DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL MINOR GENERAL PERMIT

MINOR GENERAL PERMIT 9 FOR ROCK CRUSHERS

PERMIT NO. AQ____MG90_ Revision 3 Final – April 1, 2023

This minor general permit is to be used for the construction, operation, or relocation of the rock crusher described below, which has a rated capacity of at least five tons per hour, as described in 18 AAC 50.502(b)(3), that is also classified as, or is part of, a minor stationary source, but is not a Title-V stationary source. This minor general permit also satisfies 18 AAC 50.502(c) for rock crushers that include diesel engine(s). This minor general permit satisfies the Permittee's obligation to obtain a permit under AS 46.14.120(g). Technical support for permit conditions and explanation of revisions from the 2013 Minor General Permit 9 can be found in the Technical Analysis Report. This permit authorizes the Permittee to operate any emission unit identified in Table A at the same location. To operate emission units concurrently at two separate sites, please contact the Department or apply for a separate letter of MG9 permit authorization for the additional locations.

This minor general permit does not expire and is valid until the Alaska Department of Environmental Conservation (ADEC or Department) terminates, modifies, reopens, or revokes and reissues the permit. The letter of authorization is in effect until withdrawn, modified, revoked and reissued, or if the source no longer qualifies for this permit. The use of sample forms provided with this permit are not a reporting requirement, however, any independently developed form must contain all the reporting requirements listed within this permit.

_____
James R. Plosay, Manager
Air Permits Program

Application determined complete by:

_____ _____
Signature Authorization Date

_____
Printed Name

Table A – Facility Information

Permittee:		**Plant Name:**	
Emission Unit	**Make**	**Model**	**Rating/Capacity**
Diesel Engines:			
Rock Crushers:			
Aggregate Processing Equipment:	**Make**	**Model**	**Rating/Capacity**
Screening Operations:			
Belt Conveyors:			

Table B – Pre-Approved Operating Locations

Location Name	Site Description (Street Address or Mile Post)	Latitude/ Longitude (decimal degrees[2])
Storage or Maintenance Location[1]		
Operating Locations[3]		

1 – Rock crusher storage or maintenance location: special consideration given in Condition 2.3 for unexpected maintenance or repair. Storage or maintenance location may not be a suitable site(s) for rock crushing if minimum setbacks in Condition 1.1 are not satisfied.

2 – Location's latitude/ longitude must be specified to at least four decimal places.

3 – Pre-Approved Locations represent only ADEC Air Permits Program approval to operate at a site. Permittee may require additional authorizations from other State, Local, or private entities to operate at a location. The Department may revoke Pre-Approval if the setback requirements of Condition 1.1 are no longer satisfied, excessive complaints are received, or other agency requirements are not satisfied. Verify whether the pre-approved site still meets set-back criteria before relocation.

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* Online submission of reports may require use of standardized Sample Forms.

MG9 OPERATING PERMIT CONDITIONS

LOCATION RESTRICTIONS

1. Ambient Air Quality Protection. Give adequate consideration to siting issues when operating or changing locations of a rock crusher plant (see *Note* in Technical Analysis Report).

1.1. Do not operate the Rock Crusher or a diesel engine within 400 feet of the nearest occupied structure off the work site.

1.2. ***Nonroad engine location restrictions.*** An engine that meets the definition of nonroad engine under 40 C.F.R. 1068.30-Nonroad Engine-(1)(iii)[1], does not qualify as a nonroad engine if it remains or will remain at a location for more than 12 consecutive months or is located at a seasonal source and operates during the full annual operating period of the seasonal source. Monitor, record, and report in accordance with Condition 12.

1.3. ***Co-Located Equipment***. If two Rock Crusher plants are co-located at the same location, do not operate rock crushers from both plants concurrently. An asphalt plant with a valid MG3 permit may be co-located and be operated with a rock crusher plant with this permit.

a. Calculate, record, and report in the FOR required under Condition 5.3 the following:

(i) the total actual emissions of each criteria air pollutant for each month from the site; and

(ii) the 12-month rolling total emissions for each month of the prior 12-month period for all permitted equipment.

b. For emission calculations, use the methods set out in *Appendix A: Assessable Emissions Calculation (MG9)* of this permit, the *MG9 Assessable Emissions Spreadsheet* on the Department's general permit website[2], or other methods approved by the Department.

2. Relocation Reporting Requirements. Provide notice to the Department before installing or relocating the Rock Crusher by using *Form 1: Relocation Notification* of this permit or reporting all information the form contains to the Department. Site selection must comply with Condition 1.1. If the location is within 2,000 feet of the nearest occupied off-site structure, you must attach a fugitive dust control plan as part of the relocation notice; see Condition 19.

2.1. ***Pre-Approved Locations.*** Provide notice to the Department at least 8 hours before installing or relocating the Rock Crusher to a pre-approved location listed in Table B using Air Online Services. Provide at least 5 days' notice to the Department using any method other than Air Online Services.

[1] Definition for *Nonroad Engine* in 40 C.F.R. 1068.30-Nonroad Engine-(1)(iii): Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that by itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

[2] Worksheets to calculate MG3 and MG9 Assessable Emissions: https://dec.alaska.gov/air/air-permit/general-permits/

2.2. ***New Locations.*** Provide notice to the Department at least 48 hours before installing or relocating the Rock Crusher to a new location using Air Online Services. Provide at least 5 days' notice to the Department using any method other than Air Online Services.

2.3. ***Unexpected Breakdown and Repair.*** If the Rock Crusher requires unexpected maintenance or repair, provide notice to the Department within 24 hours of relocating the plant to its pre-approved storage location listed in the first row of Table B. Note that relocating using this condition does not allow for production.

GENERAL RECORDKEEPING AND REPORTING REQUIREMENTS

3. General Recordkeeping. Keep copies of all monitoring, recordkeeping, reporting, and all other documents required in this permit for at least five years.

4. Equipment Operated. Report all equipment operated under this permit during the reporting season within each Facility Operating Report (FOR) required in Condition 5.3. Include a detailed list of equipment installed, removed and operated during the reporting season. Include make, model and rated capacity in *Form 9: Equipment Operated Report Form* or an equivalent summary form.

4.1. ***Rental Agreements.*** Report any equipment listed in Table A which is leased, rented or otherwise provided under any business arrangement to a third party . Rental agreements must include language certifying that the third party will comply with Alaska Statutes and Regulations. Both parties must complete *Form 11: Rental Equipment Notification* or an equivalent document. The Permittee must submit the Rental Equipment Notification to the Department within 7 days of rental to the third party.

