn CB-3500	Used Oil	350,000 Btu/hr	3/2024
Nonroad Engines (NREs)					
107	Mining Contractor Blasthole Drill No. 1	Epiroc Flexi/ROC D60 Rock Drill	ULSD	530 hp	N/A
108	Mining Contractor Blasthole Drill No. 2	Epiroc Flexi/ROC D60 Rock Drill	ULSD	530 hp	N/A
109	Mining Contractor Blasthole Drill No. 3	Epiroc Flexi/ROC D60 Rock Drill	ULSD	530 hp	N/A

EU ID	EU Description	Make/Model	Fuel	Rating/Max Capacity	Installation Date
Fugitive Sources					
201	Truck Unloading Mobile Crusher	N/A	N/A	500 tons/hr	N/A
202	Truck Loading Mobile Crusher	N/A	N/A	500 tons/hr	N/A
203	Unpaved Roads	N/A	N/A	N/A	N/A
204	Wind Erosion	N/A	N/A	N/A	N/A
205	Truck Loading Mine Site	N/A	N/A	3,900 tons/day	N/A
206	Truck Unloading Ore Loadout Facility	N/A	N/A	3,900 tons/day	N/A
207	Truck Loading Ore Loadout Facility	N/A	N/A	3,900 tons/day	N/A
208	Bulldozing Mine Pit	N/A	N/A	N/A	N/A
209	Bulldozing Ore Loadout Facility	N/A	N/A	N/A	N/A
210	Blasting	N/A	N/A	18,000 ft^2/blast	N/A
211	Drilling	N/A	N/A	210 holes/blast	N/A

Notes:

1) The existing emissions unit inventory shown above is from Minor Permit AQ1616MSS01 Revision 1 with the following updates: EU IDs 9 through 15, 20 through 22, 101 through 106, and 110 were not installed; EU IDs 24 through 27 were added EUs that did not trigger permitting; and EU ID 16 utilizes an electric heater.
2) EU ID 7 is an existing engine that is being reclassified within this permit action from emergency to backup to account for reliability issues with existing Tier 4 engines (EU IDs 5 and 6).

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**.**

Section 2 Fee Requirements

2. Conditions 3 through 6 of Minor Permit AQ1616MSS01 Revision 1 are rescinded and replaced by Conditions 3 through 6 of Minor Permit AQ1616MSS02.

3. **Fee Requirements.** The Permittee shall pay to the Department all assessed permit fees. Fee rates are set out in 18 AAC 50.400 – 499.

4. **Assessable Emissions**. For each period from July 1 through the following June 30, the Permittee shall pay to the Department annual emission fees 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. The quantity for which fees will be assessed is the lesser of the stationary source's

4.1 potential to emit of 539.09 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 no estimate 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 set out 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. Conditions 7 through 9 of Minor Permit AQ1616MSS01 Revision 1 are rescinded and replaced by Conditions 8 through 10 of Minor Permit AQ1616MSS02.

8. **Visible Emissions for Industrial Process and Fuel-Burning Equipment.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 5 through 8, 26, and 27 listed in in Table 1 to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

9. **Particulate Matter for Industrial Process and Fuel-Burning Equipment.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 5 through 8, 26, and 27 listed in in Table 1 to exceed 0.05 grains per dry standard cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

10. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 5 through 8, 26, and 27 listed in in Table 1 to exceed 500 parts per million (ppm) averaged over three hours.

Section 4 ORL to Avoid Permit Classifications

11. ORL to Avoid Minor Permitting under 18 AAC 50.502(c)(4) for NOx. The Permittee shall operate EU ID 7 for no more than 7,400 hours in any 12-consecutive month period.

11.1 Monitor, record, and report as follows:

a. Install, maintain, and operate a non-resettable hour meter on EU ID 7.

b. By the end of each calendar month, calculate and record the total hours of operation for EU ID 7 for the previous calendar month and for the previous 12-consecutive months.

c. Report in each operating report required by Condition 19 of Minor Permit AQ1616MSS01 Revision 1 for each month of the reporting period, the monthly and the 12-consecutive month total hours of operation for EU ID 7, as determined in Condition 11.1b.

d. Report as excess emissions and/or permit deviation as described in Condition 14 whenever the limit in Condition 11 is exceeded, or requirements of Conditions 11.1a through 11.1c are not met.

Section 5 Recordkeeping, Reporting, and Certification Requirements

12. 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 emissions 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.

12.1 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.

13. 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.

13.1 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/.

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

14.1 ***Excess Emissions Reporting.*** Except as provided in Condition 15, 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 after the event commenced or is discovered, 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 emissions 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 14.1d.

d. Report all other excess emissions not described in Conditions 14.1a, 14.1b, and 14.1c 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 of Minor Permit AQ1616MSS01 Revision 1 for excess emissions that occurred during the period covered by the report, whichever is sooner.

