



TITLE V RENEWAL APPLICATION

FACILITY ID: 009-00014

TITLE V:
R30-00900014-2012

CROWN CORK & SEAL
3011 Birch Drive
Weirton, WV 26062

OVERVIEW:

TITLE V RENEWAL APPLICATION
Crown Cork & Seal – WEIRTON, WV FACILITY #:009-00014

The CROWN facility located at 3011 Birch Drive, Weirton, WV 26062 conducts sheet lithography for use in the production of metal closures.

This facility is submitting required title V renewal application and associated forms with a request for permit renewal. CROWN requests a reissuance of the current permit with a renewal draft based on the existing permit and terms. No significant change to operation or emission characterization has occurred since the last renewal.

Please find attached all relevant application forms and associated technical data for your review.

If you have any questions or need clarification on any permit related item please contact:

Michael Herron
Environmental Engineer
(215) 698-5151
michael.herron@crowncork.com

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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): CROWN CORK & SEAL USA, INC
2. Facility Name or Location: Crown Cork & Seal USA Inc. 3011 Birch Drive Weirton, WV 26062
3. DAQ Plant ID No.: 0 0 9 — 0 0 0 1 4
4. Federal Employer ID No. (FEIN): 0 0 2 2 8 2 3 4 1
5. Permit Application Type: [X] Permit Renewal When did operations commence? MM/DD/YYYY What is the expiration date of the existing permit? 03/27 /2017
6. Type of Business Entity: [X] Corporation [] Governmental Agency [] LLC [] Partnership [] Limited Partnership
7. Is the Applicant the: [X] Owner [] Operator [] Both
8. Number of onsite employees: 116
9. Governmental Code: [X] Privately owned and operated; 0 [] County government owned and operated; 3 [] Federally owned and operated; 1 [] Municipality government owned and operated; 4 [] State government owned and operated; 2 [] District government owned and operated; 5
10. Business Confidentiality Claims: Does this application include confidential information (per 45CSR31)? [] Yes [X] No

11. Mailing Address		
Street or P.O. Box: 3011 Birch Drive		
City: Weirton	State: WV	Zip: 26062-
Telephone Number: (304) 748-6800	Fax Number: (304) 797-7802	

12. Facility Location		
Street: Birch Drive	City: Weirton	County: Brooke
UTM Easting: 532.19 km	UTM Northing: 4470.82 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: At the intersection of State Route 2 and US 22 go west on Freedom Way to Birch Drive. Turn right onto Half Moon Industrial Park and go to first building on the right.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designated attainment for PM2.5 in 2014, Not in Cross Creek Tax District		If yes, for what air pollutants?
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes, name the affected state(s). PA, OH
Is facility located within 100 km of a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: Steve Carter		Title: Plant Manager
Street or P.O. Box: 3011 Birch Drive		
City: Weirton	State: WV	Zip: 26062-
Telephone Number: (304) 748-6800	Fax Number: (304) 748-6800	
E-mail address: steve.carter@crowncork.com		
Environmental Contact: Tracy Conaway		Title: EHS Coordinator
Street or P.O. Box: 3011 Birch Drive		
City: Weirton	State: WV	Zip: 26062-
Telephone Number: (304) 748-6800	Fax Number: (304) 748-6800	
E-mail address: tracy.conaway@crowncork.com		
Application Preparer: Michael Herron		Title: Environmental Engineer
Company: CROWN Cork & Seal USA, Inc		
Street or P.O. Box: One Crown Way		
City: Philadelphia	State: PA	Zip: 19154-
Telephone Number: (215) 698-5151	Fax Number: (215) 602-2672	
E-mail address: michael.herron@crowncork.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
Metal Sheet Surface Coating	Can Components		3466
Metal Closure	Can Components		3466

Provide a general description of operations.

Crown Cork & Seal USA (SIC Code 3466 and NAICS Code 332115) manufactures decorative sheets from raw metal that arrives on flatbed trucks in a single, continuous coil. The continuous coil is unloaded by forklifts and moved to the plate shearing area. The Littell Coil Shearing Machine cuts and stacks the metal into individual sheets. The sheets are then moved by forklifts to the plain metal storage area until the desired coating and printing process begins. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week and fifty-two (52) weeks per year. The facility consists of a cutting area, a coating area with seven coater lines and an UV coating line, seven ovens, and two incinerators, and three presses.

- 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.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input checked="" type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input checked="" type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input checked="" type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> CAIR NO _x Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO _x Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> CAIR SO ₂ Trading Program (45CSR41)	

19. Non Applicability Determinations
<p>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.</p> <p>a) 45 CSR10 – To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides: Since the oxidizer does not have the potential to emit 500 pounds per hour of sulfur oxides, it is not subject to 45CSR10-4 via 45CSR10-4.1e. Since the facility does not permit the combustion of any refinery process gas stream or any other gas stream that contains hydrogen sulfide greater than 50 grains per 100 cubic feet of gas, and does not operate a coke production facility, it is not subject to 45CSR10-5.</p> <p>b) 45 CSR10A – Testing, Monitoring, Recordkeeping and Reporting Requirements Under 45CSR10: Since the oxidizer combust natural gas, it is not subject to 45CSR10A via 45CSR10A-3.1.b.</p> <p>c) Subpart TT – Standards of Performance for Metal Coil Surface Coating. This facility cuts the metal coils prior to coating, and as such, is not applicable to Subpart TT.</p> <p>d) 40 CFR 63 –KKKK – Facility is a synthetic minor and therefore not regulated under this MACT</p>
<input checked="" type="checkbox"/> 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.

- e) 40 CFR 63 HHHHHH – Not applicable, Area source of HAP however: no paint stripping, no MeCL. Additionally the site is roll applied coatings, not spray applied. 40 CFR 63.11170

- f) 40 CFR 63 Sub JJJJJJ – Area Boiler MACT : Site is area source of HAP however any boilers and water heaters for this site combust natural gas only excluding this site from MACT 6J. 40 CFR63.11195 (e) & (f)

Permit Shield

20. Facility-Wide Applicable Requirements

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

- | | | |
|----|--|--------|
| a) | CSR 45-6-3.1 | 3.1.1 |
| b) | CSR 45-6-3.2 | 3.1.2 |
| c) | 40 CFR 61.145,61.148,61.150 | 3.1.3 |
| d) | CSR 45-4-3.1 | 3.1.4 |
| e) | CSR 45-11-5.2 | 3.1.5 |
| f) | WV Code 22-5-4(a)(14) | 3.1.6 |
| g) | 40 CFR 82 SubF | 3.1.7 |
| h) | RMP (Not Applicable) | 3.1.8 |
| i) | 45CSR13, R13-2067 (2.5.1) | 3.1.9 |
| j) | 45CSR13, R13-2067 (4.1.7) | 3.1.10 |
| k) | 45CSR13, R13-2067 (4.1.8) | 3.1.11 |
| l) | WV Code 22-5-4(a)(15) | 3.3.1 |
| m) | 45CSR30-5.1.c.2.A, 45CSR13, R13-2067 (4.4.1) | 3.4.1 |
| n) | 45CSR30-5.1.c.2.B | 3.4.2 |
| o) | 45CSR30-5.1.c. | 3.4.3 |
| p) | 45CSR30-4.4 & 5.1.c.3.D | 3.5.1 |
| q) | 45CSR30-5.1.c.3.E | 3.5.2 |
| r) | 45CSR30-8 | 3.5.4 |
| s) | 45CSR30-5.3.e | 3.5.5 |
| t) | 45CSR30-5.1.c.3.A | 3.5.6 |
| u) | 45CSR30-5.1.c.3.C | 3.5.8 |
| v) | 45CSR30-4.3.h.1.B | 3.5.9 |

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.)