5. General Reporting.

5.1. ***Submittals***. Unless otherwise directed by the Department, submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit, using one of the following methods:

a. The Air Online Services Permittee Portal located at http://dec.alaska.gov/Applications/Air/airtoolsweb; this requires the Permittee to have a MyAlaska account and the Responsible Official documented with the Department for electronic signature; or

b. Email, under a cover letter, to dec.aq.airreports@alaska.gov; or

c. Mail to: ADEC Air Compliance Program
Attn: Compliance Technician
610 University Avenue
Fairbanks, AK 99709-3643

5.2. ***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.

a. 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

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

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

5.3. ***Operating Reports.*** Submit operating reports as directed by Condition 5.1 by the dates listed in Table C. The semi-annual Facility Operating Report (FOR) must include all information required by other conditions of this permit, for the period covered by the report. If the facility does not operate during the winter season, you may submit a report early with your summer FOR. You may use *Form 4: Minor General Permit (MG9) – Facility Operating Report Form* or a format of your own provided all of the required information is reported.

Table C – Operating Report Schedule

Report Type	Reporting Period	Due Date
FOR	April 1 – October 31	November 30
FOR	November 1 – March 31	April 30

5.4. ***Information Requests.*** Furnish to the Department, within a reasonable time, any information that 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, furnish to the Department copies of records required to be kept by the permit. The Department may require you to furnish copies of those records directly to the federal administrator.

STATE STANDARDS

Table D – Emissions Limits

Emission type	Limit
Opacity (Visible Emissions)	20% average opacity over any six consecutive minutes for rock crushers and diesel engines
Particulate Matter (PM)	0.05 gr/dscf averaged over three hours for diesel engines 0.1 gr/dscf averaged over three hours for rock crushers in operation before July 1, 1972 0.05 gr/dscf averaged over three hours for rock crushers in operation on or after July 1, 1972
	PM monitoring thresholds for diesel engines: 20% average opacity in any 18-consecutive minutes for exhaust stack diameters 18 inches or greater 15% average opacity in any 18-consecutive minutes for exhaust stack diameters less than 18 inches
Sulfur Compounds expressed as sulfur dioxide (SO_2)	500 ppm averaged over three hours for rock crushers and diesel engines

6. Visible Emissions (VE). Comply with the visible emissions limits for rock crushers and diesel engines, as set out in Table D.

6.1. ***Rock Crushers and Crushing Process Equipment***. VE monitoring, recordkeeping, and reporting (MR&R) requirements:

Monitor:	• Conduct EPA Method 9 observation for 18 minutes to obtain 72 consecutive 15-second opacity observations from the rock crusher. • Identify fugitive emission points capable of producing fugitive emissions. Determine which point has the greatest continuous opacity and use this point for monitoring fugitive emissions. • Observe fugitive dust using Method 9 at the emission point identified above: o During regular operation loads (not on idle or reduced loads); o Within two days of startup at the beginning of the season or after relocation; and o Within the first two days of production during each calendar month of operation.
Record:	• Keep all observation sheets and summaries for at least five years. • Calculate and record the highest 6-consecutive-minute averages observed.
Report:	• Include the following with the semi-annual FOR required under Condition 5.3, for the period covered by the report: o a list of emission points identified and which point was monitored; this list may be in the form of a simple list, picture with points circled and labeled, or a flow diagram with labeled emissions points; o copies of all Method 9 observations conducted during the reporting period (use *Form 5: Method 9 Visible Emissions Observations* form or equivalent); and o copies of all Method 9 training certificates for all observers in the reporting period. • Report in accordance with Condition 10: o any failure to monitor as a permit deviation; o if six-minute average opacity is observed as greater than 20%, and refer to Condition 19 for Reasonable Precautions to Prevent Fugitive Dust; take corrective actions as appropriate.

6.2. ***Diesel Engines.*** VE monitoring, recordkeeping, and reporting (MR&R) requirements:

Monitor:	• Use the Smoke/No Smoke Plan or EPA Method 9 to observe emissions from the exhaust stack or port of each stationary diesel engine. • Smoke/No Smoke Plan: Observe each stack for the presence or absence of visible emissions, excluding water vapor. o Initial Frequency: Conduct Smoke/No Smoke observations once every operating day for 30 days. o Reduced Frequency: After monitoring for 30 consecutive operating days, conduct Smoke/No Smoke observations at least once every 30 operating days. o Smoke Observed: If visible emissions are observed, follow the corrective actions in Condition 6.3. • Method 9: Conduct all observations for 18 minutes to obtain 72 consecutive 15-second opacity observations.

	○ First observation: within two days of the beginning of the operating season or after relocating the plant, or within three days after changing from the Smoke/No Smoke Plan. ○ Reduced Observation: After the first observation, conduct observations at least once every 30 operating days. ○ If a six-minute average opacity observation is greater than the limit in Table D, refer to corrective actions in Condition 7.1.
Record:	• Keep all observation sheets, logs, summaries, and Method 9 training certificates for at least five years. • Record date, time, production rate, observer name, and smoke observation in Smoke/No Smoke log.
Report:	• Include the following with the semi-annual FOR required under Condition 5.3, for the period covered by the report: ○ which method you used; ○ copies of all Method 9 observations and/or a complete Smoke/No Smoke log (use *Form 5: Method 9 Visible Emissions Observations* form, and/or *Form 6: Smoke/No Smoke Log – Diesel Engines*, or equivalent); ○ if/when you changed visible emissions observation methods; ○ any visible emissions observed under the Smoke/No Smoke Plan and a summary of any corrective actions taken. • Report in accordance with Condition 10: ○ any Method 9 observations that exceeded the limit in Table D; and ○ if any visible emissions monitoring was not performed when required.

6.3. **Corrective Actions Based on Smoke/No Smoke Observations in Condition 6.2 (for diesel engines only).** If visible emissions are present in the engine exhaust while conducting Smoke/No Smoke observations:

a. Initiate actions to eliminate visible emissions from the engine within 24 hours of the observation;

b. Keep a written record of the starting date, completion date, and a description of the actions taken to reduce visible emissions; and

c. After completing the actions required under Condition 6.3.a,

(i) conduct Smoke/No Smoke observations in accordance with Condition 6.2 at least once per day for the next seven operating days and, if applicable, until the initial 30-day observation period of Condition 6.2 is completed; or

(ii) if the actions taken under Condition 6.3.a do not eliminate the visible emissions, or if subsequent visible emissions are observed under the schedule of Condition 6.3.c.(i), then observe the engine exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan. After observing visible emissions and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates visible emissions and restart the Smoke/No Smoke Plan under Condition 6.2.

7. Particulate Matter (PM) Emissions. Comply with the PM emissions limits for rock crushers and diesel engines, as set out in Table D.

7.1. ***PM Emissions Monitoring for Diesel Engines.*** If the results of any Method 9 observation conducted under Condition 6.2 or Condition 6.3.c.(ii) is greater than the PM monitoring thresholds in Table D, the Permittee shall within six months of that Method 9 observation, either:

a. take corrective actions and perform a Method 9 observation on the engine exhaust under load conditions comparable to those when the criteria were exceeded, to show that emissions are no longer greater than the visible emissions limit in Table D; or

b. except as exempted under Condition 7.3, conduct a PM source test following the requirements of Condition 22.

