TITLE V REMEWAL APPLICATION

DAQ PLANT ID NO: 011-00031
TITLE V PERMIT R30-01100031

ACF INDUSTRIES
HUNTINGTON WV

April 28, 2015

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INTRODUCTION

ACF Industries LLC (ACF) owns and operates a railcar maintenance center in Huntington, West Virginia. The major air emissions sources located at the facility include abrasive blasting and surface coating operations. Currently the Huntington facility is below major source limitations of HAPS. The Huntington plant is proposing to stay below these limitations. This will continue to make the ACF Huntington facility an area source with respect to the Miscellaneous Surface Coating and any other MACT regulations that may apply in the future.

Please note this Application is being submitted to modify and renew current Title V 0perating Permit R30-01100031.

1.0 TITLE V PERMIT APPLICATION GENERAL FORMS

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE

Charleston, WV 25304

Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):**
ACF Industries LLC

2. Facility Name or Location:
Huntington WV

3. DAQ Plant ID No.:
0 1 1 - 1 0 0 3 1

4. Federal Employer ID No. (FEIN):
2 0 0 0 7 8 9 4 0

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? 03/14/2006

☒ Permit Renewal — What is the expiration date of the existing permit? 11/05/2015

☐ Update to Initial/Renewal Permit Application

6. Type of Business Entity:

☐ Corporation ☐ Governmental Agency ☒ LLC
☐ Partnership ☐ Limited Partnership

7. Is the Applicant the:

☐ Owner ☐ Operator ☒ Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.

8. Number of onsite employees:
12

9. Governmental Code:

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. Business Confidentiality Claims

Does this application include confidential information (per 45CSR31)? ☐ Yes ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: P.O. Box 547		
City: Huntington	**State:** WV	**Zip:** 25710
Telephone Number: (304) 529-3211	**Fax Number:** (304) 528-6341	

12. Facility Location		
Street: 2300 Third Avenue	**City:** Huntington	**County:** Cabell
UTM Easting: 376.31 km	**UTM Northing:** 4253 km	**Zone:** ☒ 17 or ☐ 18
Directions: From Charleston take I64 West to Hal Greer Boulevard (Exit 11). Turn right onto Hal Greer Boulevard and proceed into downtown Huntington. Turn right onto 5th Avenue, then turn left onto 24th Street and left onto 3rd Avenue. ACF is located on the right hand side between 24th and 22nd Streets.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☒ Yes ☐ No		**If yes, for what air pollutants?** O3 8 Hr PM 2.5
Is facility located within 50 miles of another state? ☒ Yes ☐ No		**If yes, name the affected state(s).** Ohio Kentucky
Is facility located within 100 km of a Class I Area[1]? ☐ Yes ☒ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☒ No		**If yes, name the area(s).**

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: Dennis Nibert		**Title:** Plant Manager
Street or P.O. Box: P.O. Box 547		
City: Huntington	**State:** WV	**Zip:** 25710
Telephone Number: (304) 529-3211	**Fax Number:** (304) 528-6341	
E-mail address: dnibert@acfindustries.com		
Environmental Contact: Chris Burke		**Title:** Environmental Consultant
Street or P.O. Box: 1907 Prospect Avenue		
City: Ashalnd	**State:** KY	**Zip:** 45662
Telephone Number: (606) 324-0445	**Fax Number:** (606) 324-0445	
E-mail address: cburke@bba7.com		
Application Preparer: Chris Burke		**Title:** Environmental Consultant
Company: Phase Environmental LLC		
Street or P.O. Box: 1907 Prospect Avenue		
City: Ashland	**State:** KY	**Zip:** 45662
Telephone Number: (606) 324-0445	**Fax Number:** (606) 324-0445	
E-mail address: cburke@bba7.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Manufacturing Railroad Rolling Stock	Railroad Equipment	336510	3743
Manufacturing Other Metal Parts & Containers	Fabricated Metal Products	332439	3499

Provide a general description of operations.

See Section 2

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☒ PSD (45CSR14)
☒ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☐ Section 111 NSPS	☐ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☒ 45CSR27 State enforceable only rule
☐ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☐ CAIR NO_x Ozone Season Trading Program (45CSR40)
☐ CAIR SO_2 Trading Program (45CSR41)	

19. Non Applicability Determinations
List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.
45CSR4 State Enforceable rule only
☒ Permit Shield

19. Non Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

☐ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

See Section 3.1

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements *(Continued)* - *Attach additional pages as necessary.*

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

☐ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/ reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R30-01100031-2010	11/05/2010	
R30-01100031-2006	02/28/2006	

22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
R13-2038B	06/12/2002	
R13-2038	01/20/1998	
R13-2038A	01/19/2002	
CO-R30-E-200H7		

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	9.83
Nitrogen Oxides (NO_X)	11.70
Lead (Pb)	
Particulate Matter ($PM_{2.5}$)[1]	
Particulate Matter (PM_{10})[1]	97.61
Total Particulate Matter (TSP)	390.42
Sulfur Dioxide (SO_2)	.07
Volatile Organic Compounds (VOC)	245 (Permit Limit)
Hazardous Air Pollutants[2]	Potential Emissions
Single HAP	<9.9
Combination of HAPs	<24.9
Regulated Pollutants other than Criteria and HAP	Potential Emissions

[1]$PM_{2.5}$ and PM_{10} are components of TSP.
[2]For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☐	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☐	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☐	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☐	8.	Boiler water treatment operations, not including cooling towers.
☐	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☒	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☐	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☐	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☐	18.	Emergency road flares.
☐	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:
☐	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☐	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☐	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☐	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☐	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☐	33.	Hydraulic and hydrostatic testing equipment.
☐	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☐	37.	Laundry activities, except for dry-cleaning and steam boilers.
☐	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☐	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.