a)	CSR 45-6-3.1	3.1.1	Not permitted
b)	CSR 45-6-3.2	3.1.2	None Claimed
c)	40 CFR 61.145,61.148,61.150	3.1.3	Asbestos work will follow 40 CFR and 45 CSR requirements
d)	CSR 45-4-3.1	3.1.4	Site controlled by incineration, no odors
e)	CSR 45-11-5.2	3.1.5	Emit Below 100 tons, will curtail upon request from Director
f)	WV Code 22-5-4(a)(14)	3.1.6	Emission data submitted annually
g)	40 CFR 82 SubF	3.1.7	All CFC work conducted by certified 3rd party
h)	RMP (Not Applicable)	3.1.8	Not Applicable
i)	45CSR13, R13-2067 (2.5.1)	3.1.9	All permits in compliance
j)	45CSR13, R13-2067 (4.1.7)	3.1.10	Control devices maintained in use, Synthetic Minor for HAP
k)	45CSR13, R13-2067 (4.1.8)	3.1.11	Control devices maintained in use, TAP limit
l)	WV Code 22-5-4(a)(15)	3.3.1	Stack testing completed as required
m)	45CSR30-5.1.c.2.A, 45CSR13, R13-2067 (4.4.1)	3.4.1	Recordkeeping
n)	45CSR30-5.1.c.2.B	3.4.2	Recordkeeping
o)	45CSR30-5.1.c.	3.4.3	Recordkeeping
p)	45CSR30-4.4 & 5.1.c.3.D	3.5.1	RO Certification
q)	45CSR30-5.1.c.3.E	3.5.2	No confidentiality claims have been made
r)	45CSR30-8	3.5.4	Emission Statements and fees are current
s)	45CSR30-5.3.e	3.5.5	Annual Compliance Certification submitted
t)	45CSR30-5.1.c.3.A	3.5.6	Monitoring reports submitted as required
u)	45CSR30-5.1.c.3.C	3.5.8	Potential deviations submitted if required
v)	45CSR30-4.3.h.1.B	3.5.9	New requirements followed under implementation schedule

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

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

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	14.83
Nitrogen Oxides (NO _x)	17.65
Lead (Pb)	0.000
Particulate Matter (PM _{2.5}) ¹	1.34
Particulate Matter (PM ₁₀) ¹	1.34
Total Particulate Matter (TSP)	1.34
Sulfur Dioxide (SO ₂)	0.11
Volatile Organic Compounds (VOC)	118
Hazardous Air Pollutants ²	Potential Emissions
Cumene	9.4
Ethyl Benzene	9.4
Formaldehyde	0.5
Isophorone	9.4
Methyl Isobutyl Ketone (MIBK)	9.4
Naphthalene	9.4
Phenol	9.4
Toluene	9.4
Xylene	9.4
Total HAP	24.4
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)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	7. Blacksmith forges.
<input type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	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.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input checked="" type="checkbox"/>	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: <u>LPP-1A Lithographic Printing Press 80 Sheets/min</u> <u>LPP1-4 Lithographic Printing Press 75 Sheets/min</u> <u>LPP2-4 Lithographic Printing Press 75 Sheets/min</u> <u>CU1-UV1 UV Curing Line #5 70 Sheets/min</u> <u>CU2-UV1 UV Curing Line #5 70- Sheets/min</u> <u>CU1-4 UV Curing Line #4 75 Sheets/min</u> <u>CU3-UV1 UV Curing Line #5 70 Sheets/min</u>

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	<p>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.</p> <p>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:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	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.)
<input type="checkbox"/>	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.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routine calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	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: STEVE CARTER

Title: PLANT MANAGER

Responsible official's signature:

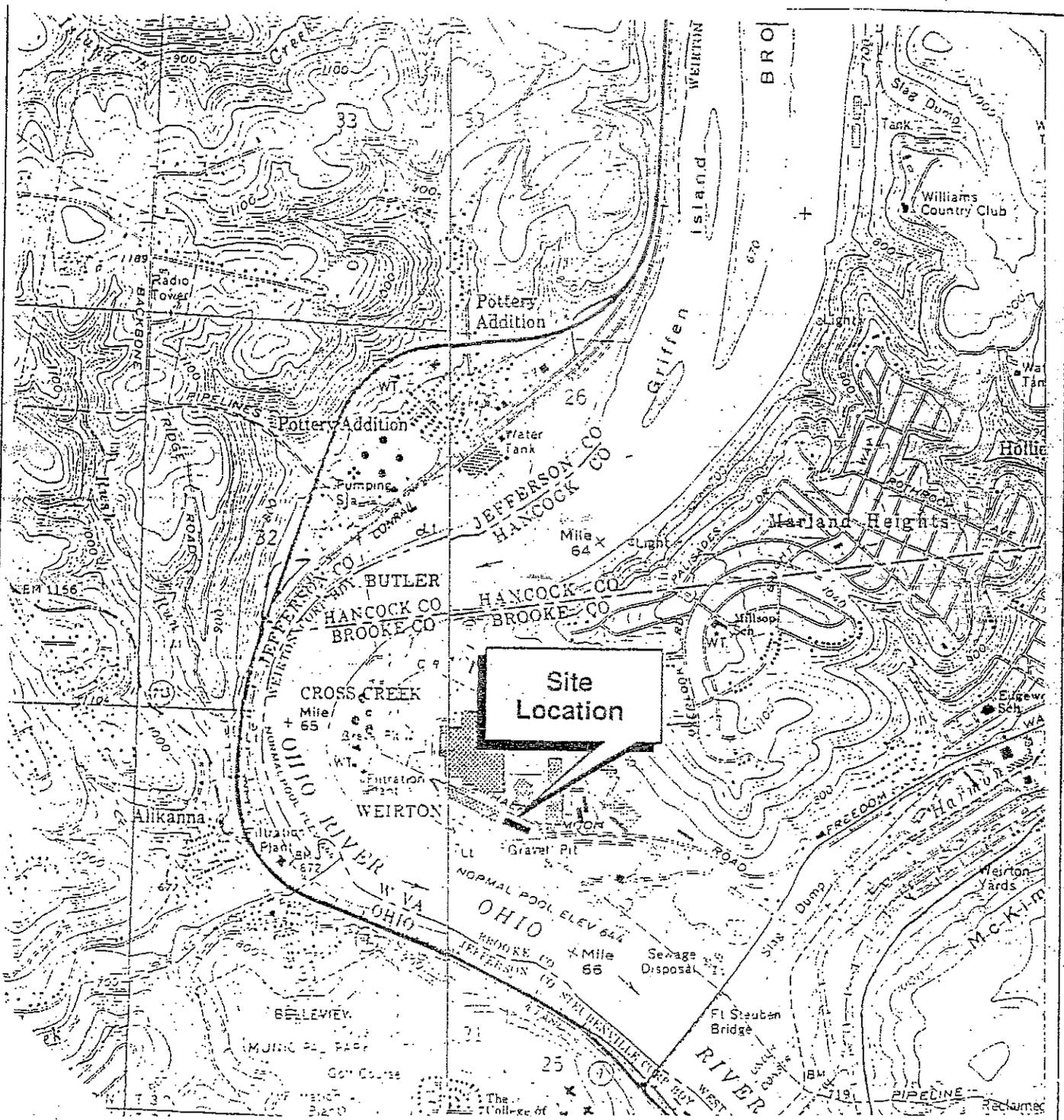
Signature: Steve Carter Signature Date: 9/21/16
 (Must be signed and dated in blue ink)

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

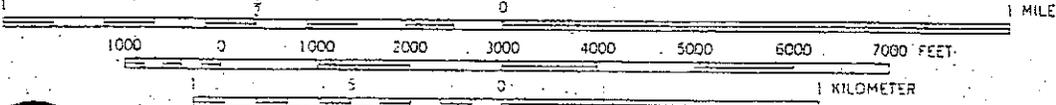
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
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<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	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/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT A – AREA MAP



SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929



WO#
993-75

Source:
USGS Weirton, WV/Knoxville, OH
Scale = 1 inch = 2,000 feet

Figure 1
Site Location Map
Weirton, West Virginia

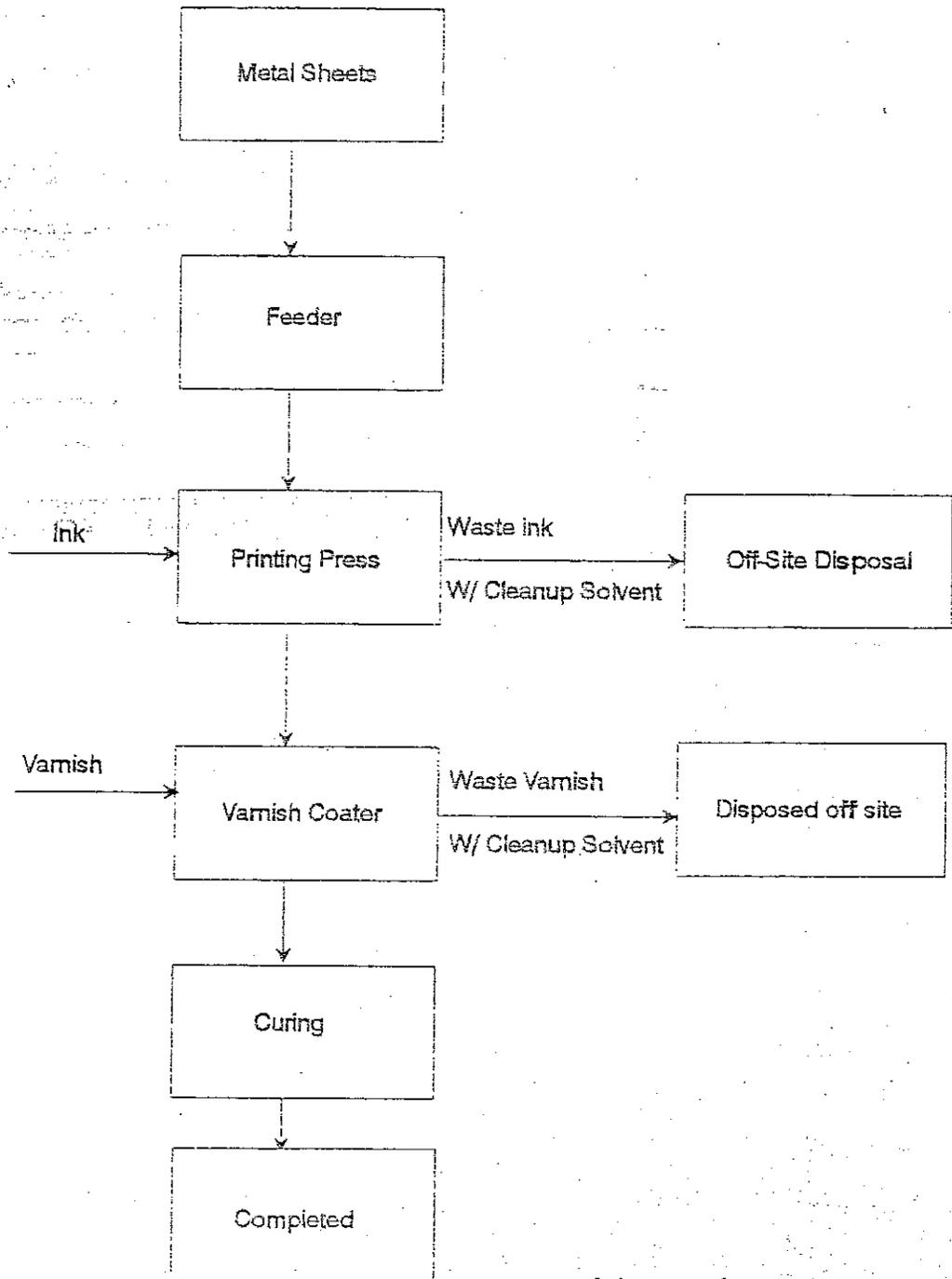


ATTACHMENT B – PLOT PLAN

ATTACHMENT C – PROCESS FLOW

LITHO DEPARTMENT

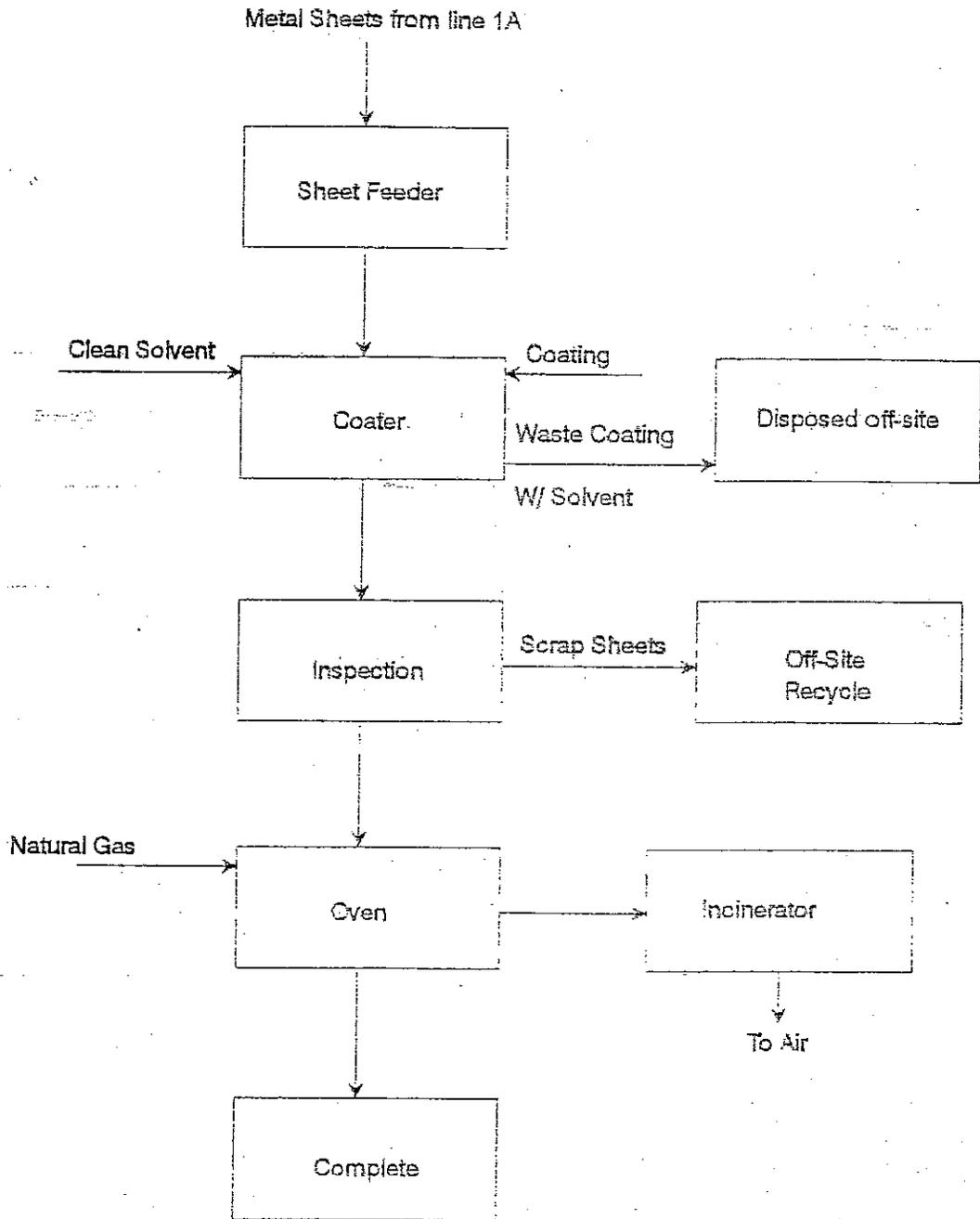
Litho Press



Line 1A

LITHO DEPARTMENT

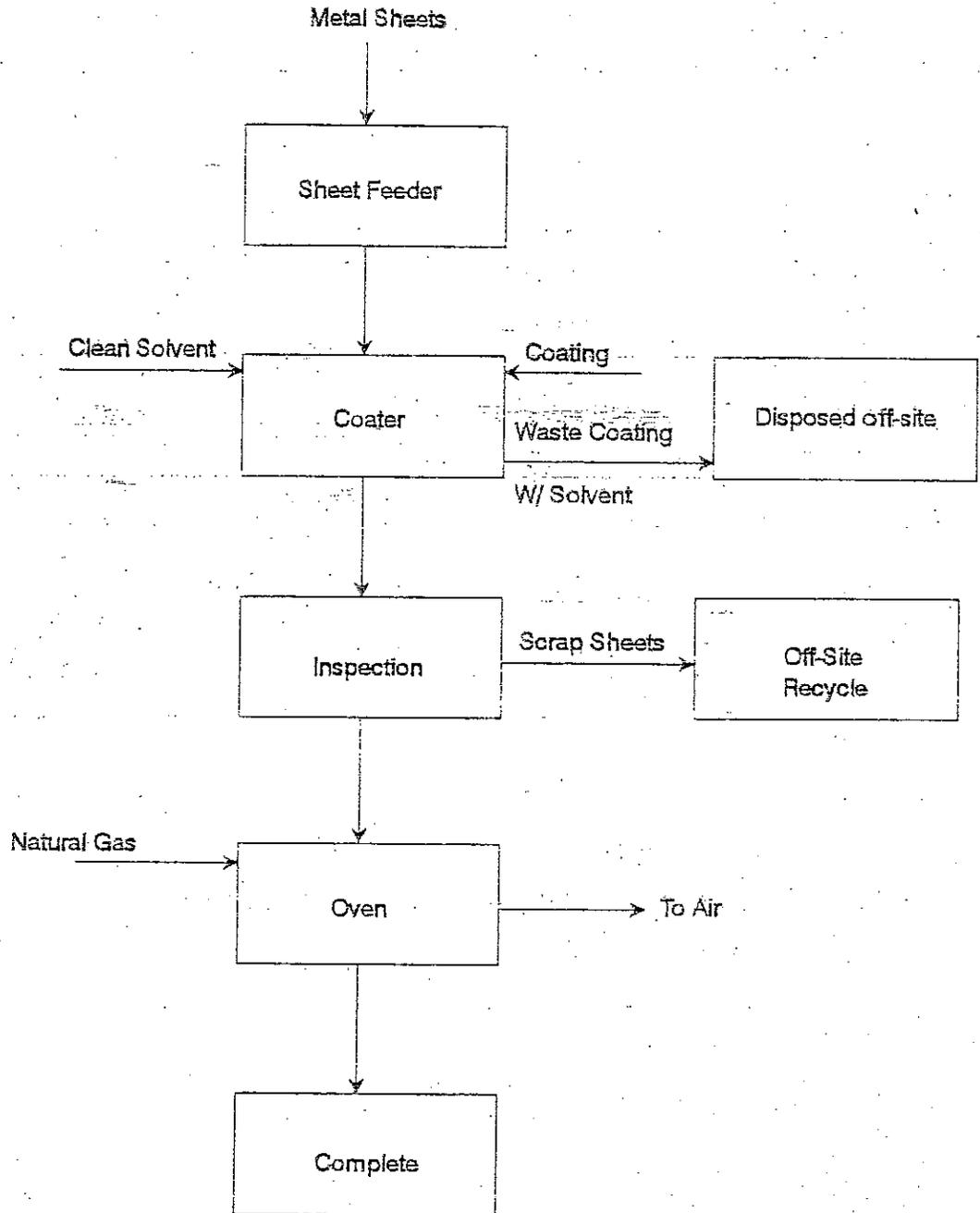
Coaters



Line 1B

LITHO DEPARTMENT

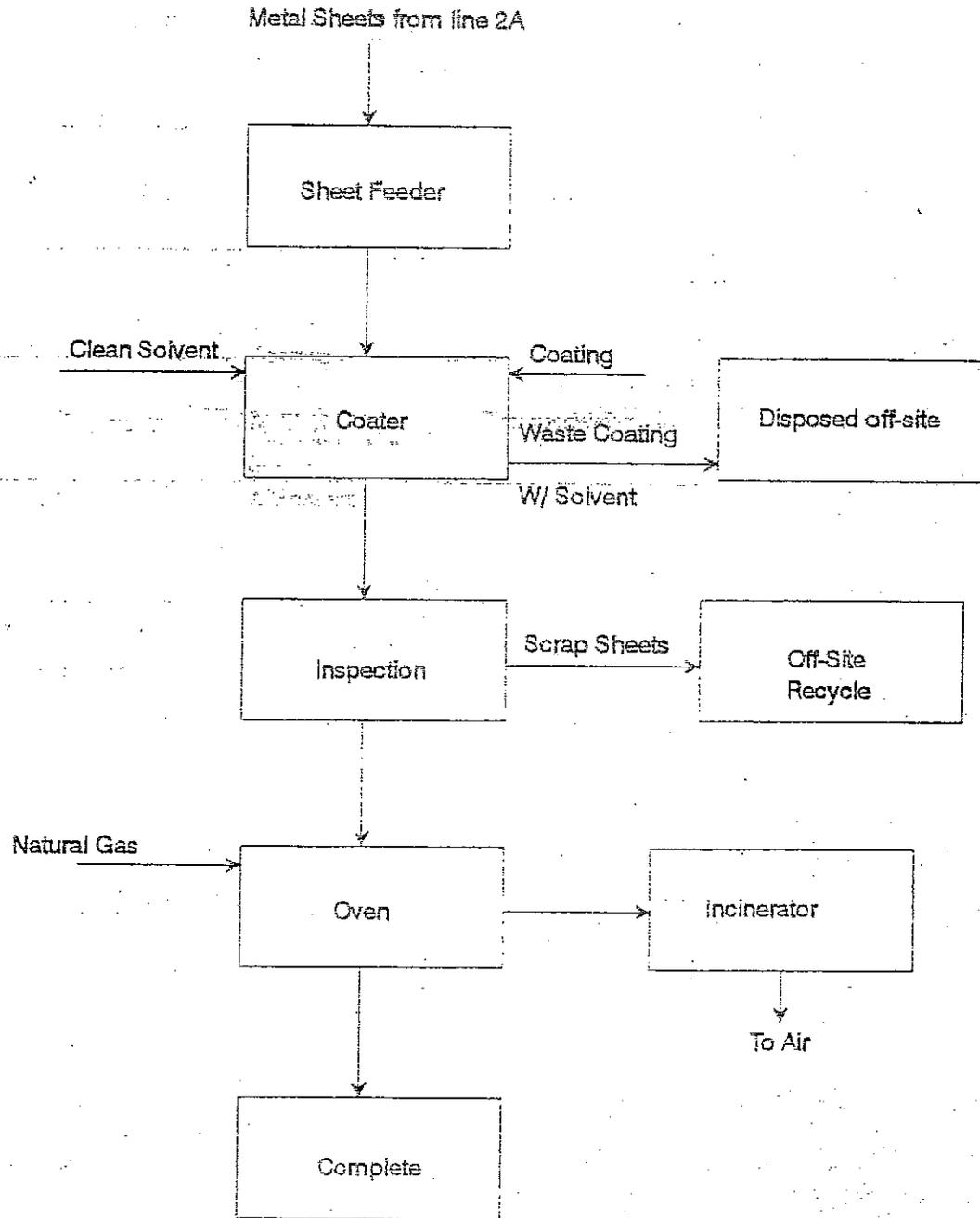
Coaters



Line 2A

LITHO DEPARTMENT

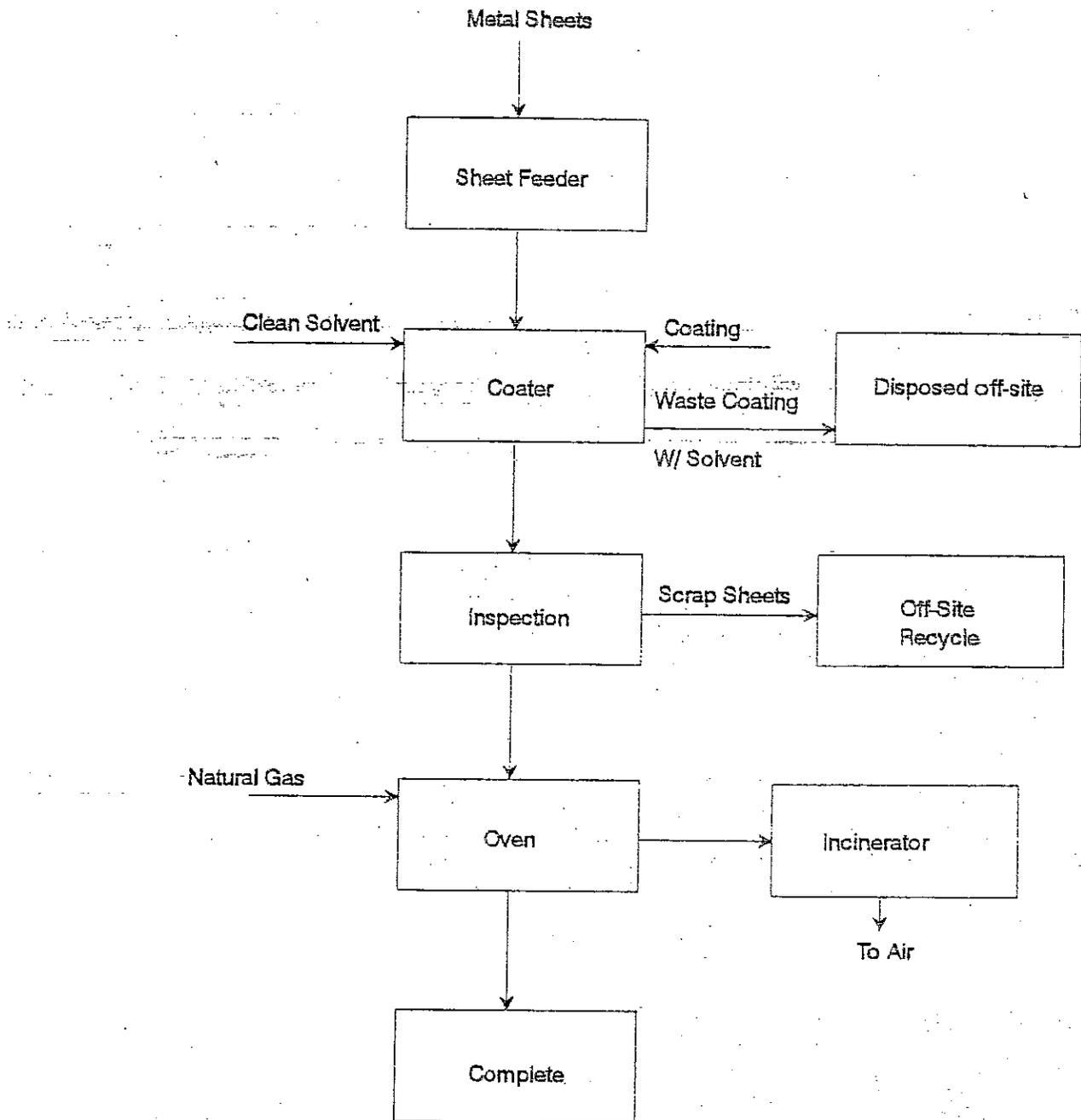
Coaters



Line 2B

LITHO DEPARTMENT

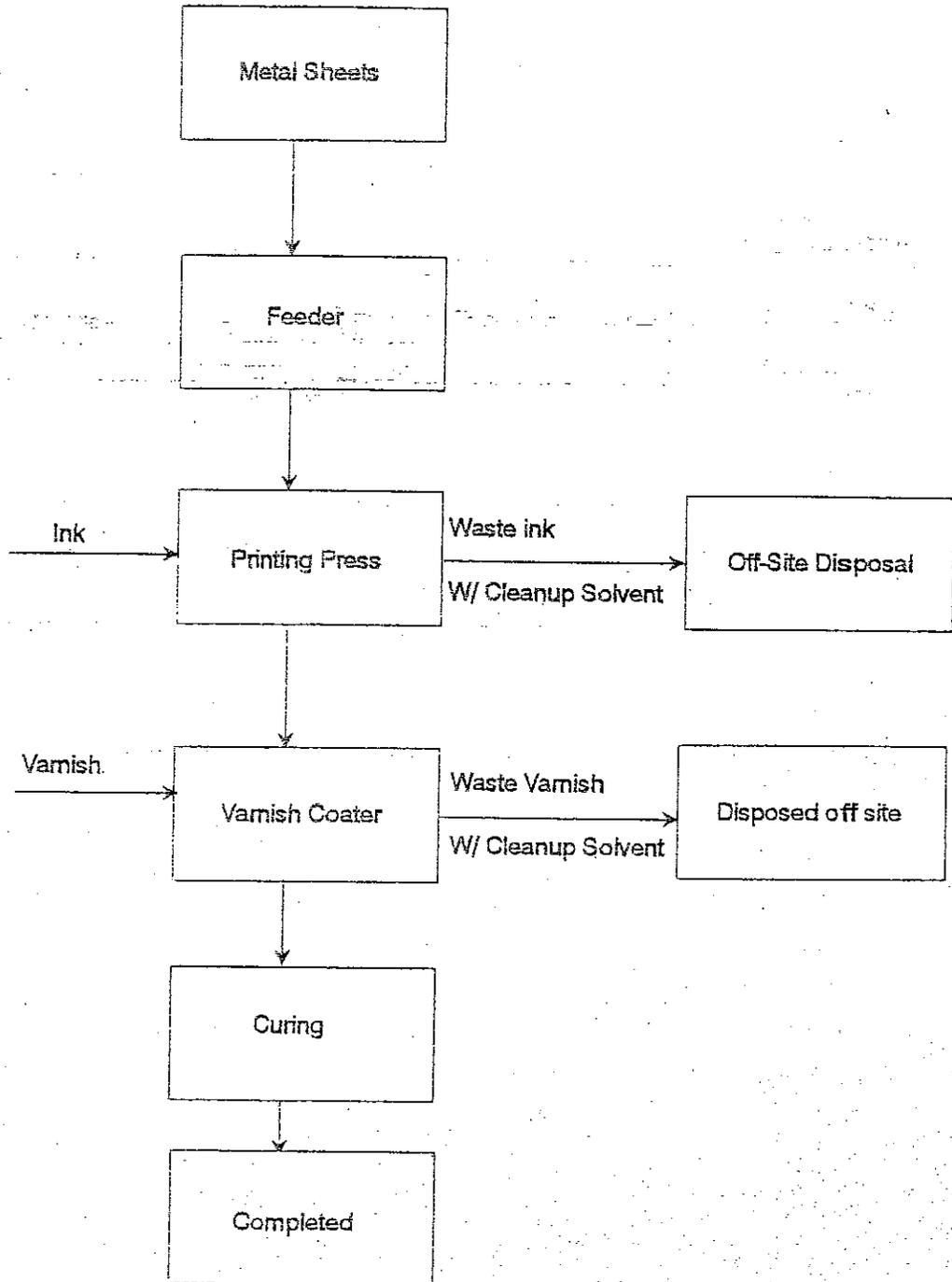
Coaters



Line 3

LITHO DEPARTMENT

Litho Press



Line 4

ATTACHMENT C2 – PROCESS DESCRIPTION

Process Description

Overview