7.2. During each one-hour PM source test run under Condition 7.1.b, observe the engine exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour source test run. Submit a copy of these observations with the source test report.

7.3. The PM source test requirements in Condition 7.1.b are waived for an engine if:

a. a source test on that unit has shown compliance with the PM standard during the previous five-year period; or

b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations conducted thereafter within a six-month period show visible emissions less than the PM monitoring thresholds in Table D.

PM emissions MR&R requirements for Diesel Engines:

Monitor:	See Conditions 7.1 - 7.3.
Record:	• Keep records of the results of any source test and visible emissions observations conducted under Conditions 7.1 and 7.2.
Report:	• Notify the Department of any Method 9 observation results that are greater than the PM monitoring thresholds shown in Table D within 30 days of the end of the month in which the observations occurred. Include the dates, the engine(s) affected, and results when an observed 18-minute average opacity was greater than an applicable threshold in Table D. • Include the following with the semi-annual FOR required under Condition 5.3, for the period covered by the report: o a summary of the results of any PM source test and visible emissions observations conducted under Condition 7.1 and 7.2; and o copies of any visible emissions observation results greater than the PM monitoring thresholds shown in Table D, if they were not already submitted. • Report in accordance with Condition 10: o anytime the results of a PM source test exceed the PM emissions limit in Table D; and o if the requirements under Condition 7.1.a or 7.1.b were not performed when required.

7.4. ***PM Emissions MR&R for Rock Crushers.*** For the Rock Crushers, demonstrate compliance with the applicable PM limit in Table D by complying with the visible emissions limit set out in Table D and associated MR&R requirements in Condition 6.1.

8. Sulfur Compound (SO_2) Emissions. Comply with the SO_2 emissions limits for rock crushers and diesel engines, as set out in Table D. This condition applies to fuel for all engines, including stationary and nonroad engines.

SO_2 emissions MR&R requirements for all Fuel-burning Equipment:

Monitor and Record:	• Keep fuel delivery receipts that specify fuel grade and amount. • If diesel delivery receipts do not show that the diesel is Ultra Low Sulfur Diesel (ULSD) or Low Sulfur Diesel (LSD), test delivered fuel for sulfur content or get a certification statement or analysis from the supplier that shows fuel sulfur percent by weight. • If a permitted facility uses fuel from a bulk supply/tank, identify the bulk supply/tank by name, and comply as otherwise set out in this section for all fuel supplied to the bulk tank for the reporting period. • For liquid fuel from a North Slope topping plant, obtain results of a monthly fuel analysis from the topping plant.
Report:	• Include the following with the semi-annual FOR required under Condition 5.3, for the period covered by the report: o If only ULSD or LSD was used for the entire reporting period, certify that only ULSD or LSD was consumed in fuel burning equipment. o If fuels other than ULSD or LSD was used (e.g., used oil fuels), submit a list of those fuel deliveries with fuel grades, a certificate from the supplier verifying the sulfur content, or a fuel analysis showing sulfur content. o If natural gas was used during the reporting period, submit a statement certified by the Responsible Official that natural gas was used for this time period. o If highline power was used during the reporting period, submit a statement certified by the Responsible Official that highline power was used for this time period. o Include a copy of the fuel analysis from a North Slope topping plant, if applicable.

9. Pollution Control Equipment Breakdowns.

Record:	• Keep records of pollution control equipment breakdowns and corrective actions.
Report:	• Notify the Department within two days of a pollution control equipment breakdown as a Permit Deviation in accordance with Condition 10. • Include a summary of each breakdown in the FOR required under Condition 5.3.

10. Excess Emissions and Permit Deviations Reports.

Record:	• Keep records of excess emissions, permit deviations, and corrective actions.
Report:	• Report excess emissions that present a potential threat to human health or safety or that the owner, operator, or Permittee believes to be unavoidable as soon as possible. • Report unavoidable emergencies, malfunctions, or non-routine repairs that cause excess emissions within two working days after the event started or was discovered.

	• Report excess emissions for a site operated with co-located sources for any month in which the 12-month rolling actual emissions from combined sources exceeds 100 tons of a criteria air pollutant, within 30 days of the end of the month in which the exceedance was discovered. • Report all other excess emissions or permit deviations, including failure to monitor, within 30 days of the end of the month in which the incident occurred, or as part of the next routine operating report in Condition 5.3 for excess emissions that occurred during the period covered by the report, whichever is sooner. • Report using either the online form at http://dec.alaska.gov/applications/air/airtoolsweb or *Form 2: Excess Emissions and Permit Deviation Reporting Form* (or equivalent summary). • Include in each FOR required under Condition 5.3 a summary of the excess emissions and permit deviations that occurred during the reporting period by citing the dates of those reports, or include a copy of those Excess Emissions and Permit Deviations reports.

11. Air Pollution Prohibited.

Record:	• Record the date, time, and nature of all emissions complaints received. • Record the name of the person(s) that complained, if known. • Record a summary of any investigations including reasons you do or do not believe the emissions have caused a violation. • Record any corrective actions taken or planned for complaints.
Report:	• Include in the FOR required under Condition 5.3 for each reporting period: o Number of complaints received. o Number of times you or the Department found corrective action necessary. o Number of times action was taken on a complaint within 24 hours. o Status of corrective actions found necessary that were not taken within 24 hours.

12. Nonroad Engines. Defined in 18 AAC 50.990(63)[3] and 40 C.F.R. 1068.30.

Record:	Keep a log of the following items for each engine that meets the definition of nonroad engine under 40 C.F.R. 1068.30-Nonroad Engine-(1)(iii)[1] for at least five years: • Date and location of the engine each time it is relocated, including each time the engine is relocated to a different site at a building, structure, facility, or installation. • Make, model, serial number, and rated capacity of the engine.
Report:	• Include completed *Form 8: Nonroad Engine Location Log* (or an equivalent summary) in each FOR.

13. Stored Equipment. If you store out of operation rock crushers, asphalt plants, or nonroad engines at the same physical location as the emission units authorized under this permit, you must maintain a Stored Non-Operating Equipment Log for the site (*Form 10: Stored Non-Operating Equipment Log* or equivalent). Unless recorded in the Log and stored in a non-operable status, this equipment will be considered stationary emission units associated with this permit. Any engine stored at the site that meets the definition of nonroad engine under 40 C.F.R. 1068.30-Nonroad Engine-(1)(iii)[1], is also to be recorded in the Nonroad Engine Location Log under Condition 12.

[3] As of the date of permit issuance, the Department is in the process of adopting the nonroad definition from 40 C.F.R. 1068.30 into 18 AAC 50.990(63).

Record:	Keep a log of the following items for at least five years: • All non-operating equipment stored on-site during the Reporting Period. • Any equipment moved to non-operating status during the Reporting Period. • Any equipment moved off-site during the reporting period, where it was relocated, if it is co-located with another Permitted source including the permit number, and if it was returned to service.
Report:	• Include completed *Form 9: Equipment Operated Report Form* (or an equivalent summary) with each FOR.