24. Insignificant Activities (Check all that apply)		
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☒	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☐	43.	Process water filtration systems and demineralizers.
☐	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☒	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☐	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☐	50.	Space heaters operating by direct heat transfer.
☐	51.	Steam cleaning operations.
☐	52.	Steam leaks.
☐	53.	Steam sterilizers.
☐	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☐	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☒	58.	Tobacco smoking rooms and areas.
☐	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.
26. Emission Units
For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.
For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.
27. Control Devices
For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Dennis Nibert	Title: Plant Manager

Responsible official's signature:

Signature: _____ Signature Date: 4-28-15

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☒	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☒	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

2.0 PROCESS DESCRTPTION

ACF Industries LLC (ACF) Huntington, West Virginia facility consists of railcar welding, fabrication, blasting and painting operations. Railcars start in the fabrication area, which consists of flame cutting, welding and assembly. From the fabrication area, railcars are transferred to a blasting section to prepare the interiors and exteriors for painting. Blasting operations include weld seam, Pangborn interior, auto, hand and finish blasting. Once blasting is complete, railcars are moved to one of two tracks through the painting facility. Painting is applied to the railcars in a series of stages in the following procession: Primary and secondary lining, exterior primer application, finish booth, stencil booth, final touch-up, pre-priming application and anti-slip application. A detail process flow diagram of these operations is included as Attachment C of this application.

3.0 REGULATORY DISCUSSION

Facility Wide Applicable Requirements

The following table represents applicable facility-wide State and Federal requirements. The permit condition number and compliance demonstration method correspond to those identified in the current Title V Permit R30-01100031-2010.

3.1 FACILITY WIDE APPLICABLE REQUIREMENTS

Applicable Requirement	Permit Condition Number	Compliance Demonstration	
		Method	Condition Number
45 CSR 4-3.1	3.1.4	Recordkeeping	3-4.3
45 CSR 6-3.1	3.1.1	Reporting	3-5.5
45 CSR 6-3.2	3.1.2	Reporting	3-5.5
45 CSR 7-3.7	4.1.2	Recordkeeping	4-4.2
45 CSR 7-5.1	4-1.4	Implement Practices to Minimize	4-4.1
45 CSR 7-5.2	4-1.5	Implement Practices to Minimize	4-4.4
45 CSR 7-8.1	3-3.1	Testing	3-4.1
45 CSR 11-5.2	3-1.5	Reporting	3-5.1
45 CSR 13	4-1.1	Recordkeeping	4-4.1
WV Code 22-5.4 (a) (15)	3-3.1	N/A	3-4.1
WV Code 22-5.4 (a) (14)	3-1.6	Reporting	3-5.1
45 CSR 30-4.3h.1.B	3-5.9	N/A	3-6.1
40 CFR 61.145, 61.148, and 61.150	3-1.3	N/A	3-4.1

Source-Specific Applicable Requirements

The following table represents applicable source-specific State and Federal Requirements. The permit condition number and compliance demonstration method correspond to those identified in the current Title V Permit R30-1100031-2010.

3.1a SOURCE SPECIFIC APPLICABLE REQUIREMENTS

Applicable Requirement	Permit Condition Number	Affected Emission Point ID	Compliance Demonstration	
			Method	Condition Number
45 CSR 7-3.1	4.1.1	008, 009, 00A, 001, 002, 003, 004, 006, and 007	Recordkeeping	4.4.3
45 CSR 7-4.1	4.1.10	8	Recordkeeping	4.4.4
45 CSR 7.4.1	4.1.12	9	Recordkeeping	4.4.4
45 CSR 7.4.1	4.1.11	00A	Recordkeeping	4.4.4
45 CSR 7.4.1	4.1.3	001, 002, 003, 004, 006, 007	Recordkeeping	4.4.6.b
45 CSR 13 45 CSR 7.4.1	4.1.13	008, 009, 00A	Recordkeeping	4.4.4
45 CSR 21-19.4	4.1.7	001, 002, 003, 004, 006, 007, 00B	Recordkeeping	4.4.7
45 CSR 21-19.4	4.1.7	003-08*	Recordkeeping	4.4.7

* This source vents inside a building and emissions are considered fugitive. Therefore this represents the source ID as opposed to the emission point ID.

Non-Applicability of 40 CFR 63 Subpart MMMM

ACF Industries Huntington WV has been approved to implement facility-wide emissions limitations of single HAPs less than or equal to 9.9 tons per year and combination of HAPs equal to or less than 24.9 tons per year. Therefore ACF Huntington will no longer be considered a major source of HAPs. The ACF Huntington facility will be considered Emission standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products under 40 CFR 63, Subpart MMMM or any other MACT regulations that may apply in the future.

Compliance Assurance Monitoring (CAM)

The CAM rule is not applicable to the facility emission units.

4.0 FACILITY-WIDE EMISSIONS

This Title V Permit Renewal Application addresses all significant emission units operating at the Huntington facility.

ACF has a facility-wide limitation on HAPs to below major source thresholds. This makes the ACF Huntington facility an area source with respect to the Miscellaneous Surface Coating MACT under CFR 63, Subpart MMMM, and any other MACT. The following table represents proposed facility-wide limitations on HAPs.

