


**FORM A1**  
**Stationary Source (General Information)**

GENERAL INFORMATION			
<b>1. Permittee:</b>			
Permittee Name: Insulfoam, a division of Carlisle Construction Materials, LLC			
Mailing Address Line 1: 19727 57 <sup>th</sup> Ave E			
Mailing Address Line 2			
City: Puyallup	State: WA	Zip Code: 98375	
<b>2. Stationary Source Name: Insulfoam Facility</b>			
<b>3. Stationary Source Physical Address:</b>			
Physical Address Line 1: 628 Western Drive			
Physical Address Line 2			
City: Anchorage	State: AK	Zip Code: 99501	
<b>4. Location:</b>	Latitude: 61.226112 North	Longitude: 149.891292 West	
<b>5. Primary SIC Code: 3086</b>	SIC Code Description: Expandable Polystyrene Manufacturing	<b>Primary NAICS Code: 326140</b>	
<b>6. Current/Previous Title V Air Permit No.: AQ1081TVP03</b>		Expiration Date: 10/09/2024	
<b>7. Does this application contain confidential data?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
8. APPLICATION IS BEING MADE FOR:			
<input type="checkbox"/> Initial Title V Permit for this Stationary Source <input type="checkbox"/> Modify Title V Permit (currently permitted) <input checked="" type="checkbox"/> Title V Permit Renewal			
9. CONTACT INFORMATION (Attach additional sheets if needed)			
<b>Owner: Carlisle Construction Materials, LLC</b>		<b>Operator: Insulfoam, a division of Carlisle Construction Materials, LLC</b>	
Name/Title:		Name/Title:	
Mailing Address Line 1: 1285 Ritner Highway		Mailing Address Line 1: 628 Western Drive	
Mailing Address Line 2		Mailing Address Line 2	
City: Carlisle	State: PA	Zip Code: 17013	City: Anchorage      State: AK      Zip Code: 99501
<b>Permittee's Responsible Official:</b>		<b>Designated Agent:</b>	
Name/Title: Daryl Sobek/ RSD/General Manager		Name/Title:	
Mailing Address Line 1: 628 Western Drive		Mailing Address Line 1:	
Mailing Address Line 2		Mailing Address Line 2	
City: Anchorage	State: AK	Zip Code: 99501	City:      State:      Zip Code:
<b>Stationary Source and Building Contact:</b>		<b>Fee Contact:</b>	
Name/Title: Daryl Sobek/ RSD/General Manager		Name/Title: Helena Riske / Office Manager	
Mailing Address Line 1: 628 Western Drive		Mailing Address Line 1: 628 Western Drive	
Mailing Address Line 2		Mailing Address Line 2	
City: Anchorage	State: AK	Zip Code: 99501	City: Anchorage      State: AK      Zip Code: 99501
Phone: 907-279-9407	Email: daryl.sobek@insulfoam.com	Phone: 907-279-9407	Email: helena.riske@insulfoam.com
<b>Permit Contact:</b>		<b>Person or Firm that Prepared Application: Arcadis U.S., Inc.</b>	
Name/Title: Justin Ivy / Environmental Manager		Name/Title: Scott Reddig / Consultant	
Mailing Address Line 1: P.O. Box 7000		Mailing Address Line 1: 880 H St #101	
Mailing Address Line 2		Mailing Address Line 2	
City: Carlisle	State: PA	Zip Code: 17013	City: Anchorage      State: AK      Zip Code: 99501
Phone: 949-473-8769	Email: justin.ivy@carlisleccm.com	Phone: 717-305-0512	Email: scott.reddig@arcadis.com
10. STATEMENT OF 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.			
Name of Responsible Official (typed): Daryl Sobek		Title: RSD / General Manager	
<input checked="" type="checkbox"/> Signature (blue ink): 		Date: 4/4/24	

**FORM A3**  
**Operating Scenario Description**

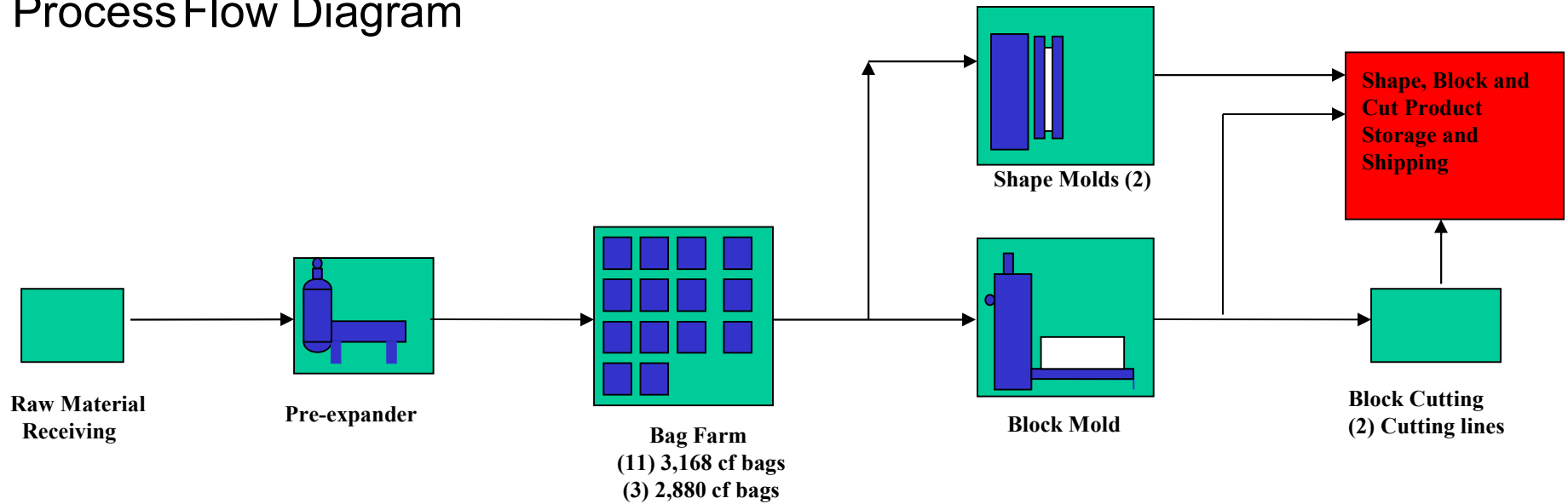
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Permit Number: \_\_\_\_\_

1.	Operating scenario ID	
2.	Operating scenario description:	
3.	List the emissions units involved in this operating scenario.	
4.	Operating schedule:                      hours/day	
	days/week	
	weeks/year	
5.	Seasonal variation (%):    December - February	
	March – May	
	June - August	
	September - November	

6.     Attach process flow diagram

# Process Flow Diagram



## Preexpander Specifications

**Idro PJX3000 batch type**

Range in EPS feed rate: **2,000 - 3,000 lb/hr**

Operating pressure and temperature: **200 F**

Range in cycle time: **0.5 – 1.5 minutes (density dependent)**

Fluid bed dryer dwell time: **30 seconds**

## Aging Bag Farm Specifications

**(11) 3,168 and (3) 2,880** cf nylon mesh bags

**43,500** cf total capacity

Range in aging time: **6 – 96 hours (24-48 typical)**

Range in EPS feed rate: **equals preexpander feed**

## Mold Specifications

**Idro 16' Vacuum Block Mold**

Operating pressure and temperature: **170 – 200 F**

Range in cycle time: **5 – 15 minutes (density dependent)**

Range in EPS feed rate: **2640 – 3800 lb/hr**

**Promass PN1628 Shape Mold**

Operating pressure and temperature: **170 – 200 F**

Range in cycle time: **2-3 minutes (density dependent)**

EPS feed rate: **540 lb/hr**

**Hirsch 1450 Shape Mold**

Operating pressure and temperature: **170 – 200 F**

Range in cycle time: **3 – 6 minutes (density dependent)**

EPS feed rate: **300 lb/hr**

## Block/product Storage Areas

Indoor: **10,000 ft<sup>2</sup>**

Outdoor: **40,000 ft<sup>2</sup>**

**FORM A4**  
**Title V Air Operating Permit Renewal Application Information**

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Permit Number: \_\_\_\_\_

1.	Permit Contact: Name	
	Title	
	Mailing Address Line 1	
	Mailing Address Line 2	
	Phone Number	
	Email	
2.	Were there any changes to stationary source General Information (Form A1)? If yes, complete and submit a Form A1.	
3.	Were there any changes to the stationary source description (Form A2)? If yes, complete and submit a Form A2.	
4.	Were there any off-permit changes? Reference any notifications provided to the Department, and attach copies of the notifications.	
	If yes, integrate changes into renewal permit? [if no, explain]	
5.	Have any Alaska Title I permits been issued to the stationary source since the most recent Title V permit or revision issuance?	
	If yes, integrate changes into renewal permit? [If yes, please list. If no, explain]	
6.	Will there be any changes to the operating scenario(s)? [if yes, describe and attach Form A3]	
7.	Will there be any new, modified, or reconstructed emission units or air pollution control equipment? [if yes, attach appropriate forms from Form Series B, C, D, and E]	
8.	Are the current emissions units correctly identified and defined in the permit? [if no, attach appropriate forms from Form Series B, C, D, and E]	
9.	Does the CAM rule [40 CFR Part 64] apply to any of the emissions units? [if yes, review the guidance provided for CAM in the Form A4 instructions for this item]	
10.	Does the accidental release prevention regulation [40 CFR Part 68] apply to the facility? [if yes, provide the appropriate regulatory applicability document in detail.]	
11.	Are there any other new applicable requirements? [if yes, list the new applicable requirements, emissions units, and attach the appropriate Series E Form]	

**FORM A4**

Title V Air Operating Permit Renewal Application Information

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12.	Are there any requested changes in the assessable potential to emit other than those identified in item 9 above? [if yes, answer the following]	
	Are the changes a result of having better emissions information such as a new emission factor from a recent source test? [if yes, complete and attach any applicable emissions forms from Series D. Attach additional information as necessary to fully document.]	
	Are the changes due to an increase in production? [if yes, complete and attach the applicable emissions form from Series D. Attach additional information as necessary to fully document.]	
13.	Is the stationary source in compliance with all of the conditions of the current permit? If yes, attach a compliance certification. If no, attach a compliance schedule and/or actions taken for any out-of-compliance emission units.	
14.	Are there any requested changes to testing and/or monitoring conditions? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	
15.	Are there any requested changes to monitoring conditions other than those being replaced by CAM? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	
16.	Are there any requested changes to recordkeeping conditions? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	
17.	Are there any requested changes to reporting conditions? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	
18.	Are there any requested changes to the non-applicable requirements (i.e. permit shield)? [if yes, identify the emission unit, the requested change, and the reason in the appropriate Series B and/or D form. If the change applies stationary source-wide, complete the appropriate Series E form. Attach additional information as necessary to fully document.]	
19.	Are there any other requested changes to any condition? [if yes, identify the condition, the requested change, and the reason. Attach	

**FORM A4**  
Title V Air Operating Permit Renewal Application Information

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	additional information as necessary to fully document.]	
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**Statement of 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.*

**Daryl Sobek**

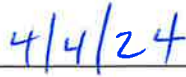
Name of Responsible Official



Signature (blue ink)

**RDS / General Manager**

Title



Date

Insulfoam

July 1, 2022

Alaska Department of Environmental Conservation  
Division of Air Quality  
555 Cordova St.  
Anchorage, AK 99501

Re: Off-Permit Change – AQ1081TVP03

We are writing to inform the Department that Insulfoam has implemented an Off-Permit Change at our facility in Anchorage. We have replaced Promass PS13525 Shape Press with Promass PN1628 Shape Press in November 2021. We are requesting no changes to current permitted emissions limits, including the facility limit of 245 tons VOC per year, as a result of this change.

