DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ1081TVP03 Issue Date: Public Comment - July 3, 2019
Expiration Date: Five Years

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Insulfoam, a division of Carlisle Construction Materials, LLC**, for the operation of the **Insulfoam Facility**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

Citations listed herein are contained within the effective version of 18 AAC 50 at permit issuance. All federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

Upon effective date of this permit, Operating Permit AQ1081TVP02 expires.

This operating permit becomes effective <insert date—30 days after issue date>.

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC.....Alaska Administrative Code
AAQS .....Ambient Air Quality Standards
ADEC .....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM.....American Society for Testing and Materials
BACT .....Best Available Control Technology
BHp .....Boiler Horsepower
CFR .....Code of Federal Regulations
The Act .....Clean Air Act
CO .....Carbon Monoxide
dscf .....Dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....Emission Unit
gr./dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
GPH.....gallons per hour
HAP.....Hazardous Air Pollutants [HAP as defined in AS 46.14.990]
ID.....Emission Unit Identification Number
kPa.....kiloPascals
LAER.....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology [MACT as defined in 40 CFR 63]
MMBtu/hr.....Million British thermal units per hour
MMSCF.....Million standard cubic feet
MR&R.....Monitoring, Recordkeeping, and Reporting
NESHAP .....National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NOx.....Nitrogen Oxides
NSPS .....New Source Performance Standards [as contained in 40 CFR 60]
O & M .....Operation and Maintenance
O_2 .....Oxygen
PAL .....Plantwide Applicability Limitation
PM_{10} .....Particulate Matter less than or equal to a nominal ten 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
SO_2 .....Sulfur dioxide
TPH.....Tons per hour
tpy .....Tons per year
VOC .....volatile organic compound [VOC as defined in 40 CFR 51.100(s)]
VOL .....volatile organic liquid [VOL as defined in 40 CFR 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:		**Insulfoam, a division of Carlisle Construction Materials, LLC** 628 Western Drive Anchorage, AK 99501
Stationary Source Name:		**Insulfoam Facility**
Location:		61.226112º North Latitude; 149.891292º West
Physical Address:		628 Western Drive Anchorage, AK 99501
Owner:		**Carlisle Construction Materials, LLC** 1285 Ritner Highway Carlisle, PA 17013
Operator:		Insulfoam 628 Western Drive Anchorage, AK 99501
Permittee's Responsible Official:		Daryl Sobek, Plant Manager 628 Western Drive Anchorage, AK 99501
Stationary Source and Building Contact:		Daryl Sobek, Plant Manager 628 Western Drive Anchorage, AK 99501 (907) 249-9407 daryl.sobek@insulfoam.com
Fee Contact:		Scott Reddig, Process Environmental Engineer 19727 57th Ave. E Puyallup, WA 98375 (253) 271-3056 scott.reddig@carlisleccm.com
Permit Contact:		Scott Reddig, Process Environmental Engineer 19727 57th Ave. E Puyallup, WA 98375 (253) 271-3056 scott.reddig@carlisleccm.com
Process Description:	SIC Code	3086 - Expandable Polystyrene Manufacturing
	NAICS Code:	326140

[18 AAC 50.040(j)(3) & 50.326(a)]
[40 CFR 71.5(c)(1) & (2)]

Section 2. Emissions Unit Inventory and Description

Emissions units listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Unless noted elsewhere in the permit, emissions unit descriptions and ratings are given for identification purposes only.