GENERAL CONDITIONS

14. Change of Ownership. If the ownership of the Rock Crusher is changed, both the new and previous owners must complete a transfer of ownership form and receive authorization to operate from the Department before the plant is operated by the new owner. The Transfer of Ownership form is available from ADEC Air Permits Program staff or on the Department's Permit Information website. The website address at the time of issuance of this permit is: https://dec.alaska.gov/air/air-permit/info/.

15. Fee Requirements. Pay the Department all assessed permit fees. Fee rates are set out in 18 AAC 50.400-499.

16. Assessable Emissions. For each period from July 1 through the following June 30, submit to the Department annual emission fees payment 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:

16.1. Potential to Emit (PTE), in tons per year (TPY); or

16.2. 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.

17. Assessable Emissions Estimates. No later than March 31 of each year, you may submit to the Department an estimate of the stationary source's assessable emissions for the most recent calendar year.

17.1. When submitting assessable emissions estimates, include:

a. completed *Form 3: Emission Reporting and Emission Fee Estimate*, and

b. any of the following:

(i) *Appendix A: Assessable Emissions Calculation (MG9)*,or

(ii) the *MG9 Assessable Emissions Spreadsheet* on the Department's general permit website[4], or

[4] Worksheets to calculate MG3 and MG9 Assessable Emissions: https://dec.alaska.gov/air/air-permit/general-permits/

(iii) equivalent information with assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

18. Good Air Pollution Control Practice. For all emissions units authorized by this permit, comply with the following:

18.1. Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

18.2. Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and

18.3. Keep a copy of either the manufacturer's or the operator's maintenance procedures on site.

19. Reasonable Precautions to Prevent Fugitive Dust. A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent the release of airborne PM and fugitive dust from aggregate piles, conveyors and elevators, loading locations, the rotary drum, screens, vehicle traffic within the stationary source boundaries and other sources of fugitive dust into the ambient air.

19.1. Follow the Fugitive Dust Control Plan (Appendix B) that you included with your minor general permit application or a revised version if submitted to or requested by the Department. A revised or site-specific Fugitive Dust Control Plan must be submitted with each relocation notice if the new location is within 2,000 feet of the nearest occupied structure (see Condition 2).

19.2. Reasonable precautions to prevent fugitive dust may include the following:

a. installation and use of hoods;

b. fans and dust collectors to enclose and vent dusty materials;

c. other covers and enclosures;

d. cleanup of loose material on work surfaces;

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

f. application of water or dust suppressants;

g. stopping activity in windy conditions.; and

h. Measures to prevent carryout or trackout of dust or mud by trucks.

20. Terms to Make the Permit Enforceable.

20.1. Compliance with permit terms and conditions is considered to be in compliance with those requirements that are

a. included and specifically identified in the permit; or

b. determined in writing in the permit to be inapplicable.

20.2. Comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50.345, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

a. an enforcement action; or

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

20.3. 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.

20.4. 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.

20.5. 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 notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

20.7. 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

a. Enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

b. Have access to and copy any records required by the permit;

c. Inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

d. Sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

21. 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:

21.1. For reporting under Condition 21, the Permittee shall report the annual emissions and the required data elements under Condition 21.3 every third year for the previous calendar year as scheduled by the EPA.[5]

[5] 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 2014, 2017, 2020, 2023 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.).

21.2. For the purposes of reporting actual or assessable emissions required under Condition 21 and Condition 16, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

21.3. For each emissions unit and the stationary source, include in the report the required data elements[6] 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.

21.4. 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/.

22. Source Testing Requirements.

22.1. ***General Requirements***. In addition to any source testing explicitly required by the permit, conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

22.2. ***Operating Conditions.*** Unless otherwise specified by an applicable requirement or test method, conduct source testing

a. at a point or points that characterize the actual discharge into the ambient air; and

b. at the maximum rated burning or operating capacity of the emission unit or another rate determined by the Department to characterize the actual discharge into the ambient air.

22.3. ***Reference Test Methods.*** Refer to the Technical Analysis Report for approved reference test methods and details.

22.4. ***Excess Air Requirements.*** Standard exhaust gas volumes must include only the volume of gases formed form the theoretical combustion of the fuel, plus the excess air volume normal for the specific emission unit type, corrected to standard conditions (dry gas at 68°F and absolute pressure of 760 mm of mercury).

22.5. ***Test Exemption.*** You are not required to comply with Conditions 22.6 – 22.9 when the exhaust is observed for visible emissions by Method 9 Plan or Smoke/No Smoke Plan (Conditions 6.1 through 7.1.a).

22.6. ***Test Plans.*** Before conducting any source tests, submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the emission unit will operate during the test and how you will document that operation. Submit a complete plan within 60 days after receiving a request under Condition 7.1.b or Condition 22.1 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[6] 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.

22.7. You may request an extension to a source test deadline established by the Department. You may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

22.8. ***Test Notification.*** At least 10 days before conducting a source test, give the Department written notice of the date and the time the source test will begin.

22.9. ***Test Reports.*** Within 60 days after completing a source test, submit a copy of the results in the format set out in the *Source Test Report Outline,* adopted by reference in 18 AAC 50.030. Certify the results in the manner set out in Condition 5.2. If requested in writing by the Department, provide preliminary results in a shorter period of time specified by the Department.

Appendix A: Assessable Emissions Calculation (MG9)

Assessable Emissions differ from a source's Potential to Emit (PTE). PTE is used in calculating a source's permit applicability and classification, i.e., minor or major source. While PTE does not include fugitive particulate emissions, assessable emissions do. A source can be classified as a minor source, yet have emission fees based on a criteria pollutant in excess of 100 tons. Likewise, a major source can have a PTE in excess of 100 tpy of a criteria pollutant, yet pay emission fees for that pollutant at a rate far lower. Assessable Emissions use the same calculations as PTE, only operating hours are not based on a maximum potential of 3,650 hours (assumed) but instead are based on actual operation for a calendar year. For examples and steps on completing this form to assist in submission of Assessable Emissions, please see the information below.

Equation:
E = (EF x (tons of rock crushed or hours of operation in a given year x RC)) / lbs per ton

Abbreviations:	
tpy	tons per year
tph	tons per hour
EF	emission factor (AP-42)
RC	rated capacity (hp for diesel engines)
lbs	pounds
E	emissions
ULSD	Ultra-low sulfur diesel

Report using *Form 3: Emission Reporting and Emission Fee Estimate* total emissions for each pollutant in a calendar year. Each emissions unit associated with the stationary source will need a separate calculation using equations provided, where rated capacity is the horsepower for diesel engines.

Emission factors are pollutant/emission unit specific. Fuel assumes use of Ultra-Low Sulfur Diesel (ULSD); please, contact the Department for assistance if you used alternative fuels. Please, see the worksheet on the next page for emission factors and further assistance.

MG9 Assessable Emissions Calculations Worksheet

Rock Crushing (AC)	Tertiary Crushing	Fines Crushing	Screening	Fines Screening	Aggregate Handling & Storage Piles
PM-10 EF (lb/ton)	0.0024	0.015	0.0087	0.072	0.05

Diesel Engines	CO	NO_X	SO_2[1]	VOC	PM-10
Greater than 600hp	0.0055	0.024	$1.2x10^{-5}$	0.000705	0.0007
Up to 600hp	0.00668	0.031	$1.2x10^{-5}$	0.0000247	0.0022
Diesel engine emission factors are given in lbs of pollutant per horsepower-hour.					

[1] SO_2 EF for use with ULSD

Rock Crushing Worksheet: E (tons) = (PM-10 EF x tons of rock crushed) / 2000

Tertiary Crushing	Fines Crushing	Screening	Fines Screening	Aggregate Handling & Storage Piles

Conveyer transfer points can change depending on configuration of your plant. The Department has simplified emissions calculations for conveyors based on reasonable assumptions of transfer points given a set number of conveyors (NoC) as follows:

Conveyor Transfer Points:

PM Emissions (tons): _____= [(1.3407 x NoC + 1) x 0.0011 x tons of rock crushed] / 2000

Diesel Engine Worksheet: E = (EF x hours of operation x RC) / 2000

CO	NO_X	SO_2	VOC	PM-10

Total Emissions: add items from Rock Crushing Worksheet and PM-10 column from diesel engines rows above for total PM-10. Add remaining columns for all diesel engines listed in Table A.

CO	NO_X	SO_2	VOC	PM-10

Assessable Emissions: Enter these values on *Form 3: Emission Reporting and Emission Fee Estimate*, and submit as required under Condition17.

CO	NO_X	SO_2	VOC	PM-10

Appendix B: Fugitive Dust Control Plan Guidelines

The Fugitive Dust Control Plan (Plan) has the purpose to control the fugitive dust emissions from asphalt plant and crusher related activities. The Plan is required for all MG3 and MG9 permit holders in order to ensure that reasonable precautions to prevent fugitive dust are taken (Condition 19 in both permits).

A sample plan is on the following page in Appendix B. This plan may be filled out and used for any MG3 or MG9 source. You are not required to use the sample form, but similar information contained in the sample form should be included in your plan. If you already have a plan developed or you wish to develop your own plan, the following items should be addressed:

- Points capable of producing fugitive emissions;
- Control of fugitive dust sources, such as:
    - Water application;
    - Dust suppressants;
    - Wind barriers;
    - Hoods, covers, or enclosures;
    - Cleanup of loose materials;
    - Minimizing drop distances and lowering loader buckets before dumping;
    - Fans;
    - Dust collectors;
- Methods to prevent trackout or carryout, such as:
    - Grizzlies or grates;
    - Gravel pads;
    - Paved surfaces;
    - Wheel washers;
    - Truck washing.

Appendix B: Fugitive Dust Control Plan

Please note, it is the responsibility of the Permittee to ensure that no part of their fugitive dust control plan violates any local, state, or federal law.

Section 1 – General Information

1-A Facility Information	
Company Name:	
Plant Name:	
Permit No.:	
1-B Contacts	
Report the names, address, and phone numbers of persons and owners or operators responsible for the implementation of the Dust Control Plan and responsible for the dust generating operation and dust control applications.	
Responsible Official (authorized under 18 AAC 50.990(93))	
Name:	
Phone Number:	
On-site Manager/Operator or Point of Contact (if different from above)	
Name:	
Phone Number:	
1-C Recordkeeping and Reporting	
Keep copy of Fugitive Dust Control Plan on-site at all times. Keep records of deviations from dust plan, reasons for the deviation, and corrective actions taken for at least five years.	

Section 2 – Fugitive Emission Points

2-A Fugitive Emission Points
Identify the relative locations of actual and potential sources of fugitive dust emissions. ☐ Bulk material handling and storage areas. ☐ Paved and unpaved access roads, haul roads, traffic areas, and equipment storage yards. ☐ Exit points where carryout and trackout onto paved public roads may occur. ☐ Water supply locations if water application will be used for controlling visible dust emissions. ☐ Rock crushing operations. ☐ Screening ☐ Conveyors ☐ Fines Screening ☐ Asphalt plant operations ☐ Screening ☐ Conveyors ☐ Baghouse Catch ☐ Drum Mixer Discharge ☐ Hot mix storage silo receiving point
2-B Comments – Fugitive Emission Points

Section 3 – Control of Fugitive Dust Sources

3-A Control of Fugitive Dust Sources

Check any boxes that apply. Checked boxes represent methods that will be used ***as needed***.

Active Operations

☐ Water will be applied to dry areas during leveling, grading, trenching, and earthmoving activities.

☐ Wind barriers will be constructed and maintained, and water or dust suppressants will be applied to the disturbed surface areas.

Inactive Operations, including after work hours, weekends, and holidays

☐ Not applicable for this project (Please explain why in Section 3-C).

☐ Water or dust suppressants will be applied on disturbed surface areas to form a visible crust, and vehicle access will be restricted to maintain the visible crust.

Sites Inactive for Seven or More Days

☐ Not applicable for this project (Please explain why in Section 3-C).

☐ Vehicle access will be restricted and water/dust suppressants will be applied at all un-vegetated areas.

☐ Vegetation will be established on all previously disturbed areas.

☐ Gravel will be applied and maintained at all previously disturbed areas.

☐ Previously disturbed areas will be paved.

Unpaved Access and Haul Roads, Traffic and Equipment Storage Areas

☐ Not applicable for this project (Please explain why in Section 3-C).

☐ Apply water or dust suppressants to unpaved haul and access roads.

☐ Post speed limit signs of not more than 15 mph at each entrance, and again every 500 ft.

☐ Water or dust suppressants will be applied to vehicle traffic and equipment storage areas.

Wind Events

☐ Water application equipment will apply water to control fugitive dust during wind events, unless unsafe to do so. Outdoor construction activities that disturb the soil will cease whenever visible dust emissions cannot be effectively controlled.

3-B Bulk Materials

Check any boxes that apply. Checked boxes represent methods that will be used ***as needed***.

Outdoor Handling of Bulk Materials

☐ Water or dust suppressants will be applied when handling bulk materials.

☐ Wind barriers with less than 50 percent porosity will be installed and maintained, and water or dust suppressants will be applied.

Outdoor Storage of Bulk Materials

☐ Water or dust suppressants will be applied to storage piles.

☐ Storage piles will be covered with tarps, plastic, or other suitable material and anchored in such a manner that prevents the cover from being removed by wind actions.

☐ Wind barriers with less than 50 percent porosity will be installed and maintained around the storage piles and water or dust suppressants will be applied.

☐ A three-sided structure (< 50% porosity) will be used that is at least as high as the storage piles.

On-Site Transporting of Bulk Materials

☐ Vehicle speed will be limited on the work site.

☐ All haul trucks will be loaded such that the freeboard is not less than six inches when transported across any paved public access road.

☐ A sufficient amount of water will be applied to the top of the load to limit visible dust emissions.

☐ Haul trucks will be covered with a tarp or other suitable cover.

Section 3 – Control of Fugitive Dust Sources (cont.)

3-B Bulk Materials - continued

Off-Site Transporting of Bulk Materials

☐ No bulk materials will be transported to or from the project site.
☐ Materials for transport will be wetted as needed.
☐ Covers will be used, as needed. Some or all of the following will be used as necessary:

- The interior of emptied truck cargo compartments will be cleaned or covered before leaving the site.
- Spillage or loss of bulk materials from holes or other openings in the cargo compartment's floor, sides, and tailgates will be prevented.
- Haul trucks will be covered with a tarp or other suitable cover or will be loaded such that the freeboard is not less than six inches when transported on any paved public access road to or from the project site.

Outdoor Transport using a Chute or Conveyor

☐ No chutes or conveyors will be used.
☐ Chute or conveyor will be fully enclosed.
☐ Water spray equipment will be used to sufficiently wet the materials.
☐ Transported materials will be washed or screened to remove fines (PM-10 or smaller).

3-C Comments – Control of Fugitive Dust Sources

Section 4 – Dust Control Methods

4-A Water Application

Complete this section if water application will be used as a control method for limiting visible dust emissions and stabilizing surface areas. Check and answer everything that applies. Checked boxes represent methods that will be used ***as needed***.

Water Application Equipment:

☐ Sprinklers:
Describe the activities that will utilize sprinklers: _____
_____
☐ Water Truck, ☐ Water Trailer, ☐ Water Wagon, ☐ Other: _____
Describe the activities that will utilize this equipment: _____
_____
Water application equipment is available to operate after normal working hours, on weekends, and holiday.
After-hours contact: _____ Phone number: _____
_

Water Supply (as needed):

☐ Fire hydrants. Obtain necessary approval to use specific hydrants.
☐ Storage tanks Number and capacity: _____
☐ Wells Number and flow rate: _____
☐ Canal, River, Pond, Lake, etc. Describe: _____
Approval granted by the owner or public agency to use their water source for this project.
Owner or Agency: _____
Contact: _____ Phone number:_____
☐ Other: _____

Section 4 – Dust Control Methods (cont.)

4-B Dust Suppressant Products

Suppressant materials include, but are not limited to: hygroscopic suppressants (road salts), adhesives, petroleum emulsions, polymer emulsions, and bituminous material (road oils).
Copy this section if more than one dust suppressant product will be used.

☐ Not applicable. Only water application will be the control method used.

☐ Applicable.

Product Name: _____

Application Equipment: _____

Number of Application Equipment Available: _____

Attach each of the following information that fully describes this product. Use the checklist below to make sure all information is submitted with this plan.

☐ Product Specifications (MSDS, Product Safety Data Sheet, etc.).
☐ Manufacturer's Usage Instructions (method, frequency, and intensity of application).
☐ Environmental impacts and approvals or certifications related to the appropriate and safe use for ground application.

4-C Other Dust Control Methods

Check the other types of dust control methods that will be implemented at the construction site.

☐ Physical barriers for restricting unauthorized vehicle access:
☐ Fences ☐ Gates ☐ Posts ☐ Berms ☐ Concrete Barriers
☐ Other: _____
☐ Wind barriers – Describe: _____
☐ Posted speed limit signs meet state and Federal Department of Transportation standards.
☐ Posted at 15 miles per hour, ☐ Posted at _____ miles per hour (less than 15 mph)
☐ Re-establish vegetation for temporarily stabilizing previously disturbed surfaces.
Explain: _____
☐ Apply and maintain gravel:
☐ On haul roads ☐ On access roads ☐ At equipment storage yards
☐ At vehicle traffic areas ☐ For temporarily stabilizing previously disturbed areas.
Explain: _____
☐ Apply pavement – Explain: _____
☐ Other: _____
_____

4-D Comments – Dust Control Methods

Section 5 – Carryout and Trackout

5-A Treatments for Preventing Trackout

Trackout is any material that adheres to vehicle tires and is deposited onto a paved public road or the paved shoulder of a paved public road. Check one or a combination that will apply.

☐ *Grizzly:* Rails, pipes, or grates used to dislodge debris off of vehicles before exiting the site. Extends from the intersection with the paved public road surface for the full width of the unpaved exit surface for the distance of at least 25 feet.
Describe: _____

☐ *Gravel Pad:* A layer of washed gravel at least one inch or larger in diameter, three inches deep, and extends from the intersection with the public paved road surface for the full width of the unpaved exit surface for a distance of at least 50 feet.
Describe: _____

☐ *Paved Surface:* Extends from the intersection with the paved public road surface for the full width of the unpaved access road for at least 100 feet to allow mud and dirt to drop off of vehicles before exiting the site.
Describe: _____
Mud and dirt deposits accumulating on paved interior roads will be removed with sufficient frequency, but not less frequently than once per workday.
Clean-up Frequency: _____

☐ *Wheel Washer:* Uses water to dislodge debris from tires and vehicle undercarriage.
Describe: _____

☐ *Other:* _____

5-B Treatments for Preventing Carryout

Carryout occurs when materials from emptied or loaded haul trucks, vehicles, or trailers falls onto a paved public road or paved shoulder of a paved public road. Check all methods that apply.

☐ No haul trucks will be routinely entering or leaving the project site.

Emptied Haul Trucks:
☐ Interior cargo compartments will be cleaned before leaving the project site.
☐ Cargo compartment will be covered with a tarp or suitable cover before leaving the project site.

Loaded Haul Trucks: Spillage or loss of materials from holes or other opening in the cargo compartment will be prevented when material is transported onto any paved public access road.
☐ Haul trucks will be loaded such that the freeboard is not less than six inches with water applied to the top of the load before leaving the project site.
☐ Cargo compartment and load will be covered with a tarp or suitable cover before leaving the project site.
☐ Other: _____

5-C Cleaning up Carryout and Trackout

Clean up Method: Check the method(s) below that will be used for cleaning carryout and trackout.
☐ Manually sweeping and picking up.
☐ Mechanical sweeping with a rotary brush or broom accompanied or preceded by water.
Describe the types of equipment that will be used:_____
☐ Operating a PM10-efficient street sweeper.
Make and Model: _____
☐ Flushing with water – allowed if:

- No curbs or gutters are present.
- Using water will not result as a source of trackout and carryout.
- Using water will not result in adverse impacts on storm water drainage systems.
- Using water will not violate any National Pollutant Discharge Elimination System permit program or Alaska Department of Environmental Conservation, Division of Water Permit.

5-D Comments - Carryout and Trackout

Form 1: Relocation Notification (Application Addendum)

Report any facility relocation according to the schedule of Condition 2.

Facility Information:

Permittee Name: _____ Permit No.: AQ_____

Facility Name: _____

Contact Person: _____ Telephone: _____

Make & Model of the Equipment/Stationary Source to be relocated: _____

_____

Attach a complete list of equipment to be operated at the new location.

Relocation Type: Pre-Approved Location (Condition 2.1) ☐

New Location (Condition 2.2) ☐

Unexpected Breakdown or Repair (Condition 2.3) ☐

Location name as recorded in Table B: _____

Estimated Operating Dates:

Estimated start-up date: _____ Estimated shut-down date: _____

Location Information:

New Plant Location (street address, milepost number, etc. – Include site maps):

_____

_____

Latitude_____ Longitude_____ (specify to at least four decimal degrees)

Distance from Plant boundary to nearest inhabited structure: _____ ft.

Nearest inhabited structure(s) are on (check one): ☐ flat terrain ☐ elevated terrain

If this distance is within 2,000 ft. (for rock crushers) or 1 mile (for asphalt plants), include with this addendum a dust control plan that is specific to this location and is adequate to prevent violations of Air Pollution Prohibited (Condition 11 in both MG3 and MG9 permits).

If the plant is to be located in a city or borough with zoning restrictions, please attach the location or siting approval documents from that city or borough to this form.

Comments: _____

_____

_____

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: _____

Submit Report using the electronic methods outlined in Condition 5.1 or by mail to Compliance Technician, ADEC Air Permits Program, 610 University Avenue, Fairbanks, AK 99709-3643.

Form 2: Excess Emissions and Permit Deviation Reporting Form

Stationary Source Name **Air Quality Permit Number.**

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[7], CO[8], or Settlement Agreement - Complete Section 2 and Certify

[7] Compliance Order By Consent
[8] 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 5.2)*
Submit this report 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-conditions-iii-and-iv-submission-instructions/.
If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 5.2).

Form 3: Emission Reporting and Emission Fee Estimate

When reporting assessable emissions under Conditions 17, submit the following information no later than March 31 of each year in accordance with the submission instructions outlined in Condition 5.1.

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 5.2). If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 5.2).*

Permittee Name: _____

Stationary Source Name: _____

Permit Number: _____ Date: _____

Emission Fee Estimate for :_____(State fiscal year)

Table 1 – Total Emissions and Assessable Emission Fee Estimate

Pollutant	Rock Crushers	Stationary Diesel Generators	Assessable Emissions
NO_x	N/A		
CO	N/A		
SO_2	N/A		
PM-10			
VOC	N/A		

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.

_____ _____ _____

Signature Printed Name Title

Form 4: Minor General Permit (MG9) – Facility Operating Report Form

Facility Information

Permittee Name: _____ Permit No.: AQ_____

Facility Name: _____

Reporting Period: ☐ 11/1/_____ to 3/31/_____ ☐ 4/1/_____ to 10/31/_____

Did this plant operate during this reporting period?

☐ Yes (please complete form) ☐ No (complete the "Certification" section only)

Certification (Condition 5.2)

☐ Certification Statement Signed by a Responsible Official (at end of form)

Co-located Equipment (Condition 1.3)

Was this Facility co-located with an additional asphalt plant or rock crusher: ☐ Yes ☐ No

☐ If yes, attach the monthly and 12 Month rolling totals of criteria emissions for both facilities.

Permit Numbers for co-located Facilities _____

_____

Relocation Reporting Requirements (Condition 2)

Would the Permittee like to add any new pre-approved locations to Table B since the previous FOR?

☐ Yes ☐ No

If yes, for each new location attach completed *Form 1: Relocation Notification* or equivalent form with maps.

Equipment Operated (Condition 4)

Was new equipment added or existing equipment removed? ☐ Yes ☐ No.

Was any part of this facility rented or leased? ☐ Yes ☐ No

☐ *Form 9: Equipment Operated Report Form* or equivalent attached for equipment operated

☐ *Form 11: Rental Equipment Notification* or equivalent attached for equipment rentals.

Visible Emissions and PM - Rock Crusher (Conditions 6.1 and 7.4)

Emissions Point observed: _____ (please describe)

Method 9 Observations Summary:

Number of Observations	
Highest 6-consecutive-minute Average	
Number of Observations >20%	

☐ All Method 9 Observation forms attached

☐ Visible Emission training certificates for all observers attached

☐ Excess Emissions/Permit Deviation Forms attached for failure to monitor or for observations of six-minute average opacity observed as greater than 20%

Visible Emissions – Diesel Engines (Condition 6.2)

Method used: ☐ Smoke/No Smoke Plan ☐ Method 9 ☐ Both

Smoke/No Smoke Plan Summary:

Number of Observations	
Number of Days Visible Emissions Observed	

☐ Complete Smoke/No Smoke Log attached

☐ Summary of Smoke/No Smoke corrective actions attached

Method 9 Observations Summary:

Emissions Unit	Dates of Observations	Highest 6-consecutive-minute Average	Highest 18-consecutive-minute Average	Number of Observations >20%

☐ All Method 9 Observation forms attached (**from Conditions 6.2 through 7.3**)

☐ Visible Emission training certificates for all observers attached

☐ Excess Emissions/Permit Deviation Forms attached for failure to monitor or for observations of six-minute average opacity observed as greater than 20%

Particulate Matter (PM) Emissions

For Diesel Engines (Condition 7)

Was PM monitoring triggered? (See thresholds in Table D.) ☐ Yes ☐ No

If yes, is PM source test waived? : ☐ Yes ☐ No.

If yes, reason for waiver:

☐ Condition 7.3.a

Date of most recent PM source test: _____ Result of source test: _____ grains/dscf

☐ Condition 7.3.b

Summary of Method 9 Observations conducted within a six-month period after corrective action:

Emissions Unit	Dates of Observations	Highest 6-consecutive-minute Average	Highest 18-consecutive-minute Average	Number of Observations >20%

☐ Method 9 Observation forms attached (copies of any visible emissions observation results greater than the PM monitoring thresholds shown in Table D)

If PM source test is not waived:
Date of PM source test: _____ Result of source test: _____ grains/dscf

☐ Excess Emissions/Permit Deviation Forms attached for failure to monitor or for PM source test results exceeding 0.05 gr/dscf averaged over three hours.

Sulfur Compound Emissions (Condition 8)

Was ULSD or LSD the ONLY fuel used for the entire reporting period?

☐ Yes, this statement is certified by Responsible Official at the end of this form.
☐ No, list of diesel deliveries and fuel analysis or certification from supplier showing fuel sulfur content attached.

☐ Highline power used. Statement certified by Responsible Official attached.

☐ Natural gas used. Statement certified by Responsible Official attached.

☐ North Slope topping plant fuel used. If checked, attach a copy of fuel analysis.