“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.”



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Daryl Sobek, General Manager  
Insulfoam

CC: Part 70 Operating Permit Program  
US EPA Region 10  
Mail Stop: OAW-150  
1200 Sixth Avenue  
Suite 155  
Seattle, WA 98101

# Annual Compliance Certification

Permit No.: AQ1081TVP03

**Facility Name:** Insulfoam  
**Facility Address:** 628 Western Drive  
 Anchorage, AK 99501

**Primary Contact:** Justin Ivy  
**Phone Number:** (949) 473-8769

This Annual Compliance Certification is being submitted for the period of **January 1 through December 31** of **2023** to satisfy the requirements of Condition 35 of the permit.

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p><b>1. Industrial Process and Fuel-Burning Equipment Visible Emissions.</b> The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment including EU IDs 1 and 2 listed in Table A, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.[18 AAC 50.040(j), 18 AAC 50.326(j), 18 AAC 50.055(a)(1)][40 C.F.R. 71.6(a)(1)]</p>	Continuous	Combustion of natural gas fuel
<p><b>2. Industrial Process and Fuel-Burning Equipment Particulate Matter.</b> The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment, including EU IDs 1 and 2 listed in Table A, 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), 18 AAC 50.326(j), 18 AAC 50.055(b)(1)][40 C.F.R. 71.6(a)(1)]</p>	Continuous	Combustion of natural gas fuel
<p><b>3. Sulfur Compound Emissions.</b> In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from an industrial process or fuel-burning equipment, including EU IDs 1 and 2 listed in Table A, to exceed 500 ppm averaged over three hours.[18 AAC 50.040(j), 18 AAC 50.326(j), 18 AAC 50.055(c)]</p>	Continuous	Combustion of natural gas fuel
<p><b>4. PSD Avoidance Limits.</b> The Permittee shall limit VOC emissions from all emission units listed in Table A to no greater than 245 tons per 12 consecutive months.[Condition 4, Minor Permit No. AQ1081MSS01, March 26, 2009][18 AAC 50.040(j) &amp; 50.326(j)][40 C.F.R. 71.6(a)]</p>	Continuous	EPS monthly bead usage records Natural gas usage records Monthly emissions records



# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>5. <b>Asbestos NESHAP.</b> The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61 Subpart A and Appendix A.[18 AAC 50.040(b)(1) &amp; (2)(F), &amp; 50.326(j)][40 C.F.R. 61, Subparts A &amp; M, and Appendix A]</p>	Continuous	Use of qualified/certified asbestos surveyors and contractors
<p>6. <b>Refrigerant Recycling and Disposal.</b> The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.[18 AAC 50.040(d), 18 AAC 50.326(j)][40 C.F.R. 82, Subpart F]</p>	Continuous	Use of qualified/certified refrigerant maintenance and repair contractors
<p>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), 18 AAC 50.345(a) &amp; (e)]</p>	N/A	No Certification Required
<p>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), 18 AAC 50.345(a) &amp; (f)]</p>	N/A	No Certification Required
<p>9. The permit does not convey any property rights of any sort, nor any exclusive privilege. [18 AAC 50.326(j)(3), 18 AAC 50.345(a) &amp; (g)]</p>	N/A	No Certification Required
<p>10. <b>Administration Fees.</b> The Permittee shall pay to the department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-405. [18 AAC 50.326(j)(1), 18 AAC 50.400-405] [AS 37.10.052(b), 2000; AS 46.14.240]</p>	Continuous	Fee Payment Records
<p>11. <b>Assessable Emissions.</b> 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(b). 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 (TPY). [18 AAC 50.040(j)(3), 18 AAC 50.326(j)(1), 18 AAC 50.346(b)(1), 18 AAC 50.410-420][40 C.F.R. 71.5(c)(3)(ii)]</p>	Continuous	Submission of Annual Emission Fee and Report

# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p><b>12. Assessable Emission Estimates.</b> Emission fees will be assessed as follows:</p> <p>12.1 no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates; or</p> <p>12.2 if no estimate is received 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 10.1. [18 AAC 50.040(j)(3), 18 AAC 50.326(j)(1), 18 AAC 50.346(b)(1), 18 AAC 50.410-420][40 C.F.R. 71.5(c)(3)(ii)]</p>	Continuous	Submission of Annual Emission Fee and Report
<p><b>13. Good Air Pollution Control Practice.</b> The Permittee shall do the following for EU IDs 1 and 3 – 9:</p> <p>13.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;</p> <p>13.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and</p> <p>13.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.[18 AAC 50.326(j)(3), 18 AAC 50.030 &amp; 50.346(b)(5)]</p>	Continuous	Preventative Maintenance Program and Recordkeeping
<p><b>14. Dilution.</b> 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)]</p>	Continuous	Annual Compliance Certification
<p><b>15. Reasonable Precautions to Prevent Fugitive Dust.</b> 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) &amp; 50.346(c), 18 AAC 50.040(e), 18 AAC 50.326(j)(3)]</p>	Continuous	Nuisance Complaint Log
<p><b>16. Stack Injection.</b> 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 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)]</p>	Continuous	No materials other than process emissions released to stack

# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>17. <b>Air Pollution Prohibited.</b> 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, 18 AAC 50.040(e), 18 AAC 50.326(j)(3), 18 AAC 50.346(a)][40 C.F.R. 71.6(a)(3)]</p>	<p>Continuous</p>	<p>Excess Emissions Reports Permit Deviation Reports Nuisance Complaint Log Annual Compliance Certification</p>

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p><b>18. Technology-Based Emission Standard.</b> If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard 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. Monitoring of compliance for this condition consists of the report required under condition 33. [18 AAC 50.235(a), 18 AAC 50.040(j)(4), 18 AAC 50.326(j)(4)][40 C.F.R. 71.6(c)(6)]</p>	Continuous	Excess Emissions Report
<p><b>19. Requested Source Tests.</b> 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) &amp; 50.345(a) &amp; (k)]</p>	Continuous	No source testing currently required
<p><b>20. Operating Conditions.</b> Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing[18 AAC 50.220(b)]</p> <p>20.1 at a point or points that characterize the actual discharge into the ambient air; and</p> <p>20.2 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.</p>	Continuous	No source testing currently required
<p><b>21. Reference Test Methods.</b> The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:</p> <p>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.[18 AAC 50.030, &amp; 50.220(c)(1)(D)]</p> <p>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 C.F.R. 60, Appendix A.[18 AAC 50.040(a)(3), 18 AAC 50.220(c)(1)(E)][40 C.F.R. 60, Appendix A]</p> <p>21.3 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.[18 AAC 50.035(b)(2), 18 AAC 50.220(c)(1)(F)][40 C.F.R. 51, Appendix M]</p> <p>21.4 Source testing for emissions of any pollutant may be determined using an alternative method approved by the department in accordance with 40 C.F.R. 63, Appendix A, Method 301.[18 AAC 50.040(c)(24), 18 AAC 50.220(c)(2)][40 C.F.R. 63, Appendix A Method 301]</p>	Continuous	No source testing currently required

# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>22. <b>Excess Air Requirements.</b> 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 emission 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), 18 AAC 50.990(102)]</p>	Continuous	No source testing currently required
<p>23. <b>Test Exemption.</b> 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)]</p>	Continuous	No source testing currently required
<p>24. <b>Test Deadline Extension.</b> 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) &amp; (l)]</p>	Continuous	No source testing currently required
<p>25. <b>Test Plans.</b> Except as provided in condition 24, 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 emission 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 20 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.[18 AAC 50.345(a) &amp; (m)]</p>	Continuous	No source testing currently required
<p>26. <b>Test Notification.</b> 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) &amp; (n)]</p>	Continuous	No source testing currently required
<p>27. <b>Test Reports.</b> Except as provided in condition 23, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the <i>Source Test Report Outline</i>, adopted by reference in 18 AAC 50.030. The Permittee shall additionally 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) &amp; (o)]</p>	Continuous	No source testing currently required
<p>28. <b>Particulate Matter Calculations.</b> 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. The source testing must account for those emissions caused by soot blowing, grate cleaning, or other routine maintenance activities by ensuring that at least one test run includes the emissions caused by the routine maintenance activity and is conducted under conditions that lead to representative emissions from that activity.</p>	Continuous	No source testing currently required

# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>29. <b>Recordkeeping Requirements.</b> The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:[18 AAC 50.326(j)][40 C.F.R 60.7(f), Subpart A, &amp; 71.6(a)(3)(ii)(B)]</p>	Continuous	Recordkeeping
<p>30. <b>Certification.</b> The Permittee shall certify all reports, compliance certifications, or other documents 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. 18 AAC 50.205 &amp; 50.345(a) &amp; (j), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(3)(iii)(A)]</p>	Continuous	Certification of reports and annual compliance certifications
<p>31. <b>Submittals.</b> Unless otherwise directed by the department or this permit, the Permittee shall send two copies of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with condition 30.[18 AAC 50.326(j)][40 C.F.R. 71.6(a)(3)(iii)(A)]</p>	Continuous	Certification of reports and annual compliance certifications
<p>32. <b>Information Requests.</b> 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 50.200 &amp; 50.345(a) &amp; (i), 18 AAC 50.326(a) &amp; (j)][40 C.F.R. 71.5(a)(2) &amp; 71.6(a)(3)]</p>	Continuous	Submission of requested information
<p>33. <b>Excess Emissions and Permit Deviation Reports.</b> [18 AAC 50.235(a)(2); 50.240(c); &amp; 50.346(b)(2) &amp; (3), 18 AAC 50.326(j)(3)]</p> <p>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:</p>	Continuous	Submission of Excess Emissions and Permit Deviation Reports
<p>34. <b>Operating Reports.</b> During the life of this permit, the Permittee shall submit to the department one 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. The Permittee, at their discretion, may submit one of the required two copies in electronic format (PDF or other department compatible image format).[18 AAC 50.346(a), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(3)(iii)(A)]</p>	Continuous	Submission of Semi-Annual Monitoring Reports.

# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>35. <b>Annual Compliance Certification.</b> Each year by March 31, the Permittee shall compile and submit to the department one original and one copy of an annual compliance certification report. The Permittee, at their discretion, may submit one of the required two copies in electronic format (PDF or other department compatible image format).[18 AAC 50.205 &amp; 50.326(j), 18 AAC 50.345(a) &amp; (j)][40 C.F.R. 71.6(c)(5)]</p>	<p>Continuous</p>	<p>Submission of Annual Compliance Certifications</p>

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>36. <b>Emission Inventory Reporting.</b> The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, NH<sub>3</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, VOCs and Lead (Pb) (and lead compounds) using the form in Section 12 of this permit, [18 AAC 50.346(b)(8) and 18 AAC 50.200][40 CFR 51.15, 51.30(a)(1) &amp; (b)(1) and 40 CFR 51, Appendix A to Subpart A, 73 FR 76556 (12/17/08)]</p>	Continuous	Submission of Annual Emission Fee and Report
<p>37. <b>Permit Applications and Submittals.</b> The Permittee shall comply with the following requirements for submitting application information to the EPA Region 10: [18 AAC 50.040(j)(7) &amp; 50.326(b)][40 C.F.R. 71.10(d)(1)]</p>	Continuous	Submittal of Reports to EPA Region 10
<p>38. <b>Emissions Trading.</b> 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), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(8)]</p>	N/A	No applicable changes made
<p>39. <b>Off Permit Changes.</b> The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 C.F.R. 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:[18 AAC 50.040(j)(4), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(12)]</p> <p>39.1 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;</p> <p>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;</p> <p>39.3 The change shall not qualify for the shield under 40 C.F.R. 71.6(f);</p> <p>39.4 The Permittee shall keep a record describing changes made at the 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.</p>	Continuous	Records of Off Permit Notifications



Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p><b>40. Operational Flexibility.</b> The Permittee may make 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):</p> <p>40.1 The Permittee shall provide EPA and the department with a notification no less than 7 days in advance of the proposed change.</p> <p>40.2 For each such change, the written notification required above shall include a brief description of the change within the permitted facility, 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.</p> <p>40.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to condition 40.</p>	Continuous	Records of Operational Flexibility Notifications
<p><b>41. Permit Renewal.</b> To renew this permit, the Permittee shall submit an application under 18 AAC 50.326 no sooner than <b>April 9, 2023</b> and no later than <b>April 9, 2024</b>. <b>The renewal application shall be complete before the permit expiration date listed on the cover page of this permit.</b> Permit expiration terminates the source’s right to operate unless a timely and complete renewal application has been submitted consistent with 40 C.F.R. 71.7(b) and 71.5(a)(1)(iii).[18 AAC 50.040(j)(3), 18 AAC 50.326(c)(2) &amp; (j)(2)][40 C.F.R. 71.5(a)(1)(iii), 71.7(b) &amp; (c)(1)(ii)]</p>	N/A	No permit renewal application required this reporting period
<p><b>42.</b> Compliance with permit terms and conditions is considered to be compliance with those requirements that are</p> <p>42.1 included and specifically identified in the permit; or</p> <p>42.2 determined in writing in the permit to be inapplicable.[18 AAC 50.326(j)(3), 18 AAC 50.345(a) &amp; (b)]</p>	N/A	No Certification Required
<p><b>43.</b> 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</p> <p>43.1 an enforcement action;</p> <p>43.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or</p> <p>43.3 denial of an operating permit renewal application.[18 AAC 50.326(j)(3), 18 AAC 50.345(a) &amp; (c)]</p>	Continuous	Monitoring Records

# Annual Compliance Certification

Permit No.: AQ1081TVP03

Permit Condition/Paraphrase	Continuous or Intermittent Compliance	Method(s) for Determining Compliance/Comments
<p>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) &amp; 71.5(c)(8)(iii)(A)]</p>	Continuous	Recordkeeping
<p>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), 18 AAC 50.345(a) &amp; (d)]</p>	N/A	No Certification Required
<p>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</p> <p>46.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;</p> <p>46.2 have access to and copy any records required by the permit;</p> <p>46.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and</p> <p>46.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.[18 AAC 50.326(j)(3), 18 AAC 50.345(a) &amp; (h)]</p>	Continuous	Inspectors allowed access upon request
<p>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), 18 AAC 50.326(j)][40 C.F.R. 71.6(c)(3) &amp; 71.5(c)(8)(iii)(B)]</p>	Continuous	Monitoring Records

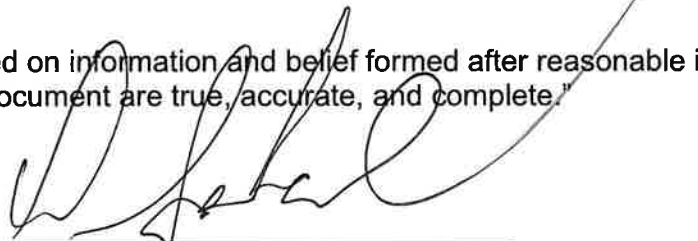
# Annual Compliance Certification

Permit No.: AQ1081TVP03

- The facility had no permit deviations or excess emissions events during the reporting period; or,
- The facility had the following permit deviations or excess emission events during the reporting period:

Date	Equipment	Condition	Description	Corrective Actions	Date Previously Reported (if applicable)

"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."



Daryl Sobek, RSD/General Manager

3.21.24

Date

**FORM B**  
Emission Unit Listing For This Application

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Permit Number: \_\_\_\_\_

EMISSION UNIT LISTING: New, Modified, Previously Unpermitted, Replaced, Deleted					
Emission Unit ID Number	Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date	Notes
Emission Units To Be ADDED By This Application (New, Previously Unpermitted, or Replacement)					
Emission Units To Be MODIFIED By This Application					
Emission Units To Be DELETED By This Application					

## FORM B

### Emission Unit Listing For This Application

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<b>SIGNIFICANT EMISSION UNIT LISTING: Title V permitted emission units that have not been modified</b>				
Emission Unit ID Number	Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date

**FORM B**

Emission Unit Listing For This Application

---

<b>INSIGNIFICANT EMISSION UNIT LISTING: Insignificant Title V permitted emission units that have not been modified</b>				
<b>Emission Unit Name</b>	<b>Brief Emission Unit Description</b>	<b>Rating/Size</b>	<b>Construction Date</b>	<b>Basis for Insignificant Status</b>

## FORM B1

### Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [if yes, describe]	
6.	Manufacturer	
7.	Description of emission unit, including type of boiler/heater and firing method:	
8.	Rated design capacity (heat input, MMBtu/hr)	
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

13.	Is waste heat utilized for any purpose? If yes, describe:

## FORM B1

### Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]



**FORM B1**

Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

---

**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**Attachment to FORM B1 (Boiler 1)**  
**Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)**

Permit Number: **AQ1081TVP03**

Applicable Requirements Specific to Emission Unit: 1

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03 Condition 1	[18 AAC 50.040(j)(4), 12/3/05; 18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.055(a)(1), 10/1/04, <b>18 AAC 50.346(c)</b> ][40 C.F.R. 71.6(a)(1), 7/1/04]	Visible Emissions	<b>1. Industrial Process and Fuel-Burning Equipment Visible Emissions.</b> 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.	Yes	Combustion of natural gas fuel. Include statement in each operating report.
AQ1081TVP03 Condition 2	[18 AAC 50.040(j)(4), 12/3/05; 18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.055(b)(1), 10/1/04, <b>18 AAC 50.346(c)</b> ][40 C.F.R. 71.6(a)(1), 7/1/04]	PM	<b>2. Industrial Process and Fuel-Burning Equipment Particulate Matter.</b> The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 and 2 A listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.	Yes	Combustion of natural gas fuel. Include statement in each operating report.
AQ1081TVP03 Condition 3	[18 AAC 50.040(j)(4), 12/3/05; 18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.055(c), 10/1/04, <b>18 AAC 50.346(c), d</b> ] [40 C.F.R. 71.6(a)(1), 7/1/04]	SO2	<b>3. Sulfur Compound Emissions.</b> The Permittee shall not cause or allow sulfur compound emissions, expressed as SO <sub>2</sub> , from EU IDs 1 and 2A to exceed 500 ppm averaged over three hours.	Yes	Semi-annual statement from the fuel supplier of the fuel total sulfur level in ppm

**FORM B1**

**Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)**

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [if yes, describe]	
6.	Manufacturer	
7.	Description of emission unit, including type of boiler/heater and firing method:	
8.	Rated design capacity (heat input, MMBtu/hr)	
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

13.	Is waste heat utilized for any purpose? If yes, describe:
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## FORM B1

### Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B1**

Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

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**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**Attachment to FORM B1 (Boiler 2)**  
**Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)**

Permit Number: **AQ1081TVP03**

Applicable Requirements Specific to Emission Unit: 2A

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03 Condition 1	[18 AAC 50.040(j)(4), 12/3/05; 18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.055(a)(1), 10/1/04, <b>18 AAC 50.346(c)</b> ][40 C.F.R. 71.6(a)(1), 7/1/04]	Visible Emissions	<b>1. Industrial Process and Fuel-Burning Equipment Visible Emissions.</b> 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.	Yes	Combustion of natural gas fuel. Include statement in each operating report.
AQ1081TVP03 Condition 2	[18 AAC 50.040(j)(4), 12/3/05; 18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.055(b)(1), 10/1/04, <b>18 AAC 50.346(c)</b> ][40 C.F.R. 71.6(a)(1), 7/1/04]	PM	<b>2. Industrial Process and Fuel-Burning Equipment Particulate Matter.</b> The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 and 2 A listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.	Yes	Combustion of natural gas fuel. Include statement in each operating report.
AQ1081TVP03 Condition 3	[18 AAC 50.040(j)(4), 12/3/05; 18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.055(c), 10/1/04, <b>18 AAC 50.346(c), d</b> ] [40 C.F.R. 71.6(a)(1), 7/1/04]	SO2	<b>3. Sulfur Compound Emissions.</b> The Permittee shall not cause or allow sulfur compound emissions, expressed as SO <sub>2</sub> , from EU IDs 1 and 2A to exceed 500 ppm averaged over three hours.	Yes	Semi-annual statement from the fuel supplier of the fuel total sulfur level in ppm

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.