Table A - Emissions Unit Inventory

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Installation or Construction Date
Boilers				
1	Boiler #1	Cleaver Brooks	150 hp	1994
2A	Boiler #2	Superior	200 hp	2008
Molds and Presses				
3A	Block Mold	Idro	3800 lb/hr	2008
4A	Shape Press	Promass PS13525	540 lb/hr	2014
6A	Shape Press	Hirsch 1450	300 lb/hr	2008
Pre-Expanders				
7A	Batch Pre-Expander	Idro PJX3000D	3000 lb/hr	2013
Aging Bags				
9	Aging Bags	Bead Aging Bags (14 each)	43,500 ft^3	
Fugitive Emissions				
10	Fugitive Storage Emissions	Warehouse Product Storage	1,000,000 lb	

[18 AAC 50.326(a)]
[40 CFR 71.5(c)(3)]

Section 3. State Requirements

Visible Emissions Standard

1. Industrial Process and Fuel-Burning Equipment Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 and 2A listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j)(4), 50.055(a)(1), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(1)]

1.1. For EU IDs 1 and 2A, burn only gas as fuel. Monitoring for these emissions units shall consist of a statement in each operating report under Condition 34 indicating whether each of these emissions units burned only gas. Report under Condition 33 if any fuel other than gas is burned.

[18 AAC 50.040(j)(4), 50.326(j)(3) & (4), & 50.346(c)]
[40 CFR 71.6(a)(3)]

Particulate Matter Emissions Standard

2. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 and 2A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(b)(1), 50.326(j)(3) & 50.346(c)]
[40 CFR 71.6(a)(1)]

2.1. For EU IDs 1 and 2A, burn only gas as fuel. Monitoring for these emissions units shall consist of a statement in each operating report under Condition 34 indicating whether each of these emissions units burned only gas. Report under Condition 33 if any fuel other than gas is burned.

[18 AAC 50.040(j)(4), 50.326(j)(3) & (4), & 50.346(c)]
[40 CFR 71.6(a)(3)]

Sulfur Compound Emission Standard

3. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 and 2A to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(c), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(1)]

Fuel Gas

3.1. **Monitoring**. The Permittee shall either:

a. obtain a semiannual statement from the fuel supplier of the fuel total sulfur level in ppm; or

b. analyze a representative sample of the fuel semiannually to determine the sulfur content using either ASTM D4084, D5504, D4810, D4913 or D6228, or GPA Standard 2377,or other listed method approved in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

3.2. **Recordkeeping**. The Permittee shall keep records of the semiannual statement from the fuel supplier or the sulfur content analysis required under Conditions 3.1.a or 3.1.b.

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

a. Report in accordance with Condition 33, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 3.

b. Include copies of the records required by Condition 3.2 with the operating report required by Condition 34 for the period covered by the report.

[18 AAC 50.040(j)(4), 50.326(j)(4), & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

Preconstruction Permit[1] Requirements

4. PSD Avoidance Limits. The Permittee shall limit VOC emissions from all emissions units listed in Table A to no greater than 245 tons per 12 consecutive months.

4.1. Keep the following daily records of EPS beads used:

a. Amounts used;

b. Bead manufacturer and lot number;

c. Pentane content; specify whether this is the actual content reported in the Certificate of Analysis (COA) for the lot, or is the upper specification level (worst case) pentane content for the product type.

4.2. Keep monthly records of total monthly bead usage by manufacturer, type, and pentane content, compiled from daily bead usage records.

4.3. Keep separate records under Conditions 4.1 and 4.2 for EPS used for

a. block molding; and

b. shape molding.

[1] *Preconstruction Permit* refers to federal PSD permits, state-issued permits-to-operate issued on or before January 17, 1997 (these permits cover both construction and operation), construction permits issued on or after January 18, 1997, and minor permits issued on or after October 1, 2004.

4.4. Before the end of each calendar month keep records of VOC emissions for the previous month, and for the most recent 12 consecutive months. For this Condition 4.4 calculate VOC emissions as the sum of VOC emissions associated with the block molding process, emissions associated with the shape molding process, and combustion emissions.