Table 4.1 ACF LIMIT ON HAZARDOUS AIR POLLUTANTS

Source ID	EPN	Control Devise	Equipment Description	Total Emissions	
				Single HAPs	Combination of HAPs
005-01	008	0008	Weld Seam Blast		
005-02	009	0009	Pangborn Interior Blast		
005-03	00A	000A & 000B	Auto Blast		
115-04	00A	000A & 000B	Hand Blast		
005-05	00A	000A & 000B	Finish Blast		
003-01	001	0001	Primary Exterior Lining		
003-02	002	0002	Exterior Prime	< 9.9	< 24.9
003-03	003	0003	Secondary Interior Lining		
003-04	004	0004	Finish Booth		
003-06	006	0006	Stencil Booth		
003-07	007	0007	Final Touch Up		
003-08	NAP		Pre-Priming Application		
003-09	00B		Anti-Skid Application		

Table 4.1a ACF BLASTING OPERATIONS

Description	Source ID	Emission Point	Control Device
Weld Seam Blast	005-01	008	0008
Pangborn Interior Blast	005-02	009	0009
Auto Blast	005-03	00A	000A & 000B
Hand Blast	005-04	00A	000A & 000B
Finish Blast	005-05	00A	000A & 000B

Emissions from blasting operations are calculated based on the abrasive flow rate, the cycle time of the operation, the number of blasting guns in use, and the abrasive emission factor. The abrasive flow rates for each nozzle for the weld seam blast, Pangborn interior blast, hand blast, and finish blast are calculated using the following equation:

$$FR = FR_t * \frac{ID^2}{ID_1^2} * \frac{\rho}{\rho_1}$$

where,

FR = Abrasive flow rate (represents the maximum grit usage per hour for one gun) (lb/hr)

FR_1 = Flow rate of sand (lb/hr)

ID = Actual nozzle internal diameter (inches)

ID_1 = Nozzle internal diameter as represented in various references (inches)

ρ = Density of abrasive (lb/ft^3)

ρ_1 = Density of sand (lb/ft^3)

For the auto blast, the abrasive flow rate is calculated using the following equation:

$$FR = FR_t * W * \left(\frac{60\ min}{hr} \right)$$

where,

FR = Abrasive flow rate (represents the maximum grit usage per hour for one gun) (lb/hr)

FR_1 = Flow rate of grit from one wheel (lb/hr)

N = Number of wheels used

The short-term and annual PM emissions are then calculated using the following equations:

$$Short - Term\ Emissions\ (lb/hr) = FR * \frac{T_1}{T} * G * EF * CE$$

$$\text{Annual Emissions (tpy)} = \frac{FR * \frac{T_1}{T} * G * EF * CE * OH}{2{,}000 \left(\frac{lb}{ton}\right)}$$

where,

FR = Abrasive rate (lb/hr)

T_1 = Time it takes to perform the blasting operation (minutes)

T = Total time in the cycle (minutes)

G = Number of blasting guns used in the cycle

EF = Emission factor (represents the amount of particulate matter that will be emitted per pound of abrasive grit used) (lb PM/lb grit)

CE = Control efficiency of the control device (%)

OH = Annual hours of operation (hr/yr)

A ratio of 0.25 pounds of PM_{10} per pound PM (lb PM_{10} /lb PM), based on the typical particle size distribution for abrasive blasting operations, is used to convert emissions of PM to emissions of PM_{10}[4] Detailed emissions calculations for the blasting operations are shown in Table 5-2 below. A summary of the facility–wide emissions is shown in Table 5-3.

Table 4-2. Title V Permit Renewal – Blasting Emissions Calculations

Constant Values Used in Calculations

Constant	Symbol	Value	Units
Emission Factor	EF		0.01lb PM/lb grit
Ratio of PM_{10} / PM	--		0.25
Hours of Operation	OH	4	4,896 hr/yr
Density of Abrasive	ρ		487 lb/ft^3
Density of Sand	P_1		99 lb/ft^3

Abrasive Flow Rate Calculations

				Internal Diameter					
Source ID	**EPN**	**Control Device**	**Equipment Description**	**Actual (inches)**	**Theoretical (inches)**	**Flow Rate of Wheel (lb/min)**	**Number of Wheels**	**Sand Flow Rate (lb/hr)**	**Abrasive Flow Rate (lb/hr)**
005-01	008	0008	Weld Seam Blast	0,31	0,31	--	--	507	2,494.03
005-02	009	0009	Pangborn Interior Blast	0.50	0.50	--	--	1,265	6,222.78
005-03	00A	000A & 000B	Auto Blast	--	--	340	20	--	408,000
005-04	00A	000A & 000B	Hand Blast	0.50	0.50	--	--	1,265	6,222.78
005-05	00A	000A & 000B	Finish Blast	0.50	0.50	--	--	1,265	6,222.78

4.3 SITE WIDE SUMMARY

Site Wide Particulate Emissions

				Uncontrolled or Permitted Emissions				
Source ID	EPN	Control Device	Equipment Description	PM (lb/hr)	PM (tpy)	PM 10 (lb/hr	PM 10 (tpy)	Control Device Efficiency (%)
005-01	008	8	Weld Seam Blast	17.72	36.72	4.43	9.18	70
005-02	009	9	Pangborn Interior Blast	112.4	232.9	28.1	58.22	97.5
005-03	00A	00A & 00B	Auto Blast	65.36	135.6	16.34	33.9	98.93
005-04	00A	00A & 00B	Hand Blast					
005-05	00A	00A & 00B	Finish Blast					
003-01	001	0001	Primary Interior Lining	21.2				95
003-02	002	0002	Exterior Prime	21.2				95
003-03	003	0003	Secondary Interior Lining	21.2				95
003-04	004	0004	Finish Booth	21.2				95
003-06	006	0006	Stencil Booth	21.2				95
003-07	007	0007	Final Touch Up	21.2				95
003-08*	008	0008	Pre Priming Application	NAP				95
003-09*	009	0009	Anti-Skid Application	NAP				95
Total Emissions					405.2		101.3	

* The coating from these operations is not spray applied. Therefore, no particulate matter emissions will be generated.