## FORM B5

### Emission Unit Detail Form - Miscellaneous Emission Units

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]



**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.

## FORM B5

### Emission Unit Detail Form - Miscellaneous Emission Units

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.

## FORM B5

### Emission Unit Detail Form - Miscellaneous Emission Units

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.



## FORM B5

### Emission Unit Detail Form - Miscellaneous Emission Units

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

---

**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.

## FORM B5

### Emission Unit Detail Form - Miscellaneous Emission Units

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.

## FORM B5

### Emission Unit Detail Form - Miscellaneous Emission Units

**Applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM B5**  
Emission Unit Detail Form - Miscellaneous Emission Units

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**Non-applicable Requirements Specific to Emission Unit** (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]



**FORM D1**  
Emission Unit Summary of Emissions

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Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

## Boiler 1 Expected Emissions

**Emission Estimates for Natural Gas Fueled Boilers  
Insulfoam**

Unit Description	Fuel Source	Hours per Year	Max Capacity (1) MMcf/hr	Max Capacity (1) MMcf/day	Actual Capacity (1) MMcf/yr	Pollutant Emitted	Emission Factor (2),(3),(4)	Units	Daily Emissions (lb/day)	Annual Emissions (TPY)
Boiler	Natural Gas	8760	0.0061	0.15	14	<b>Pollutants</b>				
						TSP	7.6	lb/MMcf	1.11	0.05
						PM10	7.6	lb/MMcf	1.11	0.05
						VOC	5.5	lb/MMcf	0.81	0.04
						NOx	100	lb/MMcf	14.66	0.68
						CO	84	lb/MMcf	12.32	0.57
						SO <sub>2</sub>	0.6	lb/MMcf	0.09	0.00
						Pb	0.0005	lb/MMcf	0.000	0.00000
						CO <sub>2</sub>	120000	lb/MMcf	17596.10	810.00
						N <sub>2</sub> O	2.2	lb/MMcf	0.32	0.01
						CH <sub>4</sub>	2.3	lb/MMcf	0.34	0.02
						CO <sub>2</sub> e			17607.11	810.51
						<b>Hazardous Air Pollutants (HAP)</b>				
						Arsenic	0.0002	lb/MMcf	2.9E-05	1.4E-06
						Beryllium	0.000012	lb/MMcf	1.8E-06	8.1E-08
						Chromium	0.0014	lb/MMcf	2.1E-04	9.5E-06
						Cadmium	0.0011	lb/MMcf	1.6E-04	7.4E-06
						Cobalt	0.000084	lb/MMcf	1.2E-05	5.7E-07
						Lead	0.0005	lb/MMcf	7.3E-05	3.4E-06
						Manganese	0.00038	lb/MMcf	5.6E-05	2.6E-06
						Mercury	0.00026	lb/MMcf	3.8E-05	1.8E-06
						Nickel	0.0021	lb/MMcf	3.1E-04	1.4E-05
						Selenium	0.000024	lb/MMcf	3.5E-06	1.6E-07
						Benzene	0.0021	lb/MMcf	3.1E-04	1.4E-05
						Benz(a)anthracene	0.0000018	lb/MMcf	2.6E-07	1.2E-08
						Benzo(a)pyrene	0.0000012	lb/MMcf	1.8E-07	8.1E-09
						Benzo(b)fluoranthene	0.0000018	lb/MMcf	2.6E-07	1.2E-08
						Benzo(k)fluoranthene	0.0000018	lb/MMcf	2.6E-07	1.2E-08
						Dibenzo(a,h)anthracene	0.0000012	lb/MMcf	1.8E-07	8.1E-09
						Dichlorobenzene	0.0012	lb/MMcf	1.8E-04	8.1E-06
						Formaldehyde	0.075	lb/MMcf	1.1E-02	5.1E-04
						Hexane	1.8	lb/MMcf	2.6E-01	1.2E-02
Indeno(1,2,3-cd)pyrene	0.0000018	lb/MMcf	2.6E-07	1.2E-08						
Naphthalene	0.00061	lb/MMcf	8.9E-05	4.1E-06						
POM	0.000649	lb/MMcf	9.5E-05	4.4E-06						
Toluene	0.0034	lb/MMcf	5.0E-04	2.3E-05						
<b>Total HAP</b>									0.3	0.013

**Notes:**

- 1- Short and long term production rates assume 1000 Btu/cf natural gas.  
Daily emissions based on rated firing rate (250 total horsepower) x 24 hours per day:  
6.1 MMBtu/hr x 24 hr/day x cf/1000 Btu = 0.15 MMcf/day  
0.15 MMcf/day x 365 day/yr = 54 MMcf/yr  
Actual operating rate (utilization factor) is expected to be less than 50%.
- 2- Emission Factors from AP-42, July 1998, Table 1.4-2, for natural gas combustion
- 3- 100% of TSP is PM10.
- 4- HAP Emission factors from AP42 1.4-3 (3/98).

## Boiler 1 Potential Emissions

**Emission Estimates for Natural Gas Fueled Boilers  
Insulfoam**

Unit Description	Fuel Source	Hours per Year	Max Capacity (1) MMcf/hr	Max Capacity (1) MMcf/day	Actual Capacity (1) MMcf/yr	Pollutant Emitted	Emission Factor (2),(3),(4)	Units	Daily Emissions (lb/day)	Annual Emissions (TPY)
Boiler	Natural Gas	8760	0.0061	0.15	54	<b>Pollutants</b>				
						TSP	7.6	lb/MMcf	1.11	0.20
						PM10	7.6	lb/MMcf	1.11	0.20
						VOC	5.5	lb/MMcf	0.81	0.15
						NOx	100	lb/MMcf	14.66	2.68
						CO	84	lb/MMcf	12.32	2.25
						SO <sub>2</sub>	0.6	lb/MMcf	0.09	0.02
						Pb	0.0005	lb/MMcf	0.000	0.00001
						CO <sub>2</sub>	120000	lb/MMcf	17596.10	3211.29
						N <sub>2</sub> O	2.2	lb/MMcf	0.32	0.06
						CH <sub>4</sub>	2.3	lb/MMcf	0.34	0.06
						CO <sub>2</sub> e			17607.11	3213.30
						<b>Hazardous Air Pollutants (HAP)</b>				
						Arsenic	0.0002	lb/MMcf	2.9E-05	5.4E-06
						Beryllium	0.000012	lb/MMcf	1.8E-06	3.2E-07
						Chromium	0.0014	lb/MMcf	2.1E-04	3.7E-05
						Cadmium	0.0011	lb/MMcf	1.6E-04	2.9E-05
						Cobalt	0.000084	lb/MMcf	1.2E-05	2.2E-06
						Lead	0.0005	lb/MMcf	7.3E-05	1.3E-05
						Manganese	0.00038	lb/MMcf	5.6E-05	1.0E-05
						Mercury	0.00026	lb/MMcf	3.8E-05	7.0E-06
						Nickel	0.0021	lb/MMcf	3.1E-04	5.6E-05
						Selenium	0.000024	lb/MMcf	3.5E-06	6.4E-07
						Benzene	0.0021	lb/MMcf	3.1E-04	5.6E-05
						Benz(a)anthracene	0.0000018	lb/MMcf	2.6E-07	4.8E-08
						Benzo(a)pyrene	0.0000012	lb/MMcf	1.8E-07	3.2E-08
						Benzo(b)fluoranthene	0.0000018	lb/MMcf	2.6E-07	4.8E-08
						Benzo(k)fluoranthene	0.0000018	lb/MMcf	2.6E-07	4.8E-08
						Dibenzo(a,h)anthracene	0.0000012	lb/MMcf	1.8E-07	3.2E-08
						Dichlorobenzene	0.0012	lb/MMcf	1.8E-04	3.2E-05
						Formaldehyde	0.075	lb/MMcf	1.1E-02	2.0E-03
						Hexane	1.8	lb/MMcf	2.6E-01	4.8E-02
Indeno(1,2,3-cd)pyrene	0.0000018	lb/MMcf	2.6E-07	4.8E-08						
Naphthalene	0.00061	lb/MMcf	8.9E-05	1.6E-05						
POM	0.000649	lb/MMcf	9.5E-05	1.7E-05						
Toluene	0.0034	lb/MMcf	5.0E-04	9.1E-05						
<b>Total HAP</b>									0.3	0.051

**Notes:**

- 1- Short and long term production rates assume 1000 Btu/cf natural gas.  
Daily emissions based on rated firing rate (250 total horsepower) x 24 hours per day:  
6.1 MMBtu/hr x 24 hr/day x cf/1000 Btu = 0.15 MMcf/day  
0.15 MMcf/day x 365 day/yr = 54 MMcf/yr  
Actual operating rate (utilization factor) is expected to be less than 50%.
- 2- Emission Factors from AP-42, July 1998, Table 1.4-2, for natural gas combustion
- 3- 100% of TSP is PM10.
- 4- HAP Emission factors from AP42 1.4-3 (3/98).