Use **Equation 1** for calculating block and shape molding emissions from each bead lot. For each process, calculate the monthly emissions as the sum of the emissions from each lot used during the month

EQUATION 1:

$$Q = Loss\ Rate \times Initial\ Pentane\ Content \times EPS / 2000$$

where

Q = tons of VOC emission from an EPS bead lot used during the month,

Loss Rate = the appropriate pentane loss rate from Conditions 4.4.a and 4.4.b,

Initial Pentane Content = the pentane content for the lot from Condition 4.1.c, and

EPS = the quantity in pounds of EPS bead used from that lot.

a. Calculate emissions associated with block molding using the following pentane loss rates:

   (i) For high pentane bead (> 5.2 weight percent pentane) – 0.71;

   (ii) For mid pentane bead (3.7 – 5.2 weight percent pentane) – 0.74;

   (iii) For low pentane bead (< 3.7 weight percent pentane) – 0.67;

b. Calculate emissions associated with shape molding using the following pentane loss rates:

   (i) For high pentane bead (> 5.2 weight percent pentane) – 0.98;

   (ii) For mid pentane bead (3.7 – 5.2 weight percent pentane) – 0.94;

   (iii) For low pentane bead (< 3.7 weight percent pentane) – 0.97;

c. Calculate VOC emissions from the boilers, EU IDs 1 and 2A, based on

   (i) The appropriate emission factor from AP-42, and

      (A) the quantity of natural gas used during the month, or

      (B) the hours of operation and rated capacity of each boiler, or

   (ii) the annual potential to emit of 0.3 tons of VOC from the boilers.

4.5. The Permittee may calculate emissions for a given month using either COAs or upper specification levels, but must use the same method for that month for each 12 month period that includes that month when reporting emissions under Condition 4.7. Specify the method for each month reported.

4.6. If the 12 month total in Condition 4.4 exceeds 245 tons, report as excess emissions as described in Condition 34.2.

4.7. Include the records and calculations required under Condition 4.4 in the operating report as described in Condition 34.1.

[Condition 4, Minor Permit AQ1081MSSS01, March 26, 2009]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)]

Section 4. Federal Requirements

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP)

Subpart A – General Provisions & Subpart M – Asbestos

General Federal Requirements

5. The Permittee shall comply with the applicable requirements set forth in 40 CFR 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 CFR 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(1) & (2)(F), & 50.326(j)]
[40 CFR 61, Subparts A & M, and Appendix A]

40 CFR Part 82 Protection of Stratospheric Ozone

6. Subpart F – Recycling and Emissions Reduction. The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 CFR 82, Subpart F.

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82, Subpart F]

Section 5. General Conditions

Standard Terms and Conditions

7. 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.

[18 AAC 50.326(j)(3), 50.345(a) & (e)]

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

[18 AAC 50.326(j)(3), 50.345(a) & (f)]

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

[18 AAC 50.326(j)(3), 50.345(a) & (g)]

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

[18 AAC 50.326(j)(1), 50.400 & 50.403]
[AS 37.10.052(b) & AS 46.14.240]

11. Assessable Emissions. The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of:

11.1. the stationary source's assessable potential to emit of 245 tpy; or

11.2. the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by

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.

[18 AAC 50.040(j)(3), 50.035, 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 CFR 71.5(c)(3)(ii)]

12. Assessable Emission Estimates. Emission fees will be assessed as follows:

12.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions via the Department's Air Online Services (AOS) System at http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option and filling out the Emission Fee Estimate form. Alternatively, the report may be submitted by

a. email using dec.aq.airreports@alaska.gov; or

b. hard copy to the following address: ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 555 Cordova Street, Anchorage, Alaska 99501.

12.2. the assessable emissions report must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

12.3. 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 forth in Condition 11.1.

[18 AAC 50.040(j)(3), 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 CFR 71.5(c)(3)(ii)]

13. Good Air Pollution Control Practice. The Permittee shall do the following for the emissions units listed in Table A:

13.1. perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

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

13.3. keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030, 50.326(j)(3), & 50.346(b)(5)]

14. Dilution. The Permittee shall not dilute emissions with air to comply with this permit. Monitoring shall consist of an annual certification that the Permittee does not dilute emissions to comply with this permit.

[18 AAC 50.045(a)]

15. 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 particulate matter from being emitted into the ambient air.