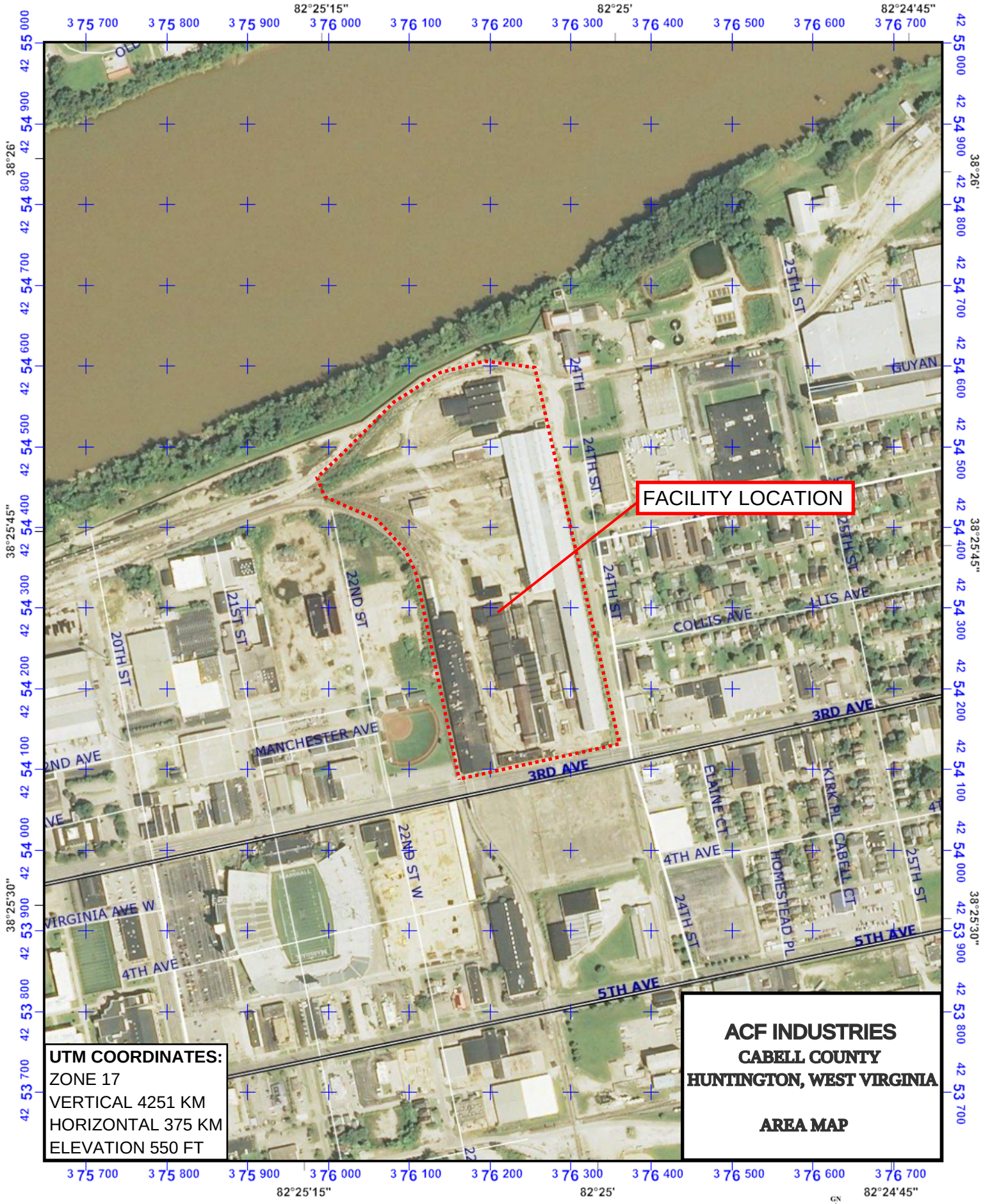
Table 4-4. Site-Wide VOC Emissions

				Total VOC Emissions [A]	
Source ID	EPN	Control Device	Equipment Description	(lb/gal coating)	(tpy)
003-01	001	0001	Primary Interior Lining	3.50	245.00
003-02	002	0002	Exterior Prime	3.50	245.00
003-03	003	0003	Secondary Interior Lining	3.50	245.00
003-04	004	0004	Finish Booth	3.50	245.00
003-06	006	0006	Stencil Booth	3.50	245.00
003-07	007	0007	Final Touch Up	3.50	245.00
003-08	NAP	--	Pre-Priming Application	3.50	245.00
003-09	00B	--	Anti-Skid Application	3.50	245.00
Total Emissions				--	245.00

[A] Total annual emissions of 245 tons per year is a cap for all facility-wide VOC emissions.