The raw metal that will eventually leave the facility in the form of decorative sheets arrives on flatbed trucks in a single, continuous coil. The continuous coil is unloaded by forklifts and moved to the plate shearing area. The Littell coil shearing machine cuts and stacks the metal into individual sheets. The sheets are then moved by forklift to the plain metal storage area until the desired coating and/or printing process begins.

The Weirton facility has a total of 4 coating lines and 3 press lines. The process description discussed here is a "typical" operating scenario and will cover the coating and printing operations at the facility.

Sheets are transported by forklift to one of four Wagner roll coating lines. Each coating line has a similar configuration with the exception of the size of sheet that the particular line can handle. The first application is to apply either a protective or decorative coating to the metal sheet. Protective coatings are generally interior coatings, compatible with the product to be filled in the container while offering protection between the product and the metal. Decorative coatings are generally outside coatings such as pigmented whites, golds, and clear coatings which enhance the aesthetics of the container. The sheets are fed into the Wagner Roll Coater by a sheet feeder. The coating is applied through direct contact between the sheet and roll coater. Pressure is maintained on the sheet by a second roller directly underneath the roll coater. The sheets then move to a wicket oven where the determined temperature and residence time cures the coating to the metal sheet. A belt at the back of the oven removes the coated sheets from the oven and transfers them to a sheet stacker.