[18 AAC 50.045(d), 50. 326(j)(3), & 50.346(c)]

15.1. The Permittee shall keep records of:

a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and

b. any additional precautions that are taken:

(i) to address complaints described in Condition 15.1 or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

15.2. The Permittee shall report according to Condition 17.

16. Stack Injection. The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a stationary source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004.

[18 AAC 50.055(g)]

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

[18 AAC 50.110, 50.040(e), 50.326(j)(3), & 50.346(a)]
[40 CFR 71.6(a)(3)]

17.1. Monitoring, Recordkeeping, and Reporting for Condition 17:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 33.

b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 17.

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

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 17; or

b. the Department notifies the Permittee that it has found a violation of Condition 17.

17.3. The Permittee shall keep records of:

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

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

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 17; and

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

17.4. With each operating report under Condition 34, the Permittee shall include a brief summary report which must include:

a. the number of complaints received;

b. the number of times the Permittee or the Department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

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

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

18. Technology-Based Emission Standard. If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard[2] listed in Condition 5 (refrigerants), the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 33 requires information on the steps taken to minimize emissions.

[18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)]
[40 CFR 71.6(c)(6)]

[2] As defined in 18 AAC 50.990(106), the term *"technology-based emission standard"* means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) standard established under 40 CFR 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 6. General Source Testing and Monitoring Requirements

19. Requested Source Tests. In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a) & 50.345(a) & (k)]

20. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing:

[18 AAC 50.220(b)]

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

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

21. Reference Test Methods. The Permittee shall use the following test methods when conducting source testing for compliance with this permit:

21.1. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9. The Permittee may use the form in Section 10 to record data.

[18 AAC 50.030 & 50.220(c)(1)(D)]

21.2. Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 CFR 60, Appendix A.

[18 AAC 50.040(a)(3) & 50.220(c)(1)(E)]
[40 CFR 60, Appendix A]

21.3. Source testing for emissions of $PM_{2.5}$ and PM_{10} must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2) & 50.220(c)(1)(F)]
[40 CFR 51, Appendix M]

21.4. Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 CFR 63 Appendix A, Method 301.

[18 AAC 50.040(c)(32) & 50.220(c)(2)]
[40 CFR 63, Appendix A, Method 301]

22. **Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific emissions unit type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3) & 50.990(102)]

23. **Test Exemption.** The Permittee is not required to comply with Conditions 25, 26 and 27 when the exhaust is observed for visible emissions by Method 9 Plan or Smoke/No Smoke Plan.

[18 AAC 50.345(a)]

24. **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee 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.

[18 AAC 50.345(a) & (l)]

25. **Test Plans.** Except as provided in Condition 23, before conducting any source tests, the Permittee shall 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 emissions unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 19 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 performed without resubmitting the plan.

[18 AAC 50.345(a) & (m)]

26. **Test Notification.** Except as provided in Condition 23, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n)]

27. **Test Reports.** Except as provided in Condition 23, within 60 days after completing a source test, the Permittee shall submit one certified copy of the results in the format set out in the Source Test Report Outline, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 30. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o)]

28. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Condition 2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

[18 AAC 50.040(a)(1) and 50.326(j)]
[40 CFR 60.7(f), Subpart A, 40 CFR 71.6(a)(3)(ii)(B)]

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

29.2. Records of all monitoring required by this permit, and information about the monitoring including:

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

b. the date(s) analyses were performed;

c. the company or entity that performed the analyses;

d. the analytical techniques or methods used;

e. the results of such analyses; and,

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

Reporting Requirements

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

30.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if:

a. a certifying authority registered under AS 09.80.020 verifies that the electronic signature is authentic; and

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 30.1.a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 50.205, & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

31. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit reports, compliance certifications, and/or other submittals required by this permit via the Department's Air Online Services (AOS) System at http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option.

31.1. Alternatively, the documents may be certified in accordance with Condition 30, and submitted either by:

a. Email using dec.aq.airreports@alaska.gov;

b. Certified mail to the following address: ADEC, Air Permits Program, ATTN: Compliance Technician, 610 University Ave., Fairbanks, AK 99709-3643.

[18 AAC 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

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

[18 AAC 50.345(a) & (i), 50.200, & 50.326(a) & (j)]
[40 CFR 71.5(a)(2) & 71.6(a)(3)]

33. Excess Emissions and Permit Deviation Reports.

33.1. Except as provided in Condition 17, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. In accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report:

(i) 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 non-routine repair that causes emissions in excess of a technology-based emission standard; and

c. Report all other excess emissions and permit deviations:

(i) within 30 days of the end of the month in which the excess emissions or deviation occurred, except as provided in Conditions 33.1.c(ii) and 33.1.c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 33.1.c(i); or

(iii) for failure to monitor, as required in other applicable conditions of this permit.

33.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at http://dec.alaska.gov/applications/air/airtoolsweb, or if the Permittee prefers, the form contained in Section 11 of this permit. The Permittee must provide all information called for by the form that is used.

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

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

34. Operating Reports. During the life of this permit[3], the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

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

34.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 34.1, the Permittee shall identify

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

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

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

34.3. when excess emissions or permit deviations have already been reported under Condition 33 the Permittee shall cite the date or dates of those reports.

[3] *Life of this permit* is defined as the permit effective dates, including any periods of reporting obligations that extend beyond the permit effective dates. For example if a permit expires prior to the end of a calendar year, there is still a reporting obligation to provide operating reports for the periods when the permit was in effect.

34.4. **Transition from expired to renewed permit**. For the first period of this renewed operating permit, also provide the previous permit's operating report elements covering that partial period immediately preceding the effective date of this renewed permit.

[18 AAC 50.346(a) & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

35. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report.

35.1. Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:

a. identify each term or condition set forth in Section 3 through Section 9, that is the basis of the certification;

b. briefly describe each method used to determine the compliance status;

c. state whether compliance is intermittent or continuous; and

d. identify each deviation and take it into account in the compliance certification;

35.2. **Transition from expired to renewed permit**. For the first period of this renewed operating permit, also provide the previous permit's annual compliance certification report elements covering that partial period immediately preceding the effective date of this renewed permit.

35.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, Mail Stop: OCE-101, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 CFR 71.6(c)(5)]

36. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emissions unit, of CO, NH_3, NO_X, PM_{10}, $PM_{2.5}$, SO_2, VOCs and Lead (Pb) (and lead compounds) using the form in Section 12 of this permit, as follows:

36.1. Each year by April 30, if the stationary source's potential to emit for the previous calendar year equals or exceeds:

a. 250 tons per year (tpy) of NH_3, PM_{10}, $PM_{2.5}$ or VOCs; or

b. 2,500 tpy of CO, NO_X or SO_2.

36.2. Every third year by April 30 if the stationary source's potential to emit (except actual emissions for Pb) for the previous calendar year equals or exceeds:

a. 0.5 tpy of actual lead (Pb); or

b. 1,000 tpy of CO; or

c. 100 tpy of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_X or VOCs.

36.3. For reporting under Condition 36.2, the Permittee shall report in 2021 for calendar year 2020, etc., in accordance with the EPA schedule.

36.4. Include in the report required by this condition, the required data elements contained within the form in Section 12 or those contained in Tables 2a and 2b of Appendix A to Subpart A of 40 CFR 51 and Emission Inventory Instructions available in the AOS system for each emissions unit.

a. Submit the report through electronic online submission via the Department's AOS system at http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option.

b. If the AOS system is not available, the report may be submitted by

(i) email using dec.aq.airreports@alaska.gov; or

(ii) hard copy to the following address: ADEC Air Permits Program, ATTN: Emissions Inventory, 555 Cordova Street, Anchorage, Alaska 99501

[18 AAC 50. 50.040(j)(4), 50.200, & 50.346(b)(8) & (9)]
[40 CFR 51.15, 51.30(a)(1) & (b)(1) & 40 CFR 51, Appendix A to Subpart A]

Section 8. Permit Changes and Renewal

37. Permit Applications and Submittals. The Permittee shall comply with the following requirements for submitting application information to the EPA Region 10:

37.1. The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;

37.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, Mail Stop: OAW-150, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.

37.3. To the extent practicable, the Permittee shall provide to EPA applications in portable document format (pdf), MS Word format (.doc), or other computer-readable format compatible with EPA's national database management system; and

37.4. The Permittee shall maintain records as necessary to demonstrate compliance with this condition.

[18 AAC 50.040(j)(7), 50.326(a) & (j)(3), & 50.346(b)(7)]
[40 CFR 71.10(d)(1)]

38. Emissions Trading. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(8)]

39. Off Permit Changes. The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 CFR Part 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:

39.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;

39.2. Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d)–(i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;

39.3. The change shall not qualify for the shield under 40 CFR 71.6(f);

39.4. The Permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(12)]

40. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[4] changes within the permitted stationary source without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions):

40.1. The Permittee shall provide EPA and the Department with a notification no less than seven days in advance of the proposed change.

40.2. For each such change, the notification required by Condition 40.1 shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

40.3. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 40.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(13)]

41. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[5] an application under 18 AAC 50.326 no sooner than [18 months before the expiration date of this permit] and no later than [6 months before the expiration date of this permit]. The renewal application shall be complete before the permit expiration date listed on the cover page of this permit. Permit expiration terminates the stationary source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 CFR 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3), 50.326(c) & (j)(2)]
[40 CFR 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

[4] As defined in 40 C.F.R. 71.2, CAA Section 502(b)(10) changes are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[5] Submit permit applications to the Department's Anchorage office. The current address is: Air Permit Intake Clerk, ADEC, 555 Cordova Street, Anchorage, AK 99501.

Section 9. Compliance Requirements

General Compliance Requirements

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

42.1. included and specifically identified in the permit; or

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

[18 AAC 50.326(j)(3) & 50.345(a) & (b)

43. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14.120(c), 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

43.1. an enforcement action;

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

43.3. denial of an operating permit renewal application.

[18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]

44. For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.

[18 AAC 50.040(j), 50.326(j)]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

45. 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.

[18 AAC 50.326(j)(3) & 50.345(a) & (d)]

46. 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:

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

46.2. have access to and copy any records required by the permit;

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

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

[18 AAC 50.326(j)(3) & 50.345(a) & (h)]

47. For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis.

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(B)]

Section 10. Visible Emissions Forms

VISIBLE EMISSION OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources." Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under additional information. Following are brief descriptions of the type of information that needs to be entered on the form: for a more detailed discussion of each part of the form, refer to "Instructions for Use of Visible Emission Observation Form" (available at https://www3.epa.gov/ttnemc01/methods/webinar8.pdf)

- 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 visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clineometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Plume is present, note in the Comments section "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 color of clouds and 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.
- Observer's Affiliation: observer's employer.
- Certifying Organization, Certified By, Date: name of "smoke school" certifying observer and date of most recent certification.

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

Page No._____

Stationary Source Name		Type of Emission Unit		Observation Date		Start Time		End Time
				Sec / Min	0	15	30	45	Comments
Emission Unit Location				1					
City	State	Zip		2					
Phone # (Key Contact)		Stationary Source ID Number		3					
Process Equipment		Operating Mode		4					
Control Equipment		Operating Mode		5					
Describe Emission Point/Location				6					
Height above ground level	Height relative to observer	Clinometer Reading		7					
Distance From Observer		Direction From Observer		8					
Start End		Start End							
Describe Emissions & Color				9					
Start		End							
Visible Water Vapor Present? If yes, determine approximate distance from the				10					
No Yes	stack exit to where the plume was read								
Point in Plume at Which Opacity Was Determined				11					
Describe Plume Background		Background Color		12					
Start		Start							
End		End		13					
Sky Conditions:				14					
Start		End							
Wind Speed		Wind Direction From		15					
Start End		Start End							
Ambient Temperature		Wet Bulb Temp	RH percent	16					
SOURCE LAYOUT SKETCH:	1 Stack or Point Being Read	2 Wind Direction From		17					
3 Observer Location	4 Sun Location	5 North Arrow	6 Other Stacks						
				18					
				19					
				20					
				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					
				30					
				Range of Opacity					
				Minimum			Maximum		
I have received a copy of these opacity observations				Print Observer's Name					
Print Name:				Observer's Signature					Date
Signature:									Observer's Affiliation:
Title	Date			Certifying Organization					
				Certified By:				Date	

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

Section 11. Notification Form

Insulfoam Facility	AQ1081TVP03
Stationary Source Name	**Air Quality Permit No.**
Insulfoam (div of CCM, LLC)	
Company Name	**Date**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

☐ Deviations from COBC, CO, or Settlement Agreement – Complete Section 2 and Certify

Section 1. Excess Emissions

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

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

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

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

☐ Bad Fuel/Coal/Gas ☐ Upset Condition ☐ Other _____

(c) **Description**

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

(d) **Emissions Units Involved**:
Identify the emissions unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

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

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

☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Other _____

☐ Marine Vessel Opacity ☐ Flaring _____

(f) **Unavoidable Emissions**:

Do you intend to assert that these excess emissions were unavoidable? ☐ Yes ☐ No

Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐ Yes ☐ No

Certify Report (Go to end of form.)

Section 2. Permit Deviations

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

- ☐ Emissions unit-Specific
- ☐ Failure to Monitor/Report
- ☐ General Source Test/Monitoring Requirements
- ☐ Recording/Reporting/Compliance Certification
- ☐ Standard Conditions Not Included in the Permit
- ☐ Other Section: _____ (Title of section and section number of your permit).
- ☐ Generally Applicable Requirements
- ☐ Reporting/Monitoring for Diesel Engines
- ☐ Recordkeeping Failure
- ☐ Insignificant Emissions unit
- ☐ Stationary Source Wide

(b) **Emissions unit Involved:**

Identify the emissions unit involved in the event, using the same identification number and name as in the permit. List the corresponding permit conditions 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.

(d) **Corrective Actions**:
Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To submit this report:

1. Electronically using the Department's Air Online Services at the following website: http://dec.alaska.gov/applications/air/airtoolsweb/

   If submitted online, report must be submitted by an authorized E-Signer for the stationary source.

   Or
2. Fax this form to: 907-451-2187

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

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

   Or
5. Phone Notifications: 907-451-5173

   Phone notifications require a written follow-up report.

[18 AAC 50.346(b)(3)]

Section 12. Emission Inventory Form

Detailed instructions are available at the Department's Air Online Services (AOS) at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory by clicking on "Emission Inventory Instructions" button.

ADEC Reporting Form **Emission Inventory Reporting** State of Alaska Department of Environmental Conservation Division of Air Quality	**Emission Inventory Year- [ ]**

Mandatory information is highlighted in bright yellow. Make additional copies as needed.

Stationary Source Detail		
Inventory Start Date		
Inventory End Date		
ADEC ID or Permit Number		
EPA ID		
Census Area/Community		
Facility Name		
Facility Physical Location	**Address**	
	City, State, Zip Code	
	Latitude	**Longitude**
	Legal Description:	
Owner Name		
Owner Address		
Owner contact number		
Mailing Contact Information	**Address**	
	City, State, Zip Code	
Line of Business (NAICS)		
Facility Status		

Emission Unit Data			
Specifications			
ID		Design Capacity	
Description			
Emission Unit Status			
Manufacturer		Manufactured Year	
Model Number		Serial Number	
Regulations			
Regulation/Description			

Control Equipment (List All if applicable)			
ID			
System Description			
Equipment Type(s)			
Manufacturer			
Model			
Control Efficiency (%):			
Capture Efficiency (%)			
Pollutants Controlled		Reduction Efficiency (%)	
		Reduction Efficiency (%)	

Processes			
Process			
SCC Code			
Material Processed			
Period Start			
Period End			
Throughput (units):			
Summer %			
Fall %			
Winter %			
Spring %			
Operational Schedule			
Days/Week			
Hours/Day			
Weeks/Year			
Hours/Year			
Fuel Characteristics			
Heat Content	Elem. Sulfur Content (%)	H2S Sulfur Content	Ash Content (if applicable)
Heating			
Heat Input		Heat Output	Heat Values Convention

Emission Operating Type					
Pollutant	**Emission Factor**	**EF Numerator**	**EF Denominator**	**Emission Calculation Method**	**Tons**
Carbon Monoxide (CO)					
Nitrogen Oxides (NOx)					
PM10 Primary (PM10-PRI)					
PM2.5 Filterable (PM25-FIL)[6]					
PM Condensable (PM-CON)[7]					
Sulfur Dioxide (SO_2)					
NH3 (Ammonia)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					
Emissions' Release Point					
Release Point ID					
Apportion%					

[6] Report $PM_{2.5}$ filterable and particulate matter condensable portions of the $PM_{2.5}$ Primary emissions, as applicable, in accordance with Federal Regulation 40 CFR 51.15(a)(1)(vi). Refer to EPA's May 2017 "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" (see Section 4.2.1) for guidance on the reporting of $PM_{2.5}$ filterable and condensable emissions.

[7] Please note on the inventory form if there is no available emission factor that can be used for an applicable condensable PM. For example, EPA AP-42 Table 3.3-1 does not contain a condensable particulate matter emission factor for diesel engines smaller than 600 hp.

Process	Secondary Process (if applicable)
SCC Code	(ex. 20100201)
Material Processed	
Period Start	
Period End	
Throughput (units):	
Summer %	
Fall %	
Winter %	
Spring %	
Operational Schedule	
Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

Fuel Characteristics

Heat Content	Elem. Sulfur Content	H2S Sulfur Content	Ash Content (if applicable)

Heating

Heat Input	Heat Output	Heat Values Convention

Emissions Operating Type:

Pollutant	Emission Factor	EF Numerator	EF Denominator	Emission Calculation Method	Tons
Carbon Monoxide (CO)					
Nitrogen Oxides (NOx)					
PM10 Primary (PM10-PRI)					
PM2.5 Primary (PM25-PRI)					
Sulfur Dioxide (SO2)					
Lead and Lead Compounds					
NH3 (Ammonia)					
Volatile Organic Compounds (VOC)					

Emissions' Release Point			
Release Point ID			
Apportion%			

Stack Detail (Release Point)	
> Specifications	
ID	
Type	
Description	
Stack Status	
> Stack Parameters	
Stack Height (ft)	
Stack Diameter (ft)	
Exit Gas Temp (F)	
Exit Gas Velocity (fps)	
Exit Gas Flow Rate (acfm)	
> Geographic Coordinate	
Latitude	
Longitude	
Datum	
Accuracy (meters)	
Base Elevation (meters)	

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

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

To submit this report:

1. Department's Air Online Services using the Permittee Portal option: http://dec.alaska.gov/Applications/Air/airtoolsweb/.

Or

2. Fax this form to: 907-269-7508

Or

3. E-mail to: DEC.AQ.airreports@alaska.gov

Or

4. Mail to: ADEC Air Permits Program
ATTN: Emissions Inventory
555 Cordova Street
Anchorage, Alaska 99501

[18 AAC 50.346(b)(9)]

Section 13. EEMSP Summary Report Form

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 C.F.R. 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company:
Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission Data Summary [1]	**CMS Performance Summary** [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown ..... ____	a. Monitor equipment malfunctions ..... ____
b. Control equipment problems ..... ____	b. Non-Monitor equipment malfunctions ..... ____
c. Process problems ..... ____	c. Quality assurance calibration ..... ____
d. Other known causes ..... ____	d. Other known causes ..... ____
e. Unknown causes ..... ____	e. Unknown causes ..... ____
2. Total duration of excess emissions ..... ____	2. Total CMS Downtime ..... ____
3. Total duration of excess emissions x (100) / [Total source operating time] ..... ____ % [2]	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 C.F.R. 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____