ATTACHMENT A

AREA MAP



UTM COORDINATES:
ZONE 17
VERTICAL 4251 KM
HORIZONTAL 375 KM
ELEVATION 550 FT

ACF INDUSTRIES
CABELL COUNTY
HUNTINGTON, WEST VIRGINIA

AREA MAP

Universal Transverse Mercator (UTM) Projection Zone 17
North American Datum of 1983
100 meter UTM / USNG / MGRS
Grid Zone Designation: 17S
100,000-m Squares:LC

1:6000 scale

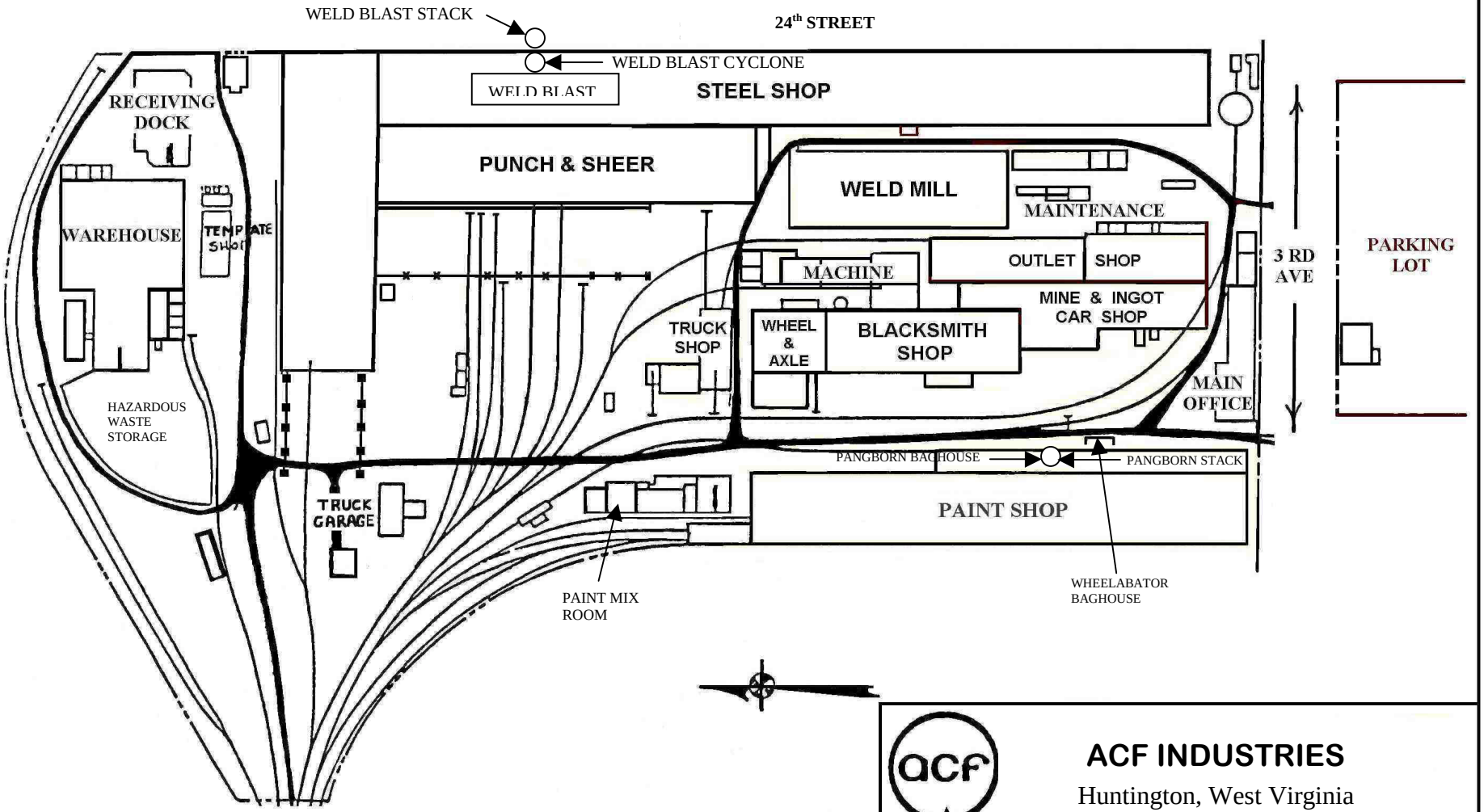
0 100 200 300 400 500 Feet
0 50 100 150 Meters