## Boiler 2 Expected Emissions

**Emission Estimates for Natural Gas Fueled Boilers  
Insulfoam**

Unit Description	Fuel Source	Hours per Year	Max Capacity (1) MMcf/hr	Max Capacity (1) MMcf/day	Actual Capacity (1) MMcf/yr	Pollutant Emitted	Emission Factor (2),(3),(4)	Units	Daily Emissions (lb/day)	Annual Emissions (TPY)
Boiler	Natural Gas	8760	0.0081	0.20	18	<b>Pollutants</b>				
						TSP	7.6	lb/MMcf	1.49	0.07
						PM10	7.6	lb/MMcf	1.49	0.07
						VOC	5.5	lb/MMcf	1.08	0.05
						NOx	100	lb/MMcf	19.55	0.90
						CO	84	lb/MMcf	16.42	0.76
						SO <sub>2</sub>	0.6	lb/MMcf	0.12	0.01
						Pb	0.0005	lb/MMcf	0.000	0.00000
						CO <sub>2</sub>	120000	lb/MMcf	23461.46	1080.00
						N <sub>2</sub> O	2.2	lb/MMcf	0.43	0.02
						CH <sub>4</sub>	2.3	lb/MMcf	0.45	0.02
						CO <sub>2</sub> e			23476.15	1080.68
						<b>Hazardous Air Pollutants (HAP)</b>				
						Arsenic	0.0002	lb/MMcf	3.9E-05	1.8E-06
						Beryllium	0.000012	lb/MMcf	2.3E-06	1.1E-07
						Chromium	0.0014	lb/MMcf	2.7E-04	1.3E-05
						Cadmium	0.0011	lb/MMcf	2.2E-04	9.9E-06
						Cobalt	0.000084	lb/MMcf	1.6E-05	7.6E-07
						Lead	0.0005	lb/MMcf	9.8E-05	4.5E-06
						Manganese	0.00038	lb/MMcf	7.4E-05	3.4E-06
						Mercury	0.00026	lb/MMcf	5.1E-05	2.3E-06
						Nickel	0.0021	lb/MMcf	4.1E-04	1.9E-05
						Selenium	0.000024	lb/MMcf	4.7E-06	2.2E-07
						Benzene	0.0021	lb/MMcf	4.1E-04	1.9E-05
						Benz(a)anthracene	0.0000018	lb/MMcf	3.5E-07	1.6E-08
						Benzo(a)pyrene	0.0000012	lb/MMcf	2.3E-07	1.1E-08
						Benzo(b)fluoranthene	0.0000018	lb/MMcf	3.5E-07	1.6E-08
						Benzo(k)fluoranthene	0.0000018	lb/MMcf	3.5E-07	1.6E-08
						Dibenzo(a,h)anthracene	0.0000012	lb/MMcf	2.3E-07	1.1E-08
						Dichlorobenzene	0.0012	lb/MMcf	2.3E-04	1.1E-05
						Formaldehyde	0.075	lb/MMcf	1.5E-02	6.8E-04
						Hexane	1.8	lb/MMcf	3.5E-01	1.6E-02
						Indeno(1,2,3-cd)pyrene	0.0000018	lb/MMcf	3.5E-07	1.6E-08
Naphthalene	0.00061	lb/MMcf	1.2E-04	5.5E-06						
POM	0.000649	lb/MMcf	1.3E-04	5.8E-06						
Toluene	0.0034	lb/MMcf	6.6E-04	3.1E-05						
<b>Total HAP</b>									0.4	0.017

**Notes:**

- 1- Short and long term production rates assume 1000 Btu/cf natural gas.  
Daily emissions based on rated firing rate (250 total horsepower) x 24 hours per day:  
8.1 MMBtu/hr x 24 hr/day x cf/1000 Btu = 0.20 MMcf/day  
0.20 MMcf/day x 365 day/yr = 71 MMcf/yr  
Actual operating rate (utilization factor) is expected to be less than 50%.
- 2- Emission Factors from AP-42, July 1998, Table 1.4-2, for natural gas combustion
- 3- 100% of TSP is PM10.
- 4- HAP Emission factors from AP42 1.4-3 (3/98).

## Boiler 2 Potential Emissions

**Emission Estimates for Natural Gas Fueled Boilers  
Insulfoam**

Unit Description	Fuel Source	Hours per Year	Max Capacity (1) MMcf/hr	Max Capacity (1) MMcf/day	Actual Capacity (1) MMcf/yr	Pollutant Emitted	Emission Factor (2),(3),(4)	Units	Daily Emissions (lb/day)	Annual Emissions (TPY)
Boiler	Natural Gas	8760	0.0081	0.20	71	<b>Pollutants</b>				
						TSP	7.6	lb/MMcf	1.49	0.27
						PM10	7.6	lb/MMcf	1.49	0.27
						VOC	5.5	lb/MMcf	1.08	0.20
						NOx	100	lb/MMcf	19.55	3.57
						CO	84	lb/MMcf	16.42	3.00
						SO <sub>2</sub>	0.6	lb/MMcf	0.12	0.02
						Pb	0.0005	lb/MMcf	0.000	0.00002
						CO <sub>2</sub>	120000	lb/MMcf	23461.46	4281.72
						N <sub>2</sub> O	2.2	lb/MMcf	0.43	0.08
						CH <sub>4</sub>	2.3	lb/MMcf	0.45	0.08
						CO <sub>2</sub> e			23476.15	4284.40
						<b>Hazardous Air Pollutants (HAP)</b>				
						Arsenic	0.0002	lb/MMcf	3.9E-05	7.1E-06
						Beryllium	0.000012	lb/MMcf	2.3E-06	4.3E-07
						Chromium	0.0014	lb/MMcf	2.7E-04	5.0E-05
						Cadmium	0.0011	lb/MMcf	2.2E-04	3.9E-05
						Cobalt	0.000084	lb/MMcf	1.6E-05	3.0E-06
						Lead	0.0005	lb/MMcf	9.8E-05	1.8E-05
						Manganese	0.00038	lb/MMcf	7.4E-05	1.4E-05
						Mercury	0.00026	lb/MMcf	5.1E-05	9.3E-06
						Nickel	0.0021	lb/MMcf	4.1E-04	7.5E-05
						Selenium	0.000024	lb/MMcf	4.7E-06	8.6E-07
						Benzene	0.0021	lb/MMcf	4.1E-04	7.5E-05
						Benz(a)anthracene	0.0000018	lb/MMcf	3.5E-07	6.4E-08
						Benzo(a)pyrene	0.0000012	lb/MMcf	2.3E-07	4.3E-08
						Benzo(b)fluoranthene	0.0000018	lb/MMcf	3.5E-07	6.4E-08
						Benzo(k)fluoranthene	0.0000018	lb/MMcf	3.5E-07	6.4E-08
						Dibenzo(a,h)anthracene	0.0000012	lb/MMcf	2.3E-07	4.3E-08
						Dichlorobenzene	0.0012	lb/MMcf	2.3E-04	4.3E-05
						Formaldehyde	0.075	lb/MMcf	1.5E-02	2.7E-03
						Hexane	1.8	lb/MMcf	3.5E-01	6.4E-02
						Indeno(1,2,3-cd)pyrene	0.0000018	lb/MMcf	3.5E-07	6.4E-08
Naphthalene	0.00061	lb/MMcf	1.2E-04	2.2E-05						
POM	0.000649	lb/MMcf	1.3E-04	2.3E-05						
Toluene	0.0034	lb/MMcf	6.6E-04	1.2E-04						
<b>Total HAP</b>									0.4	0.067

**Notes:**

- 1- Short and long term production rates assume 1000 Btu/cf natural gas.  
Daily emissions based on rated firing rate (250 total horsepower) x 24 hours per day:  
8.1 MMBtu/hr x 24 hr/day x cf/1000 Btu = 0.20 MMcf/day  
0.20 MMcf/day x 365 day/yr = 71 MMcf/yr  
Actual operating rate (utilization factor) is expected to be less than 50%.
- 2- Emission Factors from AP-42, July 1998, Table 1.4-2, for natural gas combustion
- 3- 100% of TSP is PM10.
- 4- HAP Emission factors from AP42 1.4-3 (3/98).

**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).



**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

---

<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

**FORM D1**  
Emission Unit Summary of Emissions

---

Permit Number: \_\_\_\_\_

1.	Emission Unit ID Number	
2.	Emissions Unit description	
3.	Operating Scenario ID number	
4.	Is this a significant or insignificant unit? (If insignificant, provide basis for insignificance)	

5. Emission control devices:

Control Device ID(s) from Form Series C

6. Pollutants/Emissions:

Pollutant Name	Expected Actual Annual Emissions <sup>1</sup> (after controls/ limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>			
CO			
PM-10			
SO <sub>2</sub>			
VOC			
CO <sub>2</sub> e			
<i>(List individual HAPs)</i>			

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<sup>1</sup> For significant emission units. For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15).

## Expected Actual Emissions

1 of 6

### Block Molding

Total Throughput 2,660,947 lbs./year

### Pre-Expansion

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	30%	794,329	12%	6,195.77	6,196
MID	5.00%	57%	1,524,206	13%	9,907.34	9,907.34
LOW	3.60%	12%	322,161	13%	1,507.71	1,507.71
SUBTOTAL EMISSIONS						<b>17,611 lbs.</b> <b>8.81 tons</b>

### Aging

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	30%	794,329	27%	13,940.48	13,940
MID	5.00%	57%	1,524,206	25%	19,052.57	19,052.57
LOW	3.60%	12%	322,161	21%	2,435.54	2,435.54
SUBTOTAL EMISSIONS						<b>35,429 lbs.</b> <b>17.71 tons</b>

### Molding

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	30%	794,329	12%	6,195.77	6,196
MID	5.00%	57%	1,524,206	16%	12,193.65	12,193.65
LOW	3.60%	12%	322,161	13%	1,507.71	1,507.71
SUBTOTAL EMISSIONS						<b>19,897 lbs.</b> <b>9.95 tons</b>

### TOTAL PROCESS LINE EMISSIONS

<b>72,937</b>	<b>lbs.</b>
<b>36.5</b>	<b>tons</b>

### Post Manufacturing Fugitive Emissions

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	30%	794,329	20%	10,326.28	10,326
MID	5.00%	57%	1,524,206	20%	15,242.06	15,242.06
LOW	3.60%	12%	322,161	20%	2,319.56	2,319.56
SUBTOTAL EMISSIONS						

### TOTAL FUGITIVE EMISSIONS

<b>27,888</b>	<b>lbs.</b>
<b>13.9</b>	<b>tons</b>

**Expected Actual Emissions**

**Shape Molding**

Total Throughput 4,898,252 lbs./year

**Pre-Expansion**

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	1%	47,520	24%	741.32	741
MID	5.00%	55%	2,685,428	19%	25,511.57	25,511.57
LOW	3.60%	44%	2,169,471	19%	14,839.18	14,839.18
SUBTOTAL EMISSIONS						<b>41,092 lbs. 20.55 tons</b>

**Aging**

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	1%	47,520	25%	772.21	772
MID	5.00%	55%	2,685,428	24%	32,225.14	32,225.14
LOW	3.60%	44%	2,169,471	16%	12,496.16	12,496.16
SUBTOTAL EMISSIONS						<b>45,493 lbs. 22.75 tons</b>

**Molding**

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	1%	47,520	12%	370.66	371
MID	5.00%	55%	2,685,428	10%	13,427.14	13,427.14
LOW	3.60%	44%	2,169,471	12%	9,372.12	9,372.12
SUBTOTAL EMISSIONS						<b>23,170 lbs. 11.58 tons</b>

**TOTAL PROCESS LINE EMISSIONS**

<b>109,755</b>	<b>lbs.</b>
<b>54.9</b>	<b>tons</b>

**Post Manufacturing Fugitive Emissions**

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	1%	47,520	37%	1,142.86	1,143
MID	5.00%	55%	2,685,428	41%	55,051.27	55,051.27
LOW	3.60%	44%	2,169,471	50%	39,050.49	39,050.49
SUBTOTAL EMISSIONS						<b>95,245 47.62</b>