The coated sheets are then removed from the sheet stacker and the process is followed again to coat the opposite side of the sheet. Once the protective and decorative coatings have been applied, the sheets are moved to one of three Hoe press lines where they receive the decorative inks and/or a protective varnish coating. The coated sheets are fed into the press where the image is transferred onto the sheet through direct pressure between the press roller and metal plate. The sheets then move through a Wagner trailing varnisher that applies a protective coating over the newly printed sheets. The varnish is applied in the same manner as described in the coating application. The sheets then move to a wicket oven where the determined temperature and residence time cures the decorative ink and varnish. A belt at the back of the oven removes the printed sheets and transfers them to a sheet stacker. As a final step, the decorated sheets are packaged and made ready for shipment.

Littell Coil Shearing

The continuous coil is fed into the Littell coil shearing machine where individual plates are cut to design specifications. The metal sheets are stacked and stored in the raw metal storage area prior to the coating and press operations. There are no emissions associated with this process.

Wagner Roll Coaters

All liquid coatings and varnishes are applied on the seven Wagner Coaters at the Weirton facility. The coating is pumped from a drum or main coating reservoir into the upper coating pan reservoir. The coating is distributed via two stainless steel "metering rollers". One of the metering rollers is immersed in the coating and transfers the coating to the second roller. A pan located under the metering rollers collects excess coating which is gravity fed back to the main coating reservoir. The amount of coating applied is metered by the gap between the two rollers. This gap is micrometer adjustable and is controlled by Weirton personnel in accordance with the pre-determined film thickness of the material to be applied. The metered coating then is transferred to the metal sheet by an

applicator roller. This roller is generally made from a high quality, fine finish, urethane or rubber material. The hardness of the applicator roller will vary according to the chemical composition and film thickness of the material to be applied.

Located directly underneath and in direct contact with the applicator roller is another stainless steel roller called the impression cylinder. The purpose of this roller is to create pressure between the applicator roller, the tinplate being coated, and itself so that the metal sheet passing between the two rollers receives the coating and is pulled through by the pressure of the rollers. As this impression cylinder is in direct contact with the applicator roller, whenever sheets are not passing between them, the impression roller will receive and transfer wet coating to the opposite side of the tinplate. To avoid the unwanted coating being applied to the underneath side of the sheet, the impression roller must be continually cleaned. The coating is first scraped off the impression roller by a scraper knife assembly. There is a secondary flow channel and scraper system whereby, compatible solvent (rollwash) is applied to the impression roller via a felt pad. This roll wash cleans the impression roller and then the scraper knife assembly removes all rollwash residue. The rollwash and coating mixture is recycled back into a main rollwash reservoir. As this cleaning process continues, additional coating is picked up by the rollwash and eventually loses its effectiveness as a cleaner. Once this occurs, the "spent" rollwash is placed in drums and shipped off site for recycling.

Wicket Ovens

As the metal sheets exit the Wagner Roll Coater, they are transported to the curing oven via a precision oven infeed table. Curing temperatures will vary dependent upon the chemical composition of the coatings. The approximate time and temperature range for the coating is 10 minutes curing time at temperatures of 315 to 415 degrees F. Ovens at the Weirton facility have bake lengths of either 130 feet or 150 feet. At the beginning portion of the bake area, an exhaust system maintains a negative pressure that directs VOC into the capture hood which is ducted to either the incinerator or the respective stack for that oven. Near the back of the oven a second exhaust system pulls air from outside which helps cool the sheet and maintains a positive pressure within the oven that directs any VOC back toward the front exhaust system.

Printing Presses

The lithographic process is performed on four presses at the Weirton facility. Inks are first picked up on the plate cylinders which are then transferred to the application roller. The application roller comes in direct contact with the coated sheet and the image is transferred onto the sheet. The printed sheet then receives a protective varnish by the Wagner roll coating process as described above. Once the sheet is coated it follows the same curing process by the Wicket oven as described above.

ATTACHMENT D – 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
TO-1	TO-1	C-1A	Roll Coater Line 1A (Wagner Trailing Varnisher)	80 Sheets/min	1983
TO-1	TO-1	C-1B	Roll Coater Line 1B (Wagner Trailing Varnisher)	80 Sheets/min	1983
TO-1	TO-1	C-2A	Roll Coater Line 2A (Wagner)	85 Sheets/min	1983
TO-1	TO-1	C2B	Roll Coater Line 2B (Wagner)	85 Sheets/min	1983
TO-1	TO-1	C-3	Roll Coater Line 3 (Wagner)	100 Sheets/min	1973
TO-1	TO-1	C-4	Roll Coater Line 4 (Wagner Trailing Varnisher)	75 Sheets/min	1950
TO-1	TO-1	O-1A	Oven Line 1A	4.05 MMBTU/hr	1983
TO-1	TO-1	O-1B	Oven Line 1B	4.05 MMBTU/hr	1983
TO-1	TO-1	O-2A	Oven Line 2A	4.05 MMBTU/hr	1983
TO-1	TO-1	O-2B	Oven Line 2B	4.05 MMBTU/hr	1983
TO-1	TO-1	O-3	Oven Line 3	8.1 MMBTU/hr	1973
TO-1	TO-1	O-4	Oven Line 4	5.4 MMBTU/hr	1950
TO-2	TO-2	C-6	Roll Coater Line 6	100 Sheets/min	2005
TO-2	TO-2	O-6	Oven Line 6 – HEAT FROM INTEGRATED TO-2	0	2005
TO-1	TO-1	P-1A	1- Color Hoe Press	80 Sheets/min	1992
TO-1	TO-1	P-4	2-Color "Y" Hoe Press	75 Sheets/min	1974
TO-1	TO-1	P-3	1-Color Hoe Press	70 Sheets/min	2010
TO-1		TO-1	ADWEST THERMAL OXIDIZER	5.6 MMBTU/HR	2006
TO-2		TO-2	LTG ECO TNV INTEGRATED OXIDIZER	5.6 MMBTU/HR	2011

¹For 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 FORMS**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CIA & O1A	Emission unit name: Roll Coater Line 1A Over Line 1 A	List any control devices associated with this emission unit. TO-1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Sheet Coating and Printing Line
Wagner coater and Hoe printing press and thermal oven

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 1983	Modification date(s): MM/DD/YYYY
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
4500 coated and printed sheets per hour

Maximum Hourly Throughput: 14 gal. coating/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
---	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: 4.05 mmBtu/hr
--	--

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.

Natural gas 4050 ft3/hr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas			4.05 mmBtu/hr

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.34	1.49
Nitrogen Oxides (NO _x)	0.405	1.774
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.031	0.135
Particulate Matter (PM ₁₀)	0.031	0.135
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)	0.002	0.011
Volatile Organic Compounds (VOC)	1.4	6.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.9	3.8
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.).

1000 BTU/FT3

Emission Factors:

NOx	100 lbs/million Ft3
PM	7.6 lbs/million Ft3
SOx	0.6 lbs/million Ft3
CO	84 lbs/million Ft3
VOC	5.50 lbs/million Ft3

Sample Calculation:

Tons NO_x/yr = (mm BU/hr x 7200 hrs/yr/1000 BTU/Ft3) x 100 lbs NO_x/mm FT3/2000 lbs/ton

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

	<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a)	45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b)	45CSR13, R13-2067 (4.1.6)	4.1.2
c)	45CSR13, R13-2067 (4.1.13)	4.1.3
d)	45CSR13, R13-2067 (4.1.14)	4.1.4
e)	45CSR13, R13-2067 (4.1.17)	4.1.5
f)	45CSR13, R13-2067 (4.1.18)	4.1.6
g)	45CSR13, R13-2067 (4.2.1)	4.2.1
h)	None	4.3.1
i)	45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j)	None	4.5.1
k)	None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? 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: CIB & O1B	Emission unit name: Roll Coater Line 1B Over Line 1B	List any control devices associated with this emission unit. TO-1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Sheet Coating Line
 Wagner coater and thermal oven

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 1983	Modification date(s): MM/DD/YYYY
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 4500 coated and printed sheets per hour

Maximum Hourly Throughput: 14 gal. coating/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
---	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: 4.05 mmBtu/hr
--	--

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.

Natural gas 4050 ft³/hr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas			4.05 mmBtu/hr

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.34	1.49
Nitrogen Oxides (NO _x)	0.405	1.774
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.031	0.135
Particulate Matter (PM ₁₀)	0.031	0.135
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)	0.002	0.011
Volatile Organic Compounds (VOC)	1.4	6.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.9	6.2
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.).

1000 BTU/FT3

Emission Factors:

NO _x	100 lbs/million Ft3
PM	7.6 lbs/million Ft3
SO _x	0.6 lbs/million Ft3
CO	84 lbs/million Ft3
VOC	5.50 lbs/million Ft3

Sample Calculation:

$$\text{Tons NO}_x/\text{yr} = (\text{mm BU/hr} \times 7200 \text{ hrs/yr} / 1000 \text{ BTU/Ft}^3) \times 100 \text{ lbs NO}_x/\text{mm Ft}^3 / 2000 \text{ lbs/ton}$$

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a) 45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b) 45CSR13, R13-2067 (4.1.6)	4.1.2
c) 45CSR13, R13-2067 (4.1.13)	4.1.3
d) 45CSR13, R13-2067 (4.1.14)	4.1.4
e) 45CSR13, R13-2067 (4.1.17)	4.1.5
f) 45CSR13, R13-2067 (4.1.18)	4.1.6
g) 45CSR13, R13-2067 (4.2.1)	4.2.1
h) None	4.3.1
i) 45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j) None	4.5.1
k) None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? 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: C2A & O2A	Emission unit name: Roll Coater Line 2A Over Line 2A	List any control devices associated with this emission unit. TO-1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Sheet Coating Line
 Wagner coater and thermal oven

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 1983	Modification date(s): MM/DD/YYYY
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 4500 coated and printed sheets per hour

Maximum Hourly Throughput: 14 gal. coating/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
---	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: 4.10 mmBtu/hr
--	--

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.

Natural gas 4100 ft³/hr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas			4.10 mmBtu/hr

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.34	1.49
Nitrogen Oxides (NO _x)	0.405	1.774
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.031	0.135
Particulate Matter (PM ₁₀)	0.031	0.135
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)	0.002	0.011
Volatile Organic Compounds (VOC)	1.4	6.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.9	3.8
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.).

1000 BTU/FT3

Emission Factors:

NO_x 100 lbs/million Ft3
 PM 7.6 lbs/million Ft3
 SO_x 0.6 lbs/million Ft3
 CO 84 lbs/million Ft3
 VOC 5.50 lbs/million Ft3

Sample Calculation:

$$\text{Tons NO}_x/\text{yr} = (\text{mm BU/hr} \times 7200 \text{ hrs/yr} / 1000 \text{ BTU/Ft}^3) \times 100 \text{ lbs NO}_x/\text{mm FT}^3 / 2000 \text{ lbs/ton}$$

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a) 45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b) 45CSR13, R13-2067 (4.1.6)	4.1.2
c) 45CSR13, R13-2067 (4.1.13)	4.1.3
d) 45CSR13, R13-2067 (4.1.14)	4.1.4
e) 45CSR13, R13-2067 (4.1.17)	4.1.5
f) 45CSR13, R13-2067 (4.1.18)	4.1.6
g) 45CSR13, R13-2067 (4.2.1)	4.2.1
h) None	4.3.1
i) 45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j) None	4.5.1
k) None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? 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: C2B & O2B	Emission unit name: Roll Coater Line 2B Over Line 2B	List any control devices associated with this emission unit. TO-1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Sheet Coating Line
 Wagner coater and thermal oven

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 1983	Modification date(s): MM/DD/YYYY
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 4500 coated and printed sheets per hour

Maximum Hourly Throughput: 14 gal. coating/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
---	-----------------------------------	---

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
---	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: 4.10 mmBtu/hr
--	--

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.

Natural gas 4100 ft3/hr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas			4.10 mmBtu/hr

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.34	1.49
Nitrogen Oxides (NO _x)	0.405	1.774
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.031	0.135
Particulate Matter (PM ₁₀)	0.031	0.135
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)	0.002	0.011
Volatile Organic Compounds (VOC)	1.4	6.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.9	3.8
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.).

1000 BTU/FT3

Emission Factors:

NO _x	100 lbs/million Ft3
PM	7.6 lbs/million Ft3
SO _x	0.6 lbs/million Ft3
CO	84 lbs/million Ft3
VOC	5.50 lbs/million Ft3

Sample Calculation:

$$\text{Tons NO}_x/\text{yr} = (\text{mm BU/hr} \times 7200 \text{ hrs/yr} / 1000 \text{ BTU/Ft}^3) \times 100 \text{ lbs NO}_x/\text{mm FT}^3 / 2000 \text{ lbs/ton}$$

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a) 45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b) 45CSR13, R13-2067 (4.1.6)	4.1.2
c) 45CSR13, R13-2067 (4.1.13)	4.1.3
d) 45CSR13, R13-2067 (4.1.14)	4.1.4
e) 45CSR13, R13-2067 (4.1.17)	4.1.5
f) 45CSR13, R13-2067 (4.1.18)	4.1.6
g) 45CSR13, R13-2067 (4.2.1)	4.2.1
h) None	4.3.1
i) 45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j) None	4.5.1
k) None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? 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: C3 & O3	Emission unit name: Roll Coater Line 3 Over Line 3	List any control devices associated with this emission unit. TO-1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Sheet Coating Line
 Wagner coater and thermal oven
 Hoe Press

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 1973	Modification date(s): 2010 – add Hoe
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 5400 coated and printed sheets per hour

Maximum Hourly Throughput: 16 gal. coating/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
---	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: 8.1 mmBtu/hr
--	---

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.

Natural gas 8100 ft³/hr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas			8.10 mmBtu/hr

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.68	2.98
Nitrogen Oxides (NO _x)	0.81	3.54
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.062	0.27
Particulate Matter (PM ₁₀)	0.062	0.27
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)	0.005	0.021
Volatile Organic Compounds (VOC)	1.7	7.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	1.0	4.6
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.).

1000 BTU/FT3

Emission Factors:

NOx 100 lbs/million Ft3
 PM 7.6 lbs/million Ft3
 SOx 0.6 lbs/million Ft3
 CO 84 lbs/million Ft3
 VOC 5.50 lbs/million Ft3

Sample Calculation:

Tons NO_x/yr = (mm BU/hr x 7200 hrs/yr/1000 BTU/Ft3) x 100 lbs NO_x/mm FT3/2000 lbs/ton

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a) 45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b) 45CSR13, R13-2067 (4.1.6)	4.1.2
c) 45CSR13, R13-2067 (4.1.13)	4.1.3
d) 45CSR13, R13-2067 (4.1.14)	4.1.4
e) 45CSR13, R13-2067 (4.1.17)	4.1.5
f) 45CSR13, R13-2067 (4.1.18)	4.1.6
g) 45CSR13, R13-2067 (4.2.1)	4.2.1
h) None	4.3.1
i) 45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j) None	4.5.1
k) None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? 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: C4 & O4	Emission unit name: Roll Coater Line 4 Over Line 4	List any control devices associated with this emission unit. TO-1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Sheet Coating Line
 Wagner coater, Tandom Hoe press and thermal oven

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 1950	Modification date(s): MM/DD/YYYY
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 4500 coated and printed sheets per hour

Maximum Hourly Throughput: 14 gal. coating/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: 5.4 mmBtu/hr
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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.

Natural gas 5400 ft3/hr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas			5.4 mmBtu/hr

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.454	1.987
Nitrogen Oxides (NO _x)	0.54	2.365
Lead (Pb)		
Particulate Matter (PM _{2.5})	0.041	0.180
Particulate Matter (PM ₁₀)	0.041	0.180
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)	0.003	0.014
Volatile Organic Compounds (VOC)	1.4	6.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	0.9	3.8
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>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.).</p> <p>1000 BTU/FT3</p> <p style="text-align: center;">Emission Factors:</p> <p>NOx 100 Ibs/million Ft3</p> <p>PM 7.6 Ibs/million Ft3</p> <p>SOx 0.6 Ibs/million Ft3</p> <p>CO 84 Ibs/million Ft3</p> <p>VOC 5.50 Ibs/million Ft3</p> <p>Sample Calculation:</p> <p>Tons NOx/yr = (mm BU/hr x 7200 hrs/yr/1000 BTU/Ft3) x 100 Ibs NOx/mm FT3/2000 Ibs/ton</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a) 45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b) 45CSR13, R13-2067 (4.1.6)	4.1.2
c) 45CSR13, R13-2067 (4.1.13)	4.1.3
d) 45CSR13, R13-2067 (4.1.14)	4.1.4
e) 45CSR13, R13-2067 (4.1.17)	4.1.5
f) 45CSR13, R13-2067 (4.1.18)	4.1.6
g) 45CSR13, R13-2067 (4.2.1)	4.2.1
h) None	4.3.1
i) 45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j) None	4.5.1
k) None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? 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: C6 & O6	Emission unit name: Roll Coater Line 6 Oven Line 6	List any control devices associated with this emission unit. TO-2
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Sheet Coating Line
 Wagner coater and thermal oven

Manufacturer: Wagner	Model number:	Serial number:
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Construction date: MM/DD/YYYY	Installation date: 2006	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 6000 coated and printed sheets per hour

Maximum Hourly Throughput:	Maximum Annual Throughput:	Maximum Operating Schedule: 24 hours/day, 7 days/week, 52 week/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No All process heat is provided by the integrated oxidizer	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners: All Heat For Oven Will Come From Afterburner
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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.

All Heat For Oven Will Come From Afterburner via a Heat Exchanger

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)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)	1.9	8.2
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs	1.2	5.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>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.).</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. 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.

<u>Applicable Requirement</u>	<u>Permit Condition Number</u>
a) 45CSR13, R13-2067 (4.1.5), 45CSR7-31	4.1.1
b) 45CSR13, R13-2067 (4.1.6)	4.1.2
c) 45CSR13, R13-2067 (4.1.13)	4.1.3
d) 45CSR13, R13-2067 (4.1.14)	4.1.4
e) 45CSR13, R13-2067 (4.1.17)	4.1.5
f) 45CSR13, R13-2067 (4.1.18)	4.1.6
g) 45CSR13, R13-2067 (4.2.1)	4.2.1
h) None	4.3.1
i) 45CSR13, R13-2067 (4.4.5, a,b,c,d,e,f,k)	4.4.1
j) None	4.5.1
k) None	4.6.1

____ 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.)

Monitoring:

Records of coating usage
Combustion temperature of oxidizer

Recordkeeping:

Inventory of coating usage
VOC and HAP emissions

Reporting:

Annual VOC Report

Testing:

As required

Are you in compliance with all applicable requirements for this emission unit? Yes No

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

**ATTACHMENT G –
AIR POLLUTION CONTROL
DEVICE SHEET**

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: TO-1	List all emission units associated with this control device. C-1A, C-1B, C-2A, C-2B, C-3, C-4, O-1A, O-1B, O-2A, O-2B, O-3, O-4, P-1A, P-4, P-5, C-5																			
Manufacturer: Adwest	Model number:	Installation date: 2006																		
Type of Air Pollution Control Device:																				
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input type="checkbox"/> Baghouse/Fabric Filter</td> <td style="width: 33%;"><input type="checkbox"/> Venturi Scrubber</td> <td style="width: 33%;"><input type="checkbox"/> Multiclone</td> </tr> <tr> <td><input type="checkbox"/> Carbon Bed Adsorber</td> <td><input type="checkbox"/> Packed Tower Scrubber</td> <td><input type="checkbox"/> Single Cyclone</td> </tr> <tr> <td><input type="checkbox"/> Carbon Drum(s)</td> <td><input type="checkbox"/> Other Wet Scrubber</td> <td><input type="checkbox"/> Cyclone Bank</td> </tr> <tr> <td><input type="checkbox"/> Catalytic Incinerator</td> <td><input type="checkbox"/> Condenser</td> <td><input type="checkbox"/> Settling Chamber</td> </tr> <tr> <td><input checked="" type="checkbox"/> Thermal Incinerator</td> <td><input type="checkbox"/> Flare</td> <td><input type="checkbox"/> Other (describe) _____</td> </tr> <tr> <td><input type="checkbox"/> Wet Plate Electrostatic Precipitator</td> <td></td> <td><input type="checkbox"/> Dry Plate Electrostatic Precipitator</td> </tr> </table>			<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone	<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone	<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank	<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber	<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____	<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator
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<input checked="" type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____																		
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator																		
List the pollutants for which this device is intended to control and the capture and control efficiencies.																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Pollutant</th> <th style="width: 33%;">Capture Efficiency</th> <th style="width: 33%;">Control Efficiency</th> </tr> </thead> <tbody> <tr> <td>VOC, NO_x, CO, PM, SO_x, HAPs</td> <td>100% with permanent enclosure</td> <td>98% VOC</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Pollutant	Capture Efficiency	Control Efficiency	VOC, NO _x , CO, PM, SO _x , HAPs	100% with permanent enclosure	98% VOC												
Pollutant	Capture Efficiency	Control Efficiency																		
VOC, NO _x , CO, PM, SO _x , HAPs	100% with permanent enclosure	98% VOC																		
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).																				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <u>Afterburner Operating Parameters</u> Combustion chamber temperature in degrees F – 1500 Emission stream gas temperature in degrees F – 300 Emission stream flow rate (scfm) – 40000 Efficiency (VOC Reduction) – 98% </td> <td style="width: 50%; vertical-align: top;"> <u>Inlet Emission Stream Parameters</u> Pressure (mmHg) - 750 Oxygen Content (%) - 21 Moisture Content (%) – 5.7 </td> </tr> </table>			<u>Afterburner Operating Parameters</u> Combustion chamber temperature in degrees F – 1500 Emission stream gas temperature in degrees F – 300 Emission stream flow rate (scfm) – 40000 Efficiency (VOC Reduction) – 98%	<u>Inlet Emission Stream Parameters</u> Pressure (mmHg) - 750 Oxygen Content (%) - 21 Moisture Content (%) – 5.7																
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Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																				
If Yes, Complete ATTACHMENT H If No, Provide justification. PSEU subject to emission limitations for which the permit specifies continuous compliance determination method, therefore they are exempt from the CAM rule																				
Describe the parameters monitored and/or methods used to indicate performance of this control device. Monitoring: Combustion temperature of oxidizer Recordkeeping: Records of combustion temperature Reporting: Annual VOC and HAP reports Testing: Initial destruction efficiency testing with 180 days of operation and then Title V permit																				

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
TO-2

List all emission units associated with this control device.
C-6, O-6

Manufacturer:
LTG

Model number:
ECO TNV 10000

Installation date:
2011

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input checked="" type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> 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
VOC, NO _x , CO, PM, SO _x , HAPs	100% with permanent enclosure	98% VOC

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

Afterburner Operating Parameters

Combustion chamber temperature in degrees F – 1328
 Emission stream gas temperature in degrees F – 400
 Emission stream flow rate (scfm) – 8000
 Efficiency (VOC Reduction) – 98%

Inlet Emission Stream Parameters

Pressure (mmHg) - 750
 Oxygen Content (%) - 21
 Moisture Content (%) – 5.7

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** PSEU subject to emission limitations for which the permit specifies continuous compliance determination method, therefore they are exempt from the CAM rule

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

Monitoring: Combustion temperature of oxidizer
 Recordkeeping: Records of combustion temperature
 Reporting: Annual VOC and HAP reports
 Testing: Initial destruction efficiency testing with 180 days of operation and then Title V permit