GN
MN 7°
TN 1°

Magnetic declination of 7W at center of map
on March 17, 2011

ATTACHMENT B

PLOT PLAN



ACF INDUSTRIES

Huntington, West Virginia

TITLE

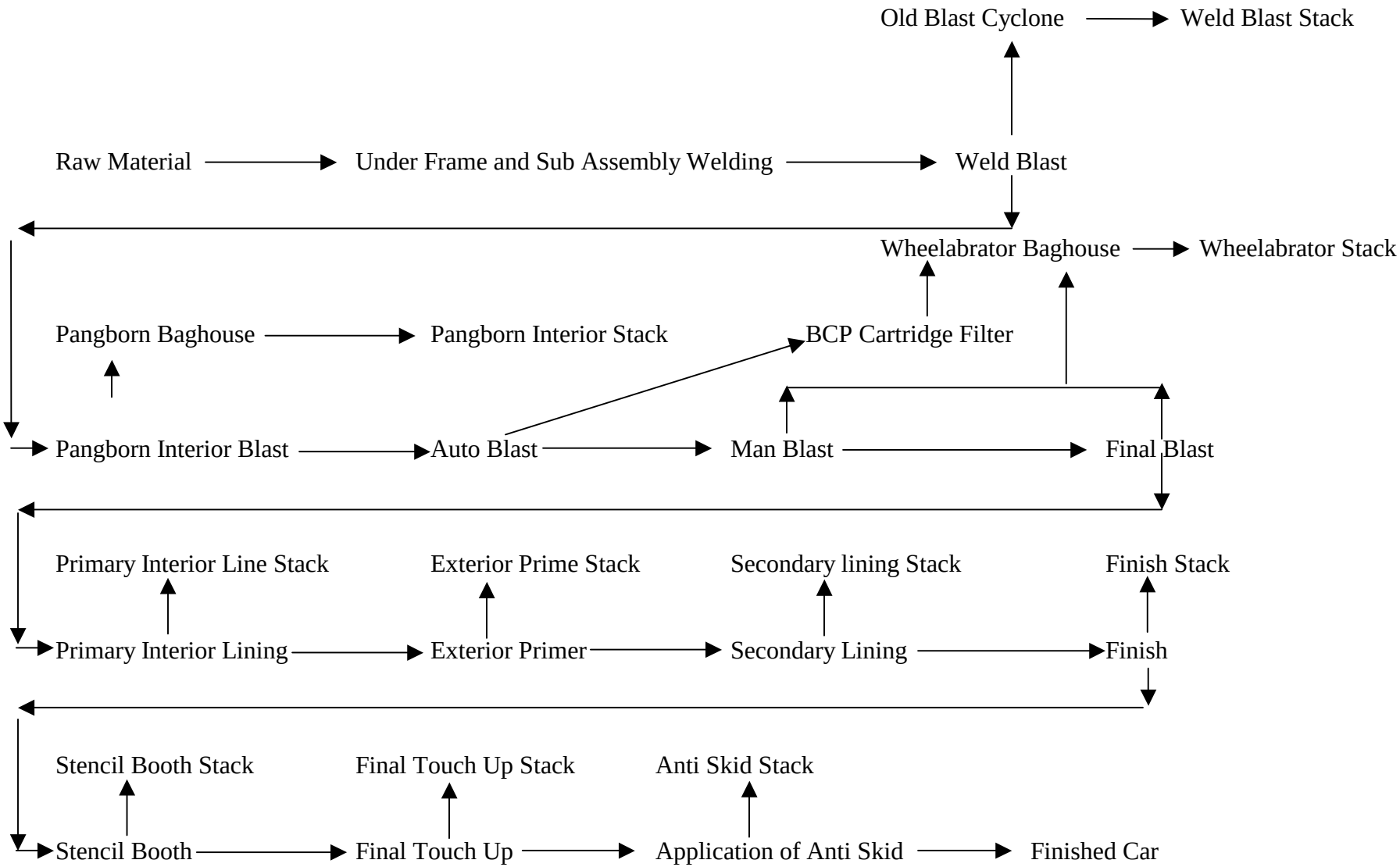
AIR PERMIT RENEWAL APPLICATION

PLOT PLAN

1 inch = approx. 165 feet
(not to scale)

ATTACHMENT C

PROCESS FLOW DIAGRAM



ACF Industries LLC
Process Flow Diagram

ATTACHMENT D

TITLE V EQUIPMENT TABLE

ATTACHMENT D - Title V Equipment Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID[1]	Control Device[1]	Emission Unit ID[1]	Emission Unit Description	Design Capacity	Year Installed/ Modified
008	0008	005-01	Weld Seam Blast	1,477 pounds	1985
009	0009	005-02	Pangborn Interior Blast	14,335 pounds	1960's
00A	000A&B	005-03	Auto Blast	152,681 pounds	Early 1960's
00A	000A&B	005-04	Hand Blast	152,681 pounds	Early 1960's
00A	000A&B	005-05	Finish Blast	152,681 pounds	1985
001	0001	003-01	Primary Interior Lining	Varies	1930's
002	0002	003-02	Exterior Prime	Varies	1930's
003	0003	003-03	Secondary Interior Lining	Varies	1930's
004	0004	003-04	Finish Booth	Varies	1930's
006	0006	003-06	Stencil Booth	Varies	1930's
007	0007	003-07	Final Touch Up	Varies	1930's
NAP	---	003-08	Pre Priming Application	Varies	1930's
00B	---	003-09	Anti Skid Application	Varies	1930's

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E

EMISSION UNIT FORM

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-01	Primary Interior Lining	0001

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The interior of the part receives a primary coating with a hand spray gun.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.）

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-02	Exterior Prime	0002

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
An initial priming coat is applied with automatic reciprocating coaters and hand guns.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.）

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-03	Secondary Interior Lining	0003

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The second lining coating is applied to the interior of the car or other parts using a hand (manual) applicator.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOX emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.）

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-04	Finish Booth	0004

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
With this one large paint booth many operations are performed. Spray guns are used to apply a pint coating to metal parts with automatic reciprocators as well as hand guns.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-06	Stencil Booth	0006

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The car or other parts are inspected and touch up paint is applied with a brush as necessary. After the touch up paint has dried, the car or parts are stenciled.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-08	Pre Priming Application	- - - -

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Primer is applied with brushes at various stages of the coationg process.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-09	Anti Skid Application	---

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Anti skid is applied with brushes after painting on the ralil car or parts.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
003-0B	Anti Skid Application	---

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Anti skid is applied with brushes after painting on the rail car or parts.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1930's	1930's	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar and/or parts being coated and amount of coating being applied.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar and/or parts being coated and amount of coating being applied.	Varies with the size of railcar and/or parts being coated and amount of coating being applied.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	21.2	---
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)	3.50(a)	245.00 facility wide (b)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

*Facility-wide, voluntary restriction to <9.9 tpy of single HAP and <24.9 tpy of multiple HAPs.
(a) The Title V Permit limitation for short-term VOC emissions is listed in units of pounds per gallon of coating used as opposed to pounds per hour.

(b) The Title V Permit limitation for annual VOC emissions is a site-wide cap of 245 tons per year for all emission units at the facility (Title V Permit Condition Number 4.1.9.)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.3 – 21.2 lb PM/hr
45 CSR 21-19.4	4.1.7 – 3.5 lb VOC/gal of coating

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 21-19.4	Recordkeeping	4.4.7

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005-01	Weld Seam Blast	0008

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The weld seams inside the hopper car are blasted with guns that have pickups on the gun to pickup and reuse the grit.