**TOTAL FUGITIVE EMISSIONS**

<b>1,143</b>	<b>lbs.</b>
<b>47.6</b>	<b>tons</b>

**Natural Gas Combustion in Boilers**

<b>0.09</b>	<b>tons</b>
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**TOTAL FACILITY EMISSIONS (BLOCK MOLDING + SHAPE MOLDING)**

<b>153</b>	<b>tons</b>
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## Potential Emissions (no limits)

3 of 6

### Block Molding

Total Throughput 18,921,600 lbs./year

### Pre-Expansion

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	100%	18,921,600	12%	147,588.48	147,588
MID	5.00%	0%	-	13%	-	-
LOW	3.60%	0%	-	13%	-	-
SUBTOTAL EMISSIONS						<b>147,588 lbs. 73.79 tons</b>

### Aging

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	100%	18,921,600	27%	332,074.08	332,074
MID	5.00%	0%	-	25%	-	-
LOW	3.60%	0%	-	21%	-	-
SUBTOTAL EMISSIONS						<b>332,074 lbs. 166.04 tons</b>

### Molding

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	100%	18,921,600	12%	147,588.48	147,588
MID	5.00%	0%	-	16%	-	-
LOW	3.60%	0%	-	13%	-	-
SUBTOTAL EMISSIONS						<b>147,588 lbs. 73.79 tons</b>

TOTAL PROCESS LINE EMISSIONS

<b>627,251</b>	<b>lbs.</b>
<b>313.63</b>	<b>tons</b>

### Post Manufacturing Fugitive Emissions

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	100%	18,921,600	20%	245,980.80	245,981
MID	5.00%	0%	-	20%	-	-
LOW	3.60%	0%	-	20%	-	-
SUBTOTAL EMISSIONS						

TOTAL FUGITIVE EMISSIONS

<b>245,981</b>	<b>lbs.</b>
<b>122.99</b>	<b>tons</b>

## Potential Emissions (no limits)

4 of 6

### Shape Molding

Total Throughput 7,358,400 lbs./year

### Pre-Expansion

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	100%	7,358,400	24%	114,791.04	114,791
MID	5.00%	0%	-	19%	-	-
LOW	3.60%	0%	-	19%	-	-
SUBTOTAL EMISSIONS						<b>114,791 lbs. 57.40 tons</b>

### Aging

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	100%	7,358,400	25%	119,574.00	119,574
MID	5.00%	0%	-	24%	-	-
LOW	3.60%	0%	-	16%	-	-
SUBTOTAL EMISSIONS						<b>119,574 lbs. 59.79 tons</b>

### Molding

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	100%	7,358,400	12%	57,395.52	57,396
MID	5.00%	0%	-	10%	-	-
LOW	3.60%	0%	-	12%	-	-
SUBTOTAL EMISSIONS						<b>57,396 lbs. 28.70 tons</b>

### TOTAL PROCESS LINE EMISSIONS

<b>291,761</b>	<b>lbs.</b>
<b>145.88</b>	<b>tons</b>

### Post Manufacturing Fugitive Emissions

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	100%	7,358,400	37%	176,969.52	176,970
MID	5.00%	0%	-	41%	-	-
LOW	3.60%	0%	-	50%	-	-
SUBTOTAL EMISSIONS						<b>176,970 88.48</b>

### TOTAL FUGITIVE EMISSIONS

<b>176,970</b>	<b>lbs.</b>
<b>88.48</b>	<b>tons</b>

### Natural Gas Combustion in Boilers

<b>0.34</b>	<b>tons</b>
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### TOTAL FACILITY EMISSIONS (BLOCK MOLDING + SHAPE MOLDING)

<b>671</b>	<b>tons</b>
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## Potential Emissions (limits) As Example Only

5 of 6

### Block Molding

Total Throughput 5,750,000 lbs./year

### Pre-Expansion

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	30%	1,725,000	12%	13,455.00	13,455
MID	5.00%	60%	3,450,000	13%	22,425.00	22,425.00
LOW	3.60%	10%	575,000	13%	2,691.00	2,691.00
SUBTOTAL EMISSIONS						<b>38,571 lbs.</b> <b>19.29 tons</b>

### Aging

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	30%	1,725,000	27%	30,273.75	30,274
MID	5.00%	60%	3,450,000	25%	43,125.00	43,125.00
LOW	3.60%	10%	575,000	21%	4,347.00	4,347.00
SUBTOTAL EMISSIONS						<b>77,746 lbs.</b> <b>38.87 tons</b>

### Molding

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	30%	1,725,000	12%	13,455.00	13,455
MID	5.00%	60%	3,450,000	16%	27,600.00	27,600.00
LOW	3.60%	10%	575,000	13%	2,691.00	2,691.00
SUBTOTAL EMISSIONS						<b>43,746 lbs.</b> <b>21.87 tons</b>

### TOTAL PROCESS LINE EMISSIONS

<b>160,063</b>	<b>lbs.</b>
<b>80.0</b>	<b>tons</b>

### Post Manufacturing Fugitive Emissions

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	30%	1,725,000	20%	22,425.00	22,425
MID	5.00%	60%	3,450,000	20%	34,500.00	34,500.00
LOW	3.60%	10%	575,000	20%	4,140.00	4,140.00
SUBTOTAL EMISSIONS						

### TOTAL FUGITIVE EMISSIONS

<b>61,065</b>	<b>lbs.</b>
<b>30.5</b>	<b>tons</b>

## Potential Emissions (limits) As Example Only

6 of 6

### Shape Molding

Total Throughput 5,750,000 lbs./year

### Pre-Expansion

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions By Phase
HIGH	6.50%	20%	1,150,000	24%	17,940.00	17,940
MID	5.00%	60%	3,450,000	19%	32,775.00	32,775.00
LOW	3.60%	20%	1,150,000	19%	7,866.00	7,866.00
SUBTOTAL EMISSIONS						<b>58,581 lbs. 29.29 tons</b>

### Aging

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	20%	1,150,000	25%	18,687.50	18,688
MID	5.00%	60%	3,450,000	24%	41,400.00	41,400.00
LOW	3.60%	20%	1,150,000	16%	6,624.00	6,624.00
SUBTOTAL EMISSIONS						<b>66,712 lbs. 33.36 tons</b>

### Molding

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	20%	1,150,000	12%	8,970.00	8,970
MID	5.00%	60%	3,450,000	10%	17,250.00	17,250.00
LOW	3.60%	20%	1,150,000	12%	4,968.00	4,968.00
SUBTOTAL EMISSIONS						<b>31,188 lbs. 15.59 tons</b>

### TOTAL PROCESS LINE EMISSIONS

<b>156,481</b>	<b>lbs.</b>
<b>78.2</b>	<b>tons</b>

### Post Manufacturing Fugitive Emissions

Bead Type	Initial Pentane (wt. %)	Throughput %	Throughput lbs.	Pentane lost (%)	Uncontrolled Emissions	Total Emissions
HIGH	6.50%	20%	1,150,000	37%	27,657.50	27,658
MID	4.50%	60%	3,450,000	41%	63,652.50	63,652.50
LOW	3.50%	20%	1,150,000	50%	20,125.00	20,125.00
SUBTOTAL EMISSIONS						<b>111,435 55.72</b>

### TOTAL FUGITIVE EMISSIONS

<b>27,658</b>	<b>lbs.</b>
<b>55.7</b>	<b>tons</b>

### Natural Gas Combustion in Boilers

<b>0.34</b>	<b>tons</b>
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### TOTAL FACILITY EMISSIONS (BLOCK MOLDING + SHAPE MOLDING)

<b>245</b>	<b>tons</b>
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## FORM D2

### Stationary Source Emission Summary – Significant Emission Units

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Permit Number: \_\_\_\_\_

1.	Applicable Emission Unit IDs (list)	
2.	Applicable Operating Scenario ID number	

3. Pollutants/Emissions:

Pollutant Name	Pollutant Emission Status (Major / Minor)	Expected Actual Annual Emissions (after controls/limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>				
CO				
PM-10				
SO <sub>2</sub>				
VOC				
HAP Total				
CO <sub>2</sub> e				
<i>(List individual HAPs)</i>				

**FORM D2**

**Stationary Source Emission Summary – Insignificant Emission Units**

Permit Number: \_\_\_\_\_

Pollutants/Emissions:

Pollutant Name	Pollutant Emission Status (Major / Minor)	Expected Actual Annual Emissions <sup>1</sup> (after controls/limitations) (tons/year)	Potential Annual Emissions (before controls/limitations) (tons/year)	Potential Annual Emissions (after controls/limitations) (tons/year)
NO <sub>x</sub>				
CO				
PM-10				
SO <sub>2</sub>				
VOC				
HAP Total				
CO <sub>2</sub> e				
<i>(List individual HAPs)</i>				

<sup>1</sup> For insignificant emission units, expected actual annual emissions are only required if the unit is an insignificant unit on an emission rate basis under 18 AAC 50.326(e) and potential annual emissions exceed 80% of the thresholds in 18 AAC 50.326(e)(1-15)

**FORM E1**  
**Stationary Source-Wide Applicable Requirements**

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Permit Number:   AQ1081TVP03  

**Stationary Source-Wide Applicable Requirements (attach additional sheets as needed):**

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
See enclosed Attachment to Form E1					

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit Number: **AQ1081TVP03**

Stationary Source-Wide Applicable Requirements (attach additional sheets as needed):

Permit and Condition Number	Applicable Requirement Citation	Parameter/Pollutant	Limit/Standard/Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03 1	[18 AAC 50.040(j)(4), 18 AAC 50.326(j), 18 AAC 50.055(a)(1), 18 AAC 50.345(c)][40 C.F.R. 71.6(a)(1)]	Visible Emissions	<b>Industrial Process and Fuel-Burning Equipment Visible Emissions.</b> 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. The Permittee shall follow the requirements outlined in 1.1 in permit AQ1081TVP03.	Yes	Combustion of natural gas fuel
AQ1081TVP03 2	[18 AAC 50.040(j)(4), 18 AAC 50.326(j)(3), 18 AAC 50.055(b)(1), 18 AAC 50.346(c)][40 C.F.R. 71.6(a)(1)]	Particulate Matter	<b>Industrial Process and Fuel-Burning Equipment Particulate Matter.</b> The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment, including EU IDs 1 and 2A listed in Table A, to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours. The Permittee shall follow the requirements outlined in 2.1 in permit AQ1081TVP03.	Yes	Combustion of natural gas fuel
AQ1081TVP03 3	[18 AAC 50.040(j)(4), 18 AAC 50.326(j)(3), 18 AAC 50.055(c)), 18 AAC 50.346(c)][40 C.F.R. 71.6(a)(1)]	SO <sub>2</sub>	<b>Sulfur Compound Emissions.</b> The Permittee shall not cause or allow sulfur compound emissions, expressed as SO <sub>2</sub> , from an industrial process or fuel-burning equipment, including EU IDs 1 and 2A, to exceed 500 ppm averaged over three hours. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements of 3.1-3.3 in permit AQ1081TVP03.	Yes	Combustion of natural gas fuel