Pollution Control Equipment Breakdowns (Condition 9)

Were there any control equipment breakdowns during this reporting period? ☐ Yes ☐ No

If Yes, ☐ Permit Deviation forms attached
☐ Summary of breakdowns attached

Excess Emissions and Permit Deviations (EE/PD) (Condition 10)

Were there any EE/PDs during this reporting period? ☐ Yes ☐ No

If Yes, ☐ Summary of EE/PD reports sent to DEC during operating period attached

Please Note: Any EE/PD forms not previously sent to DEC should also be attached and included in the summary.

Complaint Summary (Condition 11)

Did you receive any public complaints about emissions during this reporting period? ☐ Yes ☐ No

If Yes, ☐ Complaint summary attached.

Nonroad Engines (Conditions 1.2 and 12)

Are there engines that meet the definition of nonroad engine under 40 C.F.R. 1068.30-Nonroad Engine-(1)(iii) at this facility?

☐ Yes, Nonroad Engine Location Log attached. ☐ No.

Source Testing (Condition 22)

PM source test conducted during this reporting period? ☐ Yes, on date: _____ ☐ No.

Certification (Condition 5.2)

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: _____

Submit completed report according to Conditions 5.1 and 5.3.

Form 5: Method 9 Visible Emissions Observations

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 clinometer.
- 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.

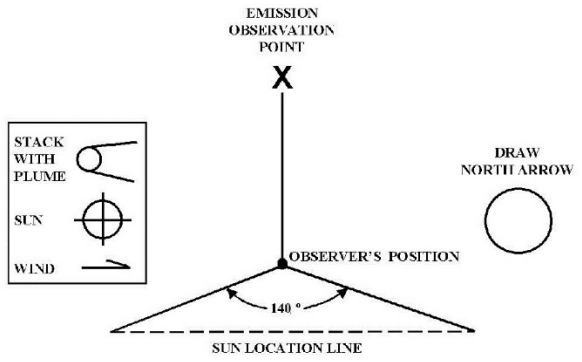
  Observer's Signature, Date: sign and date after performing VE observation.
- Organization: observer's employer.

Certified By, Date: name of "smoke school" certifying observer and date of most recent certification.

VISIBLE EMISSION OBSERVATION FORM

Company Name		
Location		
City	**State**	**Zip**
Process Equipment		**Operating Mode**
Control Equipment		**Operating Mode**
Describe Emission Point		
Height of Emission Point	**Height Relative to Observer** **Start** **End**	
Distance to Emission Point **Start** **End**	**Direction to Emission Point** **Start** **End**	
Vertical Angle to Observation Pt. **Start** **End**	**Direction to Observation Point** **Start** **End**	
Describe Emissions **Start** **End**		
Emission Color **Start** **End**	**If Water Droplet Plume (Circle)** **Attached** **Detached** **N/A**	
Point In The Plume At Which Opacity Was Determined **Start** **End**		
Describe Plume Background **Start** **End**		
Background Color **Start** **End**	**Sky Condition** **Start** **End**	
Wind Speed **Start** **End**	**Wind Direction** **Start** **End**	
Ambient Temp **Start** **End**	**Wet Bulb Temp**	**RH Percent**

SOURCE LAYOUT SKETCH



Additional Information

Observation Date	**Start Time**	**End Time**

Sec / Min	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					

Observer's Name (Print)	
Observer's Signature	**Date**
Organization (Observer's Company)	
Certified By (M9 Observer Training Organization)	**Date**

Form 6: Smoke/No Smoke Log – Diesel Engines Reporting Period: ☐11/1/___ to 3/31/____ ☐ 4/1/____ to 10/31/____

Permittee Name: _____ Permit No.: AQ_____

Facility Name: _____

Date	Engine ID	Throughput (TPH)	Visible Emissions?		Location	Background Description	Name of Observer
			Yes	No			
Number of Days Smoke/No Smoke was Conducted:					Which Days (if any) Visible Emissions Were Observed:		

Form 7: Complaint Summary Form

Reporting Period: ☐11/1/___ to 3/31/____ ☐ 4/1/____ to 10/31/_____

Permittee Name: _____ Permit No.: AQ_____

Facility Name: _____

Number of Complaints Received:	
Number of Times Corrective Actions were Found Necessary:	
Number of Times Corrective Action was Taken Within 24 hours:	

Status of corrective actions deemed necessary that were not taken within 24 hours:

_____

_____

_____

_____

_____

_____

_____

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

Form 8: Nonroad Engine Location Log[9]

Permittee Name: _____ Permit No.: AQ_____

Facility Name: _____

Company Equipment ID No.:_____

Engine Manufacturer: _____ Engine Model: _____

Engine Serial No.:_____ Engine Date of Manufacture: _____

Location	Initial Date at Location	Date Moved off Location	Not operating or in storage?

- Use One Sheet for each nonroad engine reported in the FOR.

[9] In accordance with Condition 12, use this log for all engines that meet the definition of nonroad engine under 40 C.F.R. 1068.30-Nonroad Engine-(1)(iii).

Form 9: Equipment Operated Report Form

Permittee Name: _____ Permit No.: AQ_____

Facility Name: _____

Location Name(s):_____

List in the table below the equipment that is subject to the Permit including equipment installed or removed during the reporting period. Rated capacity must be included. Report any asphalt plants, rock crushers or diesel engines rented during the reporting period.

Table 1 – Operational Equipment List

EU ID	Equipment Description	Make / Model	Rated Capacity hp/kW or tph	Date Installed	Date Removed	Operated Yes/No	Rented Yes/No

Form 10: Stored Non-Operating Equipment Log

Permittee Name: _____ Permit No: AQ_____

Location Name: _____

Facility Name: _____

Use this form to report any non-operating equipment stored at the Facility Location that is not listed in Table A of this permit that requires an Air Quality Permit and is onsite only for storage. Equipment operated concurrently should be reported on *Form 9: Equipment Operated Report Form*. Stored equipment shall not be operated until a date removed from storage is specified on this form. Stored equipment may include other asphalt plants, rock crushers, or nonroad engines.

Table 1 – Non-operational Equipment List

Equipment Description	Make / Model	Date Placed into Storage	Date Removed from Storage	AQ Permit No, if applicable

Form 11: Rental Equipment Notification

Use this form to report to the Department if the entire Facility or any equipment authorized to operate in Table A is rented or leased to a third party under any business arrangement per Condition 4.1. If emission units are leased this form must be submitted to the Department within 7 days of the signed contract. A lease agreement for any equipment authorized under this permit must include language certifying that the third party will comply with Alaska Statutes and Regulations. The equipment change should also be Reported on Form 9 or equivalent in both Permittees next semi-annual FOR submittal.

Permittee Name: _____ Permit No: AQ_____

Equipment Leased:_____

_____

_____	_____	_____
Responsible Official Signature	Printed Name	Date

Lessee Business Name: _____

Lessee Responsible Official: _____

Lessee Business Address: _____ Lessee Phone #:_____

Date of Lease: _____ Date Equipment to be Returned: _____

Location Equipment Operated: _____

Lessee Air Quality Permit No.:_____ (Required)

_____	_____	_____
Lessee Responsible Official Signature	Printed Name	Date