Manufacturer:	**Model number:**	**Serial number:**
Ager Manufacturing Company	90N70-D2	

Construction date:	**Installation date:**	**Modification date(s):**
1985	1985	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar. 1,477 lbs/hr of grit used. 24 hours a day 7 days a week.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar. 1,477 lbs/hr of grit usage.	Varies with the size of railcar. 12,938,520 lbs/yr of grit allowed.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	28.1	58.22
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

R = EF x FR x (1-n)

R = Estimated controlled particulate matte emissions (lbs PM/hr)
EF = Appropriate emission factor from Table 3-2 of the "Air Quality Permits" handbook (lb PM lb abrasive grit used)
FR = Hourly abrasive grit usage (lb grit/hr) (total aggregated grit usage divided by total aggregated hours of operation for the month)
N = Efficiency of Control device (decimal value)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.10 – 4.43 lb/hr
45 CSR 13 45 CSR 7.4.1	4.1.13

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 13 45 CSR 7.4.1	Recordkeeping	4.4.4

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005-02	Pangborn Interior Blast	0009

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The weld seams inside the hopper car are blasted with guns that have pickups on the gun to pickup and reuse the grit.

Manufacturer:	**Model number:**	**Serial number:**
Pangborn		
Construction date: 1965	**Installation date:** 1965	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar. 14,355 lbs/hr of grit used. 24 hours a day 7 days a week.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar. 14,355 lbs/hr of grit usage.	Varies with the size of railcar. 125,749,800 lbs/yr of grit allowed.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	28.1	58.22
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

R = EF x FR x (1-n)

R = Estimated controlled particulate matte emissions (lbs PM/hr)
EF = Appropriate emission factor from Table 3-2 of the "Air Quality Permits" handbook (lb PM lb abrasive grit used)
FR = Hourly abrasive grit usage (lb grit/hr) (total aggregated grit usage divided by total aggregated hours of operation for the month)
N = Efficiency of Control device (decimal value)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.12 28.1 lb/hr
45 CSR 13 45 CSR 7.4.1	4.1.13

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 13 45 CSR 7.4.1	Recordkeeping	4.4.4

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
005-03 005-04 005-05	Auto Blast, Hand Blast & Finish Blast	000A & 000B

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The outside of the car is blasted prior to painting with wheels that throw grit at the side of the car. The car is then touched up with hand blast hoses then moved on down and finished blasting with hand hoses. The car does not leave the booth to get any of this done.

Manufacturer:	**Model number:**	**Serial number:**
Construction date: Early 1960's	**Installation date:** Early 1960's	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Varies with the size of railcar. 152,681 lbs/hr of grit used. 24 hours a day 7 days a week.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Varies with the size of railcar. 152,681 lbs/hr of grit usage.	Varies with the size of railcar.	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes x No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	
Nitrogen Oxides (NO_X)	N/A	
Lead (Pb)	N/A	
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	16.34 lb/hr	33.9
Sulfur Dioxide (SO_2)	N/A	
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EST14 (Engineering Estimate)

R = EF x FR x (1-n)

R = Estimated controlled particulate matte emissions (lbs PM/hr)
EF = Appropriate emission factor from Table 3-2 of the "Air Quality Permits" handbook (lb PM lb abrasive grit used)
FR = Hourly abrasive grit usage (lb grit/hr) (total aggregated grit usage divided by total aggregated hours of operation for the month)
N = Efficiency of Control device (decimal value)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Applicable Requirement	Permit Condition
45 CSR 7-3.1	4.1.1
45 CSR 7-4.1	4.1.11 16.34 lb/hr
45 CSR 13 45 CSR 7.4.1	4.1.13

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Applicable Requirement	Method of Compliance	Condition Number
45 CSR 7-3.1	Recordkeeping	4.4.3
45 CSR 7-4.1	Recordkeeping	4.4.4
45 CSR 13 45 CSR 7.4.1	Recordkeeping	4.4.4

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT F

SCHEDULE OF COMPLIANCE FORM

ATTACHMENT F - Schedule of Compliance Form	
Complete this section if you indicated noncompliance with any of the applicable requirements identified in the permit application. For each emission unit which is not in compliance, identify the applicable requirement, the reason(s) for noncompliance, a description of how the source will achieve compliance, and a detailed schedule of compliance. If there is a consent order that applies to this requirement, attach a copy to this form.	
1. Applicable Requirement N/A	
Unit(s):	**Applicable Requirement:**
2. Reason for Noncompliance:	
3. How will Compliance be Achieved?	
4. Consent Order Number (if applicable):	
5. Schedule of Compliance. Provide a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance, including a date for final compliance.	
Remedial Measure or Action	Date to be Achieved
6. Submittal of Progress Reports.	
Content of Progress Report:	**Report starting date:** MM/DD/YYYY **Submittal frequency:**

ATTACHMENT G

APC DEVICE FORM

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0001	**List all emission units associated with this control device.** 003-01 Primary Interior Lining	
Manufacturer:	**Model number:**	**Installation date:** 1930's

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	X Other (describe) Fabric filter with a fan
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & VOC	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The hoppers of the hopper car are closed off on the bottoms and the tops have a hose dropped in which is attached to a fan unit with a filter that filters out the paint that is sprayed into the interior of the hopper. This air is then discharged into the shop.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

The filters are checked and they are changed on as needed basis.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0002	**List all emission units associated with this control device.** 003-02	
Manufacturer:	**Model number:**	**Installation date:** 1930's