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
4	[Condition 4, Minor Permit No. AQ1081MSS01, March 26, 2009][18 AAC 50.040(j) & 50.326(j)][40 C.F.R. 71.6(a)]	VOC	<b>PSD Avoidance Limits.</b> The Permittee shall limit VOC emissions from all emission units listed in Table A to no greater than 245 tons per 12 consecutive months. The Permittee shall follow the recordkeeping, calculation, and reporting requirements of 4.1-4.7 as applicable.	Yes	EPS monthly bead usage records Natural gas usage records Monthly emissions records
5	[18 AAC 50.040(b)(1) & (2)(F), & 50.326(j)][40 C.F.R. 61, Subparts A & M, and Appendix A]	Asbestos	<b>Asbestos NESHAP.</b> The Permittee shall comply with the applicable requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61 Subpart A and Appendix A.	Yes	Use of qualified/certified asbestos surveyors and contractors
6	[18 AAC 50.040(d), 18 AAC 50.326(j)][40 C.F.R. 82, Subpart F]	Refrigerants	<b>Subpart F - Recycling and Emissions Reduction.</b> The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.	Yes	Use of qualified/certified refrigerant maintenance and repair contractors
7	[18 AAC 50.326(j)(3), 18 AAC 50.345(a) & (e)]	Permit terms and conditions	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.	Yes	No Certification Required
8	[18 AAC 50.326(j)(3), 18 AAC 50.345(a) & (f)]	Permit modification, reopening, revoking, reissuing, or terminating for cause	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.	Yes	No Certification Required
9	[18 AAC 50.326(j)(3), 18 AAC 50.345(a) & (g)]	Property rights	The permit does not convey any property rights of any sort, nor any exclusive privilege.	Yes	No Certification Required

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03 10	[18 AAC 50.326(j)(1), 50.400 & 50.403] [AS 37.10.052(b) & AS 46.14.240]	Administration Fees	<b>Administration Fees.</b> The Permittee shall pay to the department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-403.	Yes	Fee Payment Records
AQ1081TVP03 11	[18 AAC 50.040(j)(3), 18 AAC 50.035, 18 AAC 50.326(j)(1), 18 AAC 50.346(b)(1), 18 AAC 50.410 & 420][40 C.F.R. 71.5(c)(3)(ii)]	Assessable Emissions	<b>Assessable Emissions.</b> 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 (TPY). The quantity for which fees will be assessed is outlined in condition 11.1-11.2 in permit AQ1081TVP03.	Yes	Submission of Annual Emission Fee and Report
AQ1081TVP03 12	[18 AAC 50.040(j)(3), 18 AAC 50.326(j)(1), 18 AAC 50.346(b)(1), 18 AAC 50.410 & 420][40 C.F.R. 71.5(c)(3)(ii)]	Assessable Emissions Estimates	<b>Assessable Emission Estimates.</b> 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 per condition 12.1-12.3 in permit AQ1081TVP03.	Yes	Submission of Annual Emission Fee and Report



**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03  13	[18 AAC 50.326(j)(3), 18 AAC 50.030 & 50.346(b)(5)]	Good Air Pollution Control Practice	<p><b>Good Air Pollution Control Practice.</b> The Permittee shall do the following for the emissions units listed in Table A:</p> <p>13.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;</p> <p>13.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and</p> <p>13.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.</p>	Yes	Preventative Maintenance Program and Recordkeeping
AQ1081TVP03  14	[18 AAC 50.045(a)]	Dilution	<p><b>Dilution.</b> 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.</p>	Yes	Annual Compliance Certification
AQ1081TVP03  15	[18 AAC 50.045(d) & 50.346(c), 18 AAC 50.326(j)(3)]	Fugitive Dust	<p><b>Reasonable Precautions to Prevent Fugitive Dust.</b> 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. The Permittee shall follow the recordkeeping and reporting requirements of 15.1-15.2 in permit AQ1081TVP03.</p>	Yes	Nuisance Complaint Log

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03  16	[18 AAC 50.055(g)]	Stack Injection	<b>Stack Injection.</b> 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.	Yes	No materials other than process emissions released to stack
AQ1081TVP03  17	[18 AAC 50.110, 18 AAC 50.040(e), 18 AAC 50.326(j)(3), 18 AAC 50.346(a)][40 C.F.R. 71.6(a)(3)]	Air Pollution	<b>Air Pollution Prohibited.</b> 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. The Permittee shall follow the monitoring, recordkeeping, reporting, notifications and other necessary actions per condition 17.1-17.4 in permit AQ1081TVP03.	Yes	Excess Emissions Reports Permit Deviation Reports Nuisance Complaint Log Annual Compliance Certification
AQ1081TVP03  18	[18 AAC 50.235(a), 18 AAC 50.040(j)(4), 18 AAC 50.326(j)(4)][40 C.F.R. 71.6(c)(6)]	Excess Emissions	<b>Technology-Based Emission Standard.</b> 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 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.	Yes	Excess Emissions Report

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03  19	[18 AAC 50.220(a) & 50.345(a) & (k)]	Source Tests	<b>Requested Source Tests.</b> 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.	Yes	Source testing as required
AQ1081TVP03  20	[18 AAC 50.220(b)]	Operating Conditions for Source Testing	<b>Operating Conditions.</b> Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing  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 emission unit or another rate determined by the department to characterize the actual discharge into the ambient air.	Yes	Source testing as required

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/Pollutant	Limit/Standard/Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03  21	<p>[18 AAC 50.030, &amp; 50.220(c)(1)(D)]</p> <p>[18 AAC 50.040(a)(3), 18 AAC 50.220(c)(1)(E)][40 C.F.R. 60, Appendix A]</p> <p>[18 AAC 50.035(b)(2), 18 AAC 50.220(c)(1)(F)][40 C.F.R. 51, Appendix M]</p> <p>[18 AAC 50.040(c)(32), 18 AAC 50.220(c)(2)][40 C.F.R. 63, Appendix A Method 301]</p>	Reference test methods	<p><b>Reference Test Methods.</b> The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit per condition 21.1-21.4 in permit AQ1081TVP03.:</p> <p>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.</p> <p>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 C.F.R. 60, Appendix A.</p> <p>21.3 Source testing for emissions of PM 2.5 and PM 10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.</p> <p>21.4 Source testing for emissions of any pollutant may be determined using an alternative method approved by the department in accordance with 40 C.F.R. 63, Appendix A, Method 301.</p>	Yes	Source testing as required

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/Pollutant	Limit/Standard/Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03 22	[18 AAC 50.220(c)(3), 18 AAC 50.990(102)]	Excess Air	<b>Excess Air Requirements.</b> 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 emission unit type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).	Yes	Source testing as required
AQ1081TVP03 23	[18 AAC 50.345(a)]	Test Exemption	<b>Test Exemption.</b> 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.	Yes	Source testing as required
AQ1081TVP03 24	[18 AAC 50.345(a) & (l)]	Test Deadline Extension	<b>Test Deadline Extension.</b> 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.	Yes	Source testing as required
AQ1081TVP03 25	[18 AAC 50.345(a) & (m)]	Test Plans	<b>Test Plans.</b> 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 emission 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.	Yes	Source test plan as required

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03  26	[18 AAC 50.345(a) & (n)]	Test notification	<b>Test Notification.</b> Except as provided in condition 3, 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.	Yes	Test notification as required
AQ1081TVP03  27	[18 AAC 50.345(a) & (o)]	Test reports	<b>Test Reports.</b> 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.	Yes	Test reports as required
AQ1081TVP03  28	[18 AAC 50.220(f)]	Particulate matter source testing	<b>Particulate Matter Calculations.</b> 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.	Yes	Source testing as required
AQ1081TVP03  29	[18 AAC 50.040(a)(1), 18 AAC 50.326(j)][40 C.F.R 60.7(f), Subpart A, & 71.6(a)(3)(ii)(B)]	Recordkeeping	<b>Recordkeeping Requirements.</b> The Permittee shall keep all records required by this permit for at least five years after the date of collection, per condition 29.1-29.2 in permit AQ1081TVP03.	Yes	Recordkeeping

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03  30	18 AAC 50.205 & 50.345(a) & (j), 18 AAC 50.326(j))[40 C.F.R. 71.6(a)(3)(iii)(A)]	Certification	<b>Certification.</b> The Permittee shall certify all reports, compliance certifications, or other documents 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. Electronic signatures are acceptable per condition 30.1 in permit AQ1081TVP03.	Yes	Certification of reports and annual compliance certifications
AQ1081TVP03  31	[18 AAC 50.326(j))[40 C.F.R. 71.6(a)(3)(iii)(A)]	Submittals	<b>Submittals.</b> 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 <a href="http://dec.alaska.gov/applications/air/airtoolsweb">http://dec.alaska.gov/applications/air/airtoolsweb</a> using the Permittee Portal option or certified and submitted per condition 31 in permit AQ1081TVP03.	Yes	Submittal of reports and annual compliance certifications

**Attachment to FORM E1**  
**Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03 32	[18 AAC 50.200 & 50.345(a) & (i), 18 AAC 50.326(a) & (j)][40 C.F.R. 71.5(a)(2) & 71.6(a)(3)]	Information requests	<b>Information Requests.</b> 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.	Yes	Submission of requested information
AQ1081TVP03 33	[18 AAC 50.235(a)(2); 50.240(c); & 50.346(b)(2) & (3), 18 AAC 50.326(j)(3)]	Excess Emissions and Permit Deviation Reports	<b>Excess Emissions and Permit Deviation Reports.</b> Except as provided in Condition 0, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows per condition 33.1-33.3 in permit AQ1081TVP03.	Yes	Submission of Excess Emissions and Permit Deviation Reports
AQ1081TVP03 34	[18 AAC 50.346(a), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(3)(iii)(A)]	Operating Reports	<b>Operating Reports.</b> During the life of this permit, 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 as outlined in condition 34.1-34.4 in permit AQ1081TVP03.	Yes	Submission of Semi-Annual Monitoring Reports
AQ1081TVP03 35	[18 AAC 50.205 & 50.326(j), 18 AAC 50.345(a) & (j)][40 C.F.R. 71.6(c)(5)]	Compliance Certification	<b>Annual Compliance Certification.</b> Each year by March 31, the Permittee shall compile and submit to the department an annual compliance certification report as outlined in condition 35.1-35.3 in permit AQ1081TVP03.	Yes	Submission of Annual Compliance Certifications



**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03  36	[18 AAC 50. 5040(j)(4), 18 AAC 50.346(b)(8) & (9), 18 AAC 50.200][40 CFR 51.15, 51.30(a)(1) & (b)(1) and 40 CFR 51, Appendix A to Subpart A)]	Emission Inventory Reporting	<b>Emission Inventory Reporting.</b> The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, NH <sub>3</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , VOCs and Lead (Pb) (and lead compounds) using the form in Section 12 of this permit, and as outlined in condition 36.1-36.4 in permit AQ1081TVP03.	Yes	Submission of Annual Emission Fee and Report
AQ1081TVP03  37	[18 AAC 50.040(j)(7) & 50.326(a) & (j)(3), 18 AAC 5.346(b)(7)][40 C.F.R. 71.10(d)(1)]	Permit Applications and Submittals	<b>Permit Applications and Submittals.</b> The Permittee shall comply with the following requirements for submitting application information to the EPA Region 10 as outlined in condition 37.1-37.4 in permit AQ1081TVP03.	Yes	Submittal of Reports to EPA Region 10
AQ1081TVP03  38	[18 AAC 50.040(j)(4), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(8)]	Emissions Trading	<b>Emissions Trading.</b> 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.	Yes	No applicable changes made

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03  39	[18 AAC 50.040(j)(4), 18 AAC 50.326(j)][40 C.F.R. 71.6(a)(12)]	Off Permit Changes	<p><b>Off Permit Changes.</b> The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 C.F.R. 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:</p> <p>39.1 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;</p> <p>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;</p> <p>39.3 The change shall not qualify for the shield under 40 C.F.R. 71.6(f);</p> <p>39.4 The Permittee shall keep a record describing changes made at the 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.</p>	Yes	Records of Off Permit Notifications

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081TVP03  40		Operational Flexibility	<p><b>Operational Flexibility.</b> The Permittee may make CAA Section 502(b)(10) 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):</p> <p style="padding-left: 40px;">40.1 The Permittee shall provide EPA and the department with a notification no less than 7 days in advance of the proposed change.</p> <p style="padding-left: 40px;">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.</p> <p style="padding-left: 40px;">40.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to condition 40.</p>	Yes	Records of Operational Flexibility Notifications
AQ1081TVP03  41	[18 AAC 50.040(j)(3), 18 AAC 50.326(c) & (j)(2)][40 C.F.R. 71.5(a)(1)(iii), 71.7(b) & (c)(1)(ii)]	Permit Renewal	<p><b>Permit Renewal.</b> To renew this permit, the Permittee shall submit to the Department an application under 18 AAC 50.326 no sooner than April 9, 2023 and no later than April 9, 2024. 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 C.F.R. 71.7(b) and 71.5(a)(1)(iii).</p>	Yes	Permit renewal application

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03 42	[18 AAC 50.326(j)(3), 18 AAC 50.345(a) & (b)]	Compliance with terms and conditions	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.	Yes	No Certification Required
AQ1081TVP03 43	[18 AAC 50.040(j), 18 AAC 50.326(j), 18 AAC 50.345(a) & (c)]	Compliance with terms and conditions	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.	Yes	Monitoring Records
AQ1081TVP03 44	[18 AAC 50.040(j), 18 AAC 50.326(j)][40 C.F.R. 71.6(c)(3), 71.5(c)(8)(iii)(A)]	Compliance with terms and conditions	For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.	Yes	No Certification Required
AQ1081TVP03 45	[18 AAC 50.326(j)(3), 18 AAC 50.345(a) & (d)]	Compliance with terms and conditions	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.	Yes	No Certification Required

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081TVP03  46	[18 AAC 50.326(j)(3), 18 AAC 50.345(a) & (h)]	Access	<p>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</p> <p>46.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;</p> <p>46.2 have access to and copy any records required by the permit;</p> <p>46.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and</p> <p>46.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.</p>	Yes	Inspectors allowed access upon request
AQ1081TVP03  47	[18 AAC 50.040(j), 18 AAC 50.326(j)][40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(B)]	Applicable requirements	For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis.	Yes	Monitoring Records

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081MSS01 Condition 3	AQ1081MSS01 Condition 3	Annual Emission Estimates	<p><b>3. Assessable Emission Estimates.</b> Emission fees will be assessed as follows:</p> <p>3.1 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 <a href="http://dec.alaska.gov/applications/air/airtoolsweb">http://dec.alaska.gov/applications/air/airtoolsweb</a> using the Permittee Portal option and filling out the Emission Fee Estimate form. Alternatively, the report may be submitted by</p> <p>a. email using <a href="mailto:dec.aq.airreports@alaska.gov">dec.aq.airreports@alaska.gov</a>; or</p> <p>b. hard copy to the following address: ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 555 Cordova Street, Anchorage, Alaska 99501.</p> <p>3.2 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.</p> <p>3.3 if no estimate is received 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.</p>	Yes	Submission of Annual Emission Fee and Report
AQ1081MSS01 Condition 4	AQ1081MSS01 Condition 4	VOC	<p><b>4. PSD Avoidance Limits.</b> The Permittee shall limit VOC emissions from all emissions units listed in Table A to no greater than 245 tons per 12 consecutive months.</p>	Yes	Submission of Annual Emission Fee and Report

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081MSS01 Condition 4.1	AQ1081MSS01 Condition 4.1	VOC	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.	Yes	Bead Usage Records
AQ1081MSS01 Condition 4.2	AQ1081MSS01 Condition 4.2	VOC	4.2 Keep monthly records of total monthly bead usage by manufacturer, type, and pentane content, compiled from daily bead usage records.	Yes	Bead Usage Records
AQ1081MSS01 Condition 4.3	AQ1081MSS01 Condition 4.3	VOC	4.3 Keep separate records under Conditions 4.1 and 4.2 for EPS used for  a. block molding; and  b. shape molding.	Yes	Bead Usage Records

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081MSS01 Condition 4.4	AQ1081MSS01 Condition 4.4	VOC	<p>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.</p> <p>Use <b>Equation 1</b> 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.</p> <p><b>EQUATION 1:</b></p> $Q = \text{Loss Rate} \times \text{Initial Pentane Content} \times \text{EPS} / 2000$ <p>where</p> <p>Q = tons of VOC emissions from an EPS bead lot used during the month,</p> <p>Loss Rate = the appropriate pentane loss rate from condition 4.4a or 4.4b,</p> <p>Initial Pentane Content = the pentane content for the lot from condition 4.1c, and</p> <p>EPS = the quantity in pounds of EPS bead used from that lot.</p> <p>a. Calculate emissions associated with block molding using the following pentane loss rates:</p> <p>(i) For high pentane bead (&gt; 5.2 weight percent pentane) – 0.71;</p> <p>(ii) For mid pentane bead (3.7 – 5.2 weight percent pentane) – 0.74;</p> <p>(iii) For low pentane bead (&lt; 3.7 weight percent pentane) – 0.67;</p> <p>b. Calculate emissions associated with shape molding using the following pentane loss rates:</p> <p>(i) For high pentane bead (&gt; 5.2 weight percent pentane) – 0.98;</p>	Yes	VOC Emissions Records



**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081MSS01 Condition 4.5	AQ1081MSS01 Condition 4.5	VOC	4.5 The Permittee may calculate emissions for a given month using either the 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.	Yes	VOC Emissions Records
AQ1081MSS01 Condition 4.6	AQ1081MSS01 Condition 4.6	VOC	4.6 If the 12 month total in condition 4.4 exceeds 245 tons, report as excess emissions as described in permit AQ1081TVP03, condition 34.2.	Yes	Submission of Excess Emissions and Permit Deviation Reports
AQ1081MSS01 Condition 4.7	AQ1081MSS01 Condition 4.7	VOC	4.7 Include the records and calculations required under condition 4.4 in the operating report as described in condition 34.1 of permit AQ1081TVP03.	Yes	Submission of Semi-Annual Monitoring Reports

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

Permit and Condition Number	Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ1081MSS01 Condition 5	AQ1081MSS01 Condition 5	Certification	<p><b>5. Certification.</b> 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.</p> <p>5.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if:</p> <p>a. a certifying authority registered under AS 09.80.020 verifies that the electronic signature is authentic; and</p> <p>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</p>	Yes	Certification of reports and annual compliance certifications

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081MSS01 Condition 6	AQ1081MSS01 Condition 6	Information requests	<b>6. Information Requests.</b> 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.	Yes	Submission of requested information
AQ1081MSS01 Condition 7	AQ1081MSS01 Condition 7	Compliance Requirements	<b>7.</b> 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  7.1 an enforcement action; or  7.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or  7.3 denial of an operating permit renewal application.	Yes	Monitoring Records
AQ1081MSS01 Condition 8	AQ1081MSS01 Condition 8	Compliance Requirements	<b>8.</b> 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.	Yes	No Monitoring Required
AQ1081MSS01 Condition 9	AQ1081MSS01 Condition 9	Compliance Requirements	<b>9.</b> 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.	Yes	No Monitoring Required

**Attachment to FORM E1  
Stationary Source-Wide Applicable Requirements**

<b>Permit and Condition Number</b>	<b>Applicable Requirement Citation</b>	<b>Parameter/ Pollutant</b>	<b>Limit/Standard/ Requirement</b>	<b>Currently in Compliance?</b>	<b>Monitoring, Recordkeeping and Reporting Used to Determine Compliance</b>
AQ1081MSS01 Condition 10	AQ1081MSS01 Condition 10	Compliance Requirements	<b>10.</b> The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.	Yes	No Monitoring Required
AQ1081MSS01 Condition 11	AQ1081MSS01 Condition 11	Compliance Requirements	<b>11.</b> The permit does not convey any property rights of any sort, nor any exclusive privilege.	Yes	No Monitoring Required

**FORM E2**  
Permit-to-Operate and Minor Permit Condition Change Request

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Permit Number: \_\_\_\_\_

**Permit-to-Operate and Minor Permit Information** (*attach additional sheets as needed*):

Permit-to-Operate or Minor Permit Number	Condition Number	Type of change (revise or remove)	Reason for change	Requested Alaska Title V Operating Permit Condition

**FORM E3**  
Title V Condition Change Request

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Permit Number: \_\_\_\_\_

**Title V Permit Information** (*attach additional sheets as needed*):

Current Title V Operating Permit Condition Number	Type of change (revise or remove)	Reason for change	Requested Alaska Title V Operating Permit Condition