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

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2)]

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

a. Report all 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 of Minor Permit AQ1616MSS01 Revision 1 for permit deviations that occurred during the period covered by the report, whichever is sooner.

14.3 ***Reporting Instructions.*** When reporting either excess emissions or permit deviations, the Permittee shall report using the Department's online form for all such submittals, beginning no later than September 7, 2023. The form 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. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 8 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/.

15. Triennial Emission Inventory Reporting. Every third year by April 30, the Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH_3, NO_x, PM_{10}, $PM_{2.5}$, SO_2, VOC and lead (Pb) and lead compounds, as follows:

15.1 For reporting under Condition 15, the Permittee shall report the annual emissions and the required data elements under Condition 15.2 every third year for the previous calendar year as scheduled by the EPA.[1]

15.2 For each emissions unit and the stationary source, include in the report the required data elements[2] contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory.

15.3 Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/.

16. Consistency of Reporting Methodologies. Regardless of permit classification, as of September 7, 2022, all stationary sources operating in the state shall report actual emissions to the Department, either upon request or to meet individual permit requirements, in order for the state to meet federal reporting requirements under 40 C.F.R. Part 51, Subpart A.

16.1 For the purposes of reporting actual or assessable emissions required under Condition 15 and Condition 4.2, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

[1] The calendar years for which reports are required are based on the triennial reporting schedule in 40 C.F.R. 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2011, 2014, 2017, 2020, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years by April 30 of the following year (e.g., triennial emission inventory report for 2020 is due April 30, 2021, triennial emission inventory report for 2023 is due April 30, 2024, etc.).

[2] The required data elements to be reported to the EPA are outlined in 40 C.F.R. 51.15 and Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A.

Section 6 Standard Permit Conditions

17. 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

17.1 an enforcement action; or

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

18. 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.

19. 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.

20. 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.

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

22. 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

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

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

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

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

Section 7 Permit Documentation

Date	Document Details
September 26, 2024	Application Received
January 17, 2025	Pre-public Notice technical review comments received from Permittee
February 4, 2025	Preliminary Minor Permit AQ1616MSS02 sent for Public Notice

Section 8 Notification Form[3]

Manh Choh Project
Stationary Source Name

AQ1616MSS02
Air Quality Permit Number

Peak Gold, LLC
Company Name

When did you discover the Excess Emissions/Permit Deviation?

Date: ____/____/____ Time: ____:____

When did the event/deviation occur?

Begin: Date: ____/____/____ Time: ____:____ (please use 24-hr clock)

End: Date: ____/____/____ Time: ____:____ (please 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

Note: All "excess emissions" are also "permit deviations." However, use only Section 1 for events that involve excess emissions.

☐ Deviation from Permit Conditions - Complete Section 2 and Certify

Note: Use only Section 2 for permit deviations that do not involve excess emissions.

☐ Deviation from COBC[4], CO[5], or Settlement Agreement - Complete Section 2 and Certify

[3] Revised as of July 22, 2020.
[4] Compliance Order By Consent
[5] Compliance Order

Section 1. Excess Emissions

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

(b) **Cause of Event** (Check one that applies. Complete a separate form for each event, as applicable.):

☐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. Attach supporting information if necessary.

(d) **Emissions Units (EU) Involved:**

Identify the emissions 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 all that apply and provide the value requested, if any):

- ☐ Opacity _____%
- ☐ Control Equipment Down
- ☐ Emission Limit Exceeded
- ☐ Flaring
- ☐ Other**:** _____
- ☐ Venting _____(gas/scf)
- ☐ Fugitive Emissions
- ☐ Marine Vessel Opacity

(f) **Corrective Actions:**

Describe actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence. Attach supporting information if necessary.

(g) **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 (<u>go to end of form</u>)

Section 2. Permit Deviations

(a) **Permit Deviation Type:** (Check all boxes that apply per event. Complete a separate form for each event, as applicable.)

- ☐ Emissions Unit-Specific Requirements
- ☐ Stationary Source-Wide Specific Requirements
- ☐ Monitoring/Recordkeeping/Reporting Requirements
- ☐ General Source Test Requirements
- ☐ Compliance Certification Requirements
- ☐ Standard/Generally Applicable Requirements
- ☐ Insignificant Emissions Unit Requirements
- ☐ Other: _____

(b) **Emissions Units (EU) Involved:**

Identify the emissions units 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	EU 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. Attach supporting information if necessary.

(d) **Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence. Attach supporting information if necessary.

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). Read and sign the certification in the bottom of the form above. (See Condition 12.)*

Beginning September 7, 2023, Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at http://dec.alaska.gov/applications/air/airtoolsweb/.

This Notification Form may only be used to satisfy the reporting requirements if the Department has approved alternative reporting options in writing prior to submittal.

[18 AAC 50.346(b)(3)]