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	X Other (describe) Fabric filter with a fan
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & VOC	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The roof has vents that have powered fans with fabric filters that are changed on a regular basis. The water wash control system allows the over-spray to settle out into the water.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

The filters are checked once a week and changed as needed. The water system is also checked out on a regular basis every two to three weeks when in operation.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0003	**List all emission units associated with this control device.** 003-03 Secondary Interior Lining	
Manufacturer:	**Model number:**	**Installation date:** 1930's

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	X Other (describe) Fabric filter with a fan
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & VOC	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The hoppers of the hopper car are closed off on the bottoms and the tops have a hose dropped in which is attached to a fan unit with a filter that filters out the paint that is sprayed into the interior of the hopper. This air is then discharged into the shop.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

The filters are checked and they are changed on as needed basis.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0004	**List all emission units associated with this control device.** Finish Booth 003-04	
Manufacturer:	**Model number:**	**Installation date:** 1930's

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	X Other (describe) Fabric filter with a fan
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & VOC	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The roof has vents that have powered fans with fabric filters that are changed on a regular basis when in use. The water wash control system allows the over-spray to settle out into the water.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

The filters are checked once a week (when in use) and changed on as needed basis. The water system is also cleaned out on a regular basis every two to three weeks when in use.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0006	**List all emission units associated with this control device.** Stencil Booth 003-06	
Manufacturer:	**Model number:**	**Installation date:** 1930's

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	X Other (describe) Fabric filter with a fan
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & VOC	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The roof has vents that have powered fans with fabric filters that are changed on a regular basis when in use.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

The filters are checked once a week (when in use) and changed on as needed basis.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0007	**List all emission units associated with this control device.** Final Touch-Up 003-07	
Manufacturer:	**Model number:**	**Installation date:** 1930's

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	x Other (describe) Roof vents with filters
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & VOC	100%	95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The roof has vents that have powered fans with fabric filters that are changed on a regular basis when in operation.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Filters are checked once a week when in operation and changed as needed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0008	**List all emission units associated with this control device.** 005-01 Weld Seam Blast	
Manufacturer: AGET Manufacturing company	**Model number:** 90N70-D2	**Installation date:** 1985

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	X Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe)
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & PM10	100%	70%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The hoppers are covered on the bottom and the hose from the single cyclone are dropped into the hoppers. The cyclone then collects all of the particulate and it is discharged into the building into a drum.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 0009	**List all emission units associated with this control device.** 005-02 Pangborn Interior Blast	
Manufacturer:	**Model number:**	**Installation date:** 1965

Type of Air Pollution Control Device:

X Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe)
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & PM10	100%	97.5%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The hoppers are covered on the bottom and the hose from the baghouse is dropped into the hoppers the Baghouse then filters out the particulate and it is discharged outside.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

When in operation, the filters are changed when the pressure drop readings get too high.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 000A & 000B	**List all emission units associated with this control device.** 005-04 Hand Blast 005-05 Finish Blast 005-03 Auto Blast	
Manufacturer: Wheelabrator BCP	**Model number:** JPC 15	**Installation date:** 1985

Type of Air Pollution Control Device:

X Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe)
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
PM & PM10	100%	98.93%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The room that the blasting is done is filtered by a BCP cartridge filter, and a Wheelabrator baghouse which is then discharged into the atmosphere.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

When in operation, the filters are changed when the pressure drop readings get too high.

ATTACHMENT H

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at http://www.epa.gov/ttn/emc/cam.html

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): ☐ YES ☒ NO

a. The PSEU is located at a major source that is required to obtain a Title V permit;

b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is NOT exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
- Stratospheric Ozone Protection Requirements.
- Acid Rain Program Requirements.
- Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
- An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).

c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;

d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND

e. The PSEU is NOT an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

☐ RENEWAL APPLICATION. **ALL** PSEUs for which a CAM plan has NOT yet been approved need to be addressed in this CAM plan submittal.

☐ INITIAL APPLICATION (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

☐ SIGNIFICANT MODIFICATION TO LARGE PSEUs. **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, Only address the appropriate monitoring requirements affected by the significant modification.

3) [a] BACKGROUND DATA AND INFORMATION					
Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU In order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.					
PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	[b] EMISSION LIMITATION or STANDARD	[c] MONITORING REQUIREMENT
EXAMPLE Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

[a] If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

[b] Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

[c] Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA			
Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. if more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.			
4a) PSEU Designation:	**4b) Pollutant:**	**4c) [a] Indicator No. 1:**	**4d) [a] Indicator No. 2:**
5a) GENERAL CRITERIA Describe the MONITORING APPROACH used to measure the indicators:			
[b] Establish the appropriate INDICATOR RANGE or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:			
5b) PERFORMANCE CRITERIA Provide the SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, such as detector location, installation specifications, and minimum acceptable accuracy:			
[c] For new or modified monitoring equipment, provide VERIFICATION PROCEDURES, including manufacturer's recommendations, TO CONFIRM THE OPERATIONAL STATUS of the monitoring:			
Provide QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):			
[d] Provide the MONITORING FREQUENCY:			
Provide the DATA COLLECTION PROCEDURES that will be used:			
Provide the DATA AVERAGING PERIOD for the purpose of determining whether an excursion or exceedance has occurred:			

[a] Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

[b] Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

[c] The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

[d] Emission units with post-control PTE ≥ 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:	6b) Regulated Air Pollutant:

7) **INDICATORS AND THE MONITORING APPROACH**: Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

8) **INDICATOR RANGES**: Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how **EACH** indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.

- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.

- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION: