

**HEXCEL - CASA GRANDE**

- 1. Introduction** ..... 4
- 2. Listing of (*Federally Enforceable*) Applicable Requirements** ..... 5
- 3. Compliance Certification** ..... 6
  - A. Compliance Plan ..... 6
  - B. Compliance Schedule ..... 6
- 4. Authority to Construct; Major- and Minor-NSR Permit-Based Limitations** ..... 7
  - A. Generally ..... 7
  - B. Prior Permit-based Minor NSR Limitations ..... 7
    - 1. Emissions Cap - nitrogen oxides ..... 7
      - a. Emission Cap ..... 7
      - b. Operational Limitations ..... 7
- 5. Other Derivative Non-NSR Predecessor-Permit-Based Limitations** ..... 7
  - A. Generally ..... 7
  - B. PCAQCD Permit Number A20422, Attachment B Limitations ..... 7
    - 1. Opacity Limitation ..... 7
    - 2. Baghouse Operation ..... 8
    - 3. Labeling of Raw Materials ..... 8
  - C. Derivative VOC Control Limitations; Continuation of Control Effort ..... 8
    - 1. Control Required for Affected Group 1 Emission Units ..... 8
      - a. Group 1 Emission Units - Definition ..... 8
      - b. Required Level of Control ..... 8
      - c. Required Capture Efficiency ..... 9
    - 2. Control Required for Affected Group 2 Emission Units ..... 9
      - a. Group 2 Emission Units - Definition ..... 9
      - b. Required Level of Control ..... 9
      - c. Required Capture Efficiency ..... 9
    - 3. Control Requirement for Affected Group 3 Emission Units ..... 10
      - a. Group 3 Emission Units - Definition ..... 10
      - b. Required Level of Control ..... 10
      - c. Required Capture Efficiency ..... 10
  - D. Emissions Limitations ..... 10
    - 1. Best Available Control Technology (BACT) ..... 10
  - E. Emission Tracking at Group 1 Emission Units ..... 10
    - 1. Future Changes at Existing Group 1 Emission Units ..... 10
    - 2. Additional Future Emission Units ..... 11
  - F. RTO Collection System; Negative Pressure Monitoring System; Minimum Negative Pressure ..... 11
  - G. RTO Operating Requirements ..... 11
    - 1. Minimum Destruction Efficiency ..... 11
    - 2. Temperature Monitoring System ..... 11
    - 3. Minimum Operating Temperature ..... 11
    - 4. Minimum Residence Time ..... 11
    - 5. Gas Flow Monitoring ..... 12
  - H. Excess Emissions ..... 12
- 6. Regulatory Emission Limitations** ..... 12
  - A. Allowable Emissions ..... 12
    - 1. General Limitation ..... 12
    - 2. Insignificant Activities ..... 12
  - B. Particulate Emissions Limitations ..... 12
    - 1. Spray Booth Controls ..... 12

2.	Opacity Limits	12
3.	Opacity Limits	12
4.	Mass Emissions Limitation	13
a.	SIP Limitation	13
b.	Particulate Emissions - Process Industries	13
c.	Particulate Emissions - Stationary Rotating Machinery	13
5.	Fugitive Emission Limitation	13
6.	Abrasive Blasting Controls	13
C.	CAA §112 MACT Limitations	14
1.	Aerospace Manufacture and Rework Facilities MACT	14
a.	General Standards	14
b.	Housekeeping Measures	14
c.	Recordkeeping Requirements	14
d.	Reporting Requirements	14
2.	Paper and Other Web Surface Coating MACT	15
a.	Notification	15
b.	Emission Standards	15
3.	Surface Coating of Miscellaneous Metal Parts and Products MACT	15
a.	Notification	15
b.	Emission Standard	16
D.	Nitrogen Oxide Emissions	16
1.	Boilers and water heaters	16
2.	Unclassified Sources	16
E.	Sulfur Dioxide Emissions	16
1.	Boilers and Water heaters	16
2.	Unclassified Sources	16
F.	Fuel Use Limitations	17
G.	Partwashers	17
H.	General Maintenance Obligation	18
I.	Additional Applicable Limitations	18
1.	Asbestos NESHAP Compliance	18
2.	Stratospheric Ozone and Climate Protection	18
3.	Disposal Limitations	18
<b>7.</b>	<b>Compliance Demonstration</b>	<b>18</b>
A.	General Provisions	18
1.	Generally Applicable Test Program Requirements	18
a.	Test Requirement	18
b.	Test Protocol	18
c.	Timing of initial and subsequent tests	19
d.	Test Report	19
e.	Deferrals	19
2.	Recordkeeping	19
B.	Compliance with "Authority to Construct" Limitations	19
1.	Non-instrumental emissions monitoring - NOX from emergency units	19
2.	Testing - Emergency Unit Performance Tests	20
C.	Compliance with Derivative Non-NSR Limitations	20
1.	RTO Testing - Destruction Efficiency Verification	20
2.	Testing Requirement for Existing Group 1 Emission Units	20
3.	Testing Requirement for Existing Group 2 Emission Units	20
4.	Testing Requirement for Existing Group 3 Emission Units	21
5.	Emissions monitoring for Other Emission Units - Volatile organic compounds	21
a.	Graphite/prepreg corrugated line set oven emissions	21
b.	Aluminum Corrugator Vent #271	21
6.	Non-instrumental emissions monitoring - VOC Emissions from Current Materials	21
7.	RTO Operation Monitoring	22
D.	Compliance with Regulatory Limitations	22

1.	Non-instrumental emissions monitoring - oxides of nitrogen	22
2.	Compliance Assurance Monitoring	22
3.	Non-instrumental emissions monitoring - VOC Emissions from New Materials	22
4.	Non-instrumental emissions monitoring - Particulate matter.	22
	a. Baghouse	22
	b. Spray booth	22
5.	Opacity monitoring	23
	a. Stack emissions	23
	b. Open-area fugitive emissions	23
	c. Baghouse and exhaust fans	23
	d. Abrasive Blasting	23
6.	NSPS monitoring - Polymeric Coating of Supporting Substrates	23
7.	NSPS monitoring - Volatile Organic Storage Tanks	24
8.	CAA §112 MACT Compliance	24
	a. Paper and Other Web Surface Coating MACT	24
	b. Surface Coating of Miscellaneous Parts and Products MACT	24
9.	Non-instrumental emissions monitoring - fuel sulfur	24
10.	Non-instrumental emissions monitoring - Solvent Cleaning VOCs	24
<b>8.</b>	<b>Other Reporting Obligations</b>	<b>25</b>
	A. Deviation Reporting Requirements	25
	B. Regular Compliance Reporting	25
	C. Regular Compliance/Compliance Progress Certification	25
	D. Annual emissions inventory	25
<b>9.</b>	<b>Fee Payment</b>	<b>26</b>
<b>10.</b>	<b>General Conditions</b>	<b>26</b>
	A. Term	26
	B. Basic Obligation	26
	C. Duty to Supplement Application	26
	D. Right to Enter	26
	E. Transfer of Ownership	27
	F. Posting of Permit	27
	G. Permit Revocation for Cause	27
	H. Certification of Truth, Accuracy, and Completeness	27
	I. Renewal of Permit	27
	J. Severability	27
	K. Permit Shield	28
	L. Permit Revisions	28
	M. Permit Re-opening	28
	N. Record Retention	29
	O. Scope of License Conferred	29
	P. Excess Emission Reports; Emergency Provision	29
<b>11.</b>	<b>Provisions Specifically Designated as Not Federally Enforceable</b>	<b>30</b>
<b>12.</b>	<b>Equipment</b>	<b>30</b>
	A. Existing Equipment	31
	B. Future Equipment	36
<b>13.</b>	<b>Emission Inventory Table</b>	<b>37</b>
<b>1.</b>	<b>Introduction</b>	

This permit pertains to an existing structural honeycomb manufacturing facility operated by Hexcel Corporation, a Delaware corporation. The SIC Codes are 2679 and 3469. The facility is located at 1214 West Gila Bend Highway 84, Casa Grande, Arizona upon a parcel also identified by Pinal County Assessor's Parcel # 503-46-021-D3. The source is situated in an area classified as "attainment" for all pollutants.

A brief factual summary and overview of the relevant regulatory provisions follows. See the corresponding Technical Support Document ("TSD" ... filename ..\v20602.fnl) for additional information.

Section 10 of this permit recites a list of emission-generating equipment covered under this permit.

Emissions consist principally of volatile organic compounds ("VOCs"), hazardous air pollutants ("HAPs"), and typical products-of-combustion. As an informational disclosure, the last section of the permit, entitled "EMISSION INVENTORY TABLE," sets forth good-faith estimates of emissions subject to regulation, as disclosed in the application for permit. The emissions reported there do not constitute limitations, nor do they necessarily reflect the maximum emissions allowed under this permit.

The plant principally manufactures "honeycomb" and "structural cores" for aerospace and other industrial applications. The honeycomb material is typically used as a structural web, bonded between sheets to form a stiff, strong and light-weight structural panel. Honeycomb-type structures also have beneficial energy-absorbing characteristics and are used as impact absorbers on commercial aircraft as well as roadway maintenance trucks and other vehicles.

Hexcel manufactures both metallic and nonmetallic cores. Metallic foil surfaces undergo preliminary chemical cleaning and treatment to assure good adhesive bonding. Whatever the substrate, selectively applied adhesives bond successive layers of material together in a "sandwich." Mechanical fingers then expand the bonded sandwich to form the cellular core structure. Strong and reproducible bonding, using proprietary high-strength adhesives, provides high core strength and mechanical integrity. Thermally cured resin coatings stiffen the nonmetallic cores. Mechanical equipment cuts and slices the expanded cores to define final structural shapes.

The resin coating and curing processes constitute the primary sources of emissions from the facility. Most of the atmospheric emission streams from the honeycomb manufacturing process contain VOCs and HAPs. Other constituents emitted to the atmosphere consist of criteria pollutants from the combustion of natural gas, acid fumes from certain pre-printing process lines, and particulate matter from the core-shaping process areas.

The resin coating process involves large quantities of organic solvents which must be handled in an explosion-proof facility. Some of the solvent which evaporates during the dipping process and handling of "wet" blocks" is lost to the atmosphere. However, the bulk of emissions from both the "purging" process and the curing process is collected and transported to oxidizers which substantially reduce emission concentrations. Other VOC- and HAP-generating processes throughout the plant have differing degrees of capture and/or control.

Liquid wastes from the various solvents used for cleaning as well as residual solvent-based mixtures are disposed of at an EPA permitted disposal facility. The particulates from cutting non-metallic core are captured and disposed as solid waste. The chips and scraps from cutting metallic core are captured and sold on the metal recycling market.

Since actual emissions of VOCs, as currently defined, qualify this facility as a "major emitting facility" within the meaning of CAA §169 and 40 CFR §51.166, modifications potentially fall subject to "PSD review" under the SIP-approved PCAQCD program. See the TSD for further discussion. While the current permit continues a requirement to operate thermal oxidizers to reduce VOC emissions, the underlying regulatory justification for that permit requirement (*i.e.* the "40# rule"), has been rescinded. Accordingly, to avoid a "change in the method of operation" that would result in a significant net emission increase of VOCs, this permit newly imposes a voluntarily-requested federally enforceable requirement pertaining to operation of the regenerative thermal oxidizer ("RTO") control systems.

To establish a benchmark for efficacy of the RTO control systems, the final permit requires that the permittee develop a capture-efficiency-verification testing program, to define the capture efficiency at the dominant emission unit/process activities that contribute VOC loading to the RTO systems.

In order to demonstrate that this facility has not triggered any substantive requirements under the CAA §111 and the 40 CFR Part 60 NSPS standards, the permit does require compliance with the record keeping requirements of 40 CFR 60 Subpart Kb, Volatile Organic Liquid Storage Vessels, and Subpart VVV, Polymeric Coating of Supporting Substrates.

The facility also constitutes a "major source" within the meaning of CAA §112. Under CAA §112, the facility does fall subject to regulation under several MACT standards, namely 40 CFR Part 63, Subpart JJJJ, paper and other web surface coating, Subpart MMMM Surface Coating of Miscellaneous Metal Parts and Products, and Subpart GG Aerospace Manufacturing.

However, under CAA §112, the facility does not fall subject to the 40 CFR Part 63, Subpart WWWW reinforced plastic manufacturing MACT, because this facility does not use styrene resins, which constitutes the essential applicability trigger under Subpart WWWW.

The permit continues the previously imposed cap on NO<sub>x</sub> emissions from a diesel powered emergency generator and a diesel powered emergency air compressor, referred to herein as "emergency units," to thereby avoid triggering a PSD review requirement.

Since the source constitutes a "major emitting source" within the meaning of CAA §169(1), and "major source" for volatile organic compounds within the meaning of CAA §302(j), and a "major source" of hazardous air pollutants within the meaning of CAA §112(a)(1), the facility requires an operating permit under CAA §501 *et seq.*

## 2. Listing of (*Federally Enforceable*) Applicable Requirements [*Mandated by 40 CFR §70.5(c)(4)*]

- A. Those specific provisions of the Pinal-Gila Counties Air Quality Control District ("PGAQCD") Regulations, as adopted by the Pinal County Board of Supervisors on March 31, 1975, and approved by the Administrator as elements of the Arizona State Implementation Plan ("SIP") at 43 FR 50531, 50532 (11/15/78), and specifically the following rules:

7-1-1.2	Definitions
7-1-1.3.A	Air Pollution Prohibited
7-1-1.3.B	Air Pollution Prohibited
7-1-2.5	Transfer; Posting; Expirations
7-1-2.6	Recordkeeping and Reporting
7-2-1.2	Ambient Air Quality Standards - Sulfur Dioxide
7-2-1.4	Ambient Air Quality Standards - Photochemical Oxidants
7-2-1.5	Ambient Air Quality Standards - Carbon Monoxide
7-2-1.6	Ambient Air Quality Standards - Nitrogen Dioxide
7-2-1.7	Ambient Air Quality Standards - Evaluation
7-3-1.1	Emission Standards - Particulates - Visible Emissions - General
7-3-1.2	Emission Standards - Particulate Emissions - Fugitive Dust
7-3-1.3	Emission Standards - Particulates - Open Burning
7-3-1.7.A	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.B	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.C	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.D	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.E	Particulate Emissions - Fuel Burning Equipment
7-3-1.8	Particulate Emissions - Process Industries
7-3-3.3	Pumps and Compressors
7-3-4.1	CO Emissions - Industrial
7-3-5.1	NO <sub>x</sub> Emissions - Fuel Burning Equipment

- B. Those specific provisions of the Pinal-Gila Counties Air Quality Control District Regulations, as last amended by the Pinal County Board of Supervisors on March 31, 1975, and approved by the Administrator as elements of the Arizona SIP at 44 FR 73033 (12/17/79).

## 7-2-1.8 Anti Degradation

- C. Those specific provisions of the Pinal-Gila Counties Air Quality Control District Regulations, as last amended by the Pinal County Board of Supervisors on June 16, 1980, and approved by the Administrator as elements of the Arizona SIP at 47 FR 15579 (4/12/82), specifically, the following rules:
- |           |                            |
|-----------|----------------------------|
| 7-1-1.3.C | Air Pollution Prohibited   |
| 7-3-1.1   | Visible Emissions; General |
| 7-3-1.7.F | Fuel Burning Equipment     |
- D. The New Source Performance Standard ("NSPS") for Polymeric Coatings of Supporting Substrates, 40 CFR Part 60, Subpart VVV [40 CFR §60.744(b) (2000)] sections 40.747(c)(1) through (c)(3). If the amount of VOC used is 95 Mg or greater per 12-month period, the facility is subject to all the requirements of the subpart. Once a facility has become subject to the requirements of the subpart, it will remain subject to those requirements regardless of changes in annual VOC use.
- E. The New Source Performance Standard ("NSPS") for Volatile Organic Liquid Storage Vessels, 40 CFR Part 60, Subpart Kb [40 CFR §60.116b(b) (2000)].
- F. The National Emission Standard for Hazardous Air Pollutants ("MACT") for Paper and Other Web Surface Coating, 40 CFR Part 63, Subpart JJJ [40 CFR §63.3280 *et seq.* (2003)].
- G. CAA §§608 & 611 (11/15/90); 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction (9/7/95); regulations pertaining to use and handling of ozone-depleting substances.
- H. PCAQCD permit A20422.000 (1/18/94), imposing certain limits on opacity, baghouse operation, and material labeling.
- I. PCAQCD permit revision A20422.R03 (10/9/99), imposing "synthetic minor" limits on operation of newly installed emergency air compressor and emergency generator.
- J. The National Emission Standard for Hazardous Air Pollutants ("MACT") for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR Part 63, Subpart MMMM [40 CFR §63.3880 *et seq.* (2004)]
- K. The National Emission Standard for Hazardous Air Pollutants ("MACT") for Aerospace Manufacturing and Rework Facilities, 40 CFR Part 63, Subpart GG [40 CFR §63.740 *et seq.* (1995)]
- L. The National Emission Standard for Hazardous Air Pollutants ("MACT") - General Provisions [40 CFR §63.1 *et seq.*]
- M. The New Source Performance Standards ("NSPS") - General Provisions [40 CFR §60.1 *et seq.*]

**3. Compliance Certification**

- A. Compliance Plan *[Mandated by 40 CFR §70.5(c)(8)]* (Code §§3-1-081.C, 3-1-083.A.7)
- Since the Permittee has certified that it is currently in compliance, the compliance plan consists of continued adherence to the requirements of this permit.
- B. Compliance Schedule *[Mandated by 40 CFR §§ 70.5(c)(8), 70.6(c)(3)]* (Code §§3-1-060.B.1, 3-1-083.A.7.c)

Since the Permittee is currently in compliance, no compliance schedule to attain compliance is required.

**4. Authority to Construct; Major- and Minor-NSR Permit-Based Limitations**

## A. Generally

This permit section sets forth "applicable requirements" founded upon the federally enforceable provisions of prior "permits to construct." Other than as defined in this section, emission units at this facility are "grandfathered," and are not subject to limitations arising only from limitations defined in prior permits. Nonetheless, all emission units do fall subject to relevant Regulatory Emission Limitations, as defined elsewhere in this permit.

B. Prior Permit-based Minor NSR Limitations [*Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)*] (Code §3-1-081.A)1. Emissions Cap - nitrogen oxides [*Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)*] (Code §3-1-081.A)

## a. Emission Cap

The emergency air compressor and generator installed under permit revision A20422.R03 (10/9/99) constitute the "emergency units." Permittee shall limit emissions, in any consecutive twelve-month period, such that emissions of nitrogen oxides from the emergency units do not exceed 30 tons.

## b. Operational Limitations

To stay within the preceding emission cap for nitrogen oxides emissions, and thereby also avoid PSD review, Permittee shall equip the air compressor and emergency generator with a system to record the operational time of each unit, and shall limit the monthly operation of each emergency unit based on a three (3) month rolling average, to:

- I. 207 hours per month for the emergency generator; and
- ii. No limit for the emergency air compressor.

These operational limits will limit the potential emissions of nitrogen oxides to approximately 75 percent of the 40 tpy significance level for NO<sub>x</sub>.

**5. Other Derivative Non-NSR Predecessor-Permit-Based Limitations**

## A. Generally

These limitations derive from operating permit limitations imposed under prior permits, and are included at the voluntary request of the Applicant/Permittee.

## B. PCAQCD Permit Number A20422, Attachment B Limitations

## 1. Opacity Limitation

Visible emissions from all aspects of the operation shall be kept below 20 percent opacity for equipment and below 40 percent opacity for yards and open areas.

## 2. Baghouse Operation

Permittee shall operate three baghouses, and corresponding emission collection systems, to reduce particulate matter from saws (Emission units 550A through 550M) at an efficiency of 99% or higher.

3. Labeling of Raw Materials

All volatile organic compounds or material containing volatile organic compounds shall be labeled accurately.

C. Derivative VOC Control Limitations; Continuation of Control Effort *[Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)]* (Code §3-1-081.A)

As a voluntarily requested limitation to continue the level of control previously required under the now-defunct "40#/15# rule," Permittee shall maintain and operate the existing VOC capture and control system to effectively achieve an on-going continuation of the existing level of control.

1. Control Required for Affected Group 1 Emission Units

a. Group 1 Emission Units - Definition

The following devices, which are all vented to an RTO system on a full-time basis, shall be designated as Group 1 emission units.

Emiss. Unit #	Stack #	Stack Description	% VOC Loading to oxidizer <sup>1</sup>	Nominal Minimum Capture %	Capture % Confirmation/ Adjustment Required?
010	011	Ceramic prepreg tower vent	0.0%	95%	No
120A	123	PAA vent	0.4%	95%	No
130	131	Foil coater vent	1.3%	95%	No
160	161	UD tapeline vent	4.1%	95%	Yes
210	211	#335 Printline vent	6.6%	95%	Yes
230A	231	#7 Printline vent	9.9%	95%	Yes
?	232	Aluminum Printline vent (future)	n.a.	95%	No
240	241	Al Flexcore Machine vent	0.8%	95%	No
250	251	CNF Printing	0.1%	95%	No
260 series		HRP/HTP lines	0.6%	95%	No
260A	261	HRP Glue Line vent	included in #260	95%	
260B	262	HTP Machine vent	included in #260	95%	
310	311	Tapeline vent	0.5%	95%	No
410E	418	Skybond dip tank vent	(Presumed < 1.0%)	95%	No
410I	417	Clark Blowout/Flipper	<1%	95%	No
410K		F660 Dip Tank	< 1%	95%	No

b. Required Level of Control

VOC emissions from Group I emission units shall be reduced with a net control efficiency of 90%, and that control efficiency shall reflect the combination of capture efficiency and destruction efficiency of the RTO systems.

c. Required Capture Efficiency

Subject to the allowance for the Permittee to conduct unit-specific capture efficiency testing, coupled with a corresponding test of destruction efficiency for the relevant RTO system, which in combination show that some other capture efficiency still achieves an

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<sup>1</sup> See 10/27/03 application revision; this distribution reflects actual VOC emissions from the 2002 emission inventory, adjusted to exclude acetone from the definition of VOC.

overall 90% level of control, Group 1 emission units shall be subject to a capture efficiency requirement as defined above in subparagraph a. Emissions from Group 1 emission units shall be captured and controlled by an RTO system.

2. Control Required for Affected Group 2 Emission Units

a. Group 2 Emission Units - Definition

The following devices shall be designated as Group 2 emission units. Emissions from Group 2 units shall be captured and controlled by an RTO system, as further required below.

Emission Stack Unit #	Stack #	Description	% VOC Loading to oxidizer <sup>2</sup>	Nominal Minimum Capture %	Capture % Confirmation/ Adjustment Required?
270B	272	Corrugated aluminum P/C oven vent	1.2%	95%	No
440/450/460 series	many	Resin purge/cure & cure ovens	72.1% (nominal)	95%	Yes
450 series	many	Purge/cure oven vents	inc. in 440/450/460 above	as above	
460 series	many	Purge/cure oven vents	inc. in 440/450/460 above	as above	
470 Series		Corrugated/Graphite Cure Oven Vents	2.4%	99%	Yes
470A	471	Corrug./Graphite oven #1 vent	included in #470 above	as above	
470B	473	Corrug./Graphite oven #4 vent	included in #470 above	as above	
470C	475	Corrug./Graphite oven #5 vent	included in #470 above	as above	

b. Required Level of Control

VOC emissions from Group 2 emission units shall be reduced with a net control efficiency of 90%, and that control efficiency shall reflect the combination of capture efficiency, the extent of by-pass directly to the atmosphere, and destruction efficiency of the RTO systems.

c. Required Capture Efficiency

Subject to the allowance for the Permittee to conduct unit-specific capture efficiency testing, coupled with a corresponding test of destruction efficiency for the relevant RTO system, and a quantification of emissions by-passed directly to the atmosphere, which in combination show that some other capture efficiency still achieves an overall 90% level of control, Group 2 emission units shall be subject to a capture efficiency requirement as defined above in subparagraph a.

3. Control Requirement for Affected Group 3 Emission Units

a. Group 3 Emission Units - Definition

The following devices, which constitute the combination of fugitive emission sources within the dip room, and those ovens which are tributaries from the sweeps within the dip room, shall constitute Group 3 emission units.

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<sup>2</sup> See 10/27/03 application revision; this distribution reflects actual VOC emissions from the 2002 emission inventory, adjusted to exclude acetone from the definition of VOC.

Emission Stack Unit #	Stack #	Description	% VOC Loading to oxidizer <sup>3</sup>	Nominal Minimum Capture %	Capture % Confirmation/ Adjustment Required?
Dip room and related emissions			72.1%		90% . . . . . Yes
	410	Building 66 Dip Room vents 411-1	included in #410 above	90%	
	410	Building 66 Dip Room vents 411-2	included in #410 above	90%	
	410	Building 66 Dip Room vents 411-4	included in #410 above	90%	
	410	Building 66 Dip Room vents 411-5	included in #410 above	90%	
	410	Building 66 Dip Room vents 411-6	included in #410 above	90%	
	410	Building 66 Dip Room vents 417-2	included in #410 above	90%	
	440	Purge/cure oven vents	included in #410 above	90%	
	450	Purge/cure oven vents	included in #410 above	90%	

b. Required Level of Control

Combined emissions from the dip room equipment and the ovens tributary from the dip room collection sweeps shall be reduced by control in RTO system #1, with a minimum destruction efficiency of 95%.

c. Required Capture Efficiency

Subject to the allowance for the Permittee to conduct a capture-testing program to quantify capture-efficiency for Group 3 emission points, aggregate emissions from affected Group 3 emission points shall be subject to an overall nominal 90% capture requirement as defined above in subparagraph a.

D. Emissions Controls *[Mandated by 40 CFR §70.6(a)(1)]*

1. Best Available Control Technology (BACT) (Code §3-3-250)

Emissions from the following equipment shall be controlled by RTO #1, with a minimum destruction efficiency of 95%:

- Purge/Cure Ovens #19, 20 and 21.

E. Emission Tracking at Group 1 Emission Units to Assess Need for Additional Capture Efficiency Testing

1. Future Changes at Existing Group 1 Emission Units

Permittee shall track future operational changes at existing Group 1 units that have not been previously tested for capture efficiency, and if operational changes, including production-rate changes, result in contribution of 2% or more of total VOC loading to TRO systems, then conduct a capture efficiency testing program with respect to the newly affected existing emission unit.

2. Additional Future Emission Units

New, future emission units will only be subject to generally prevailing applicable requirements,

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<sup>3</sup> See 10/27/03 application revision; this distribution reflects actual VOC emissions from the 2002 emission inventory, adjusted to exclude acetone from the definition of VOC.

such as NSR/PSD or other relevant requirements, but not including the "derivative limitations" described above.

F. RTO Collection System; Negative Pressure Monitoring System; Minimum Negative Pressure Requirement

1. Permittee shall install and operate a pressure differential monitoring system in each of the trunk legs of the collection system for the thermal oxidizers, and that monitoring system shall be capable of measuring the differential relative to atmospheric pressure, measured in inches-of-water-column (" w.c. "). The system shall include a data recording system, and shall be configured to sample pressure differentials at least once every 15 minutes.
2. Based on a 1-hour average of observed pressure differential values, pressure in the collection duct trunk feeding the Combustion Engineering oxidizer #610A shall not rise above -1.9" w.c.
3. Based on a 1-hour average of observed pressure differential values, pressure in the collection duct trunk feeding the Airex oxidizer #610B shall not rise above -1.4" w.c.

G. RTO Operating Requirements

1. Minimum Destruction Efficiency

At a minimum, each RTO shall maintain a destruction efficiency of not less than 95%.

2. Temperature Monitoring System

The Permittee shall install and operate on each RTO unit a temperature monitoring system that continuously monitors the temperature in the oxidizer combustion zone, and that temperature monitoring system shall be accurate to within 0.75% of observed temperature. The continuous temperature monitoring system shall also be equipped with a system to log those temperatures, electronically or otherwise, at least once every 15 minutes. Each temperature monitoring system shall be equipped with an alarm, adequate to alert the permittee if instantaneous observed temperatures in the combustion zone fall below 1500° f.

3. Minimum Operating Temperature

Permittee shall maintain an average minimum temperature of 1500° f. in the combustion zone of each RTO unit, based upon a rolling 1-hour average of monitored temperatures, or another adequate temperature as demonstrated by a performance test. Observed excursions below that average minimum temperature shall trigger a requirement for a corrective action plan, as defined in the compliance section below.

4. Minimum Residence Time

The RTO shall be operated with a minimum residence time of 0.75 seconds assure minimum destruction efficiency until a more accurate value is identified through a performance test.

5. Gas Flow Monitoring

Within 90 days of the issuance of this permit, Permittee shall install and operate on each RTO unit a gas flow meter that continuously monitors total gas flow through the unit. The meters shall be equipped with a system to log the gas flow, electronically or otherwise.

H. Excess Emissions

Other than cure oven emissions occurring during the last 75% of the purge/cure cycle, and this in no way

relieves Permittee from controlling emissions from Group 2 units by at least 90%, bypassing emissions from any of the above-scheduled emission units around the oxidizers shall constitute a period of excess emissions.

**6. Regulatory Emission Limitations [Mandated by 40 CFR §70.6(a)(1)] (Code §3-1-081.A.2)**

**A. Allowable Emissions**

**1. General Limitation [Code § 3-1-081.A.2. (as amended 10/12/95) approved as a SIP Element at 61 FR 15717 (4/9/96)]**

Permittee is authorized to discharge or cause to discharge into the atmosphere those emissions of air contaminants as set forth below. Unless exempted under Code §3-1-040.C., or authorized by a separate permit, by this permit or by a revision or operational change allowed under Chapter 3, Article 2 of the Code, Permittee shall not commence construction of, operate or make any modification to this source in a manner which will cause emissions of any regulated air pollutant in excess of the de minimis amount.

**2. Insignificant Activities (Code §§1-3-140.74a, 3-1-040.B.2.a.i, 3-1-050)**

Apart from the authority of this permit, Permittee is authorized to discharge or cause to discharge into the atmosphere emissions from insignificant activities, as defined in Code §1-3-140.74a. Appendix B of this permit includes a non-limiting schedule of specific activities that the District concurs qualify for "insignificant" status.

**B. Particulate Emissions Limitations**

**1. Spray Booth Controls [Code 5-13-390 (10/12/95) approved as a SIP element at 61 FR 15717 (04/09/96)]**

The spray booth (process 430) shall be an enclosed area operated with dry filters by the permittee to remove paint overspray from the spray booth at an efficiency of ninety-six (96) percent by weight or higher.

**2. Opacity Limits [PGCAQCD Reg. 7-3-1.1 (amended 6/16/80) approved as a SIP Element at 47 FR 15579 (4/12/82)]**

The opacity of any plume or effluent shall not be as great, or greater than 40 percent.

**3. Opacity Limits (Code §§2-8-300. and 4-2-040.)**

The opacity of any discharge into the atmosphere from emissions of any air contaminant, other than uncombined water vapor, shall not exceed a shade or density darker than 40 percent opacity. Fugitive dust from waste piles and ponds, open areas, roadways, alleys, transportation operations, material handling operations, and conveying operations that are owned or operated by the Permittee shall be controlled in accordance with this requirement.

**4. Mass Emissions Limitation**

**a. SIP Limitation [PGCAQCD Reg. 7-3-1.7 (3/31/75) approved as a SIP element at 43 FR 50531 (11/15/78)] (§5-21-930)**

For equipment with a heat input capacity of less than 4,000 million Btu per hour, particulate emissions shall not exceed:

$$Y = 1.02X^{-.231}, \text{ where } Y = \text{maximum emissions in lbs./hr. for each million BTU per}$$

hour heat input, and  $X$  = maximum heat input capacity in million BTU per hour.

- b. Particulate Emissions - Process Industries *[PGAQCD Reg. 7-3-1.8 (3/31/75) approved as a SIP element at 43 FR 50531 (11/15/78)]* (§5-24-1030.A.1.)

Permittee shall not cause, suffer, allow, or permit the discharge of particulate matter into the atmosphere from any existing process source whatsoever, except incineration and fuel-burning equipment, in excess of the amount calculated by the equations presented below:

1. For any process operating at a production process weight rate ("P") up to 30 tons-per-hour, allowable emissions ("E") shall not exceed:

$$E = 4.10 P^{0.67} \text{ pounds-per-hour.}$$

2. For any process operating at a production process weight rates ("P") equal to or greater than 30 tons-per-hour, allowable emissions ("E") shall not exceed:

$$E = (55.0 P^{0.11} - 40.0) \text{ pounds-per-hour.}$$

- c. Particulate Emissions - Stationary Rotating Machinery *[PGAQCD Reg. 7-3-1.7 (amended 6/16/80) approved as SIP Element at 47 FR 15579 (4/12/82)]* (Code §5-23-1013)

The maximum allowable emissions shall be determined by the following equation:

$$E = 1.02Q^{0.769} \text{ where:}$$

E = the maximum allowable particulate emissions rate in pounds-mass per hour and

Q = the total heat input of all operating fuel-burning units of stationary rotating machinery on the premises in million Btu/hr.

5. Fugitive Emission Limitation *[PGCAQCD Reg. 7-3-1.2.A approved as a SIP element at 43 FR 50531 (11/15/78)]*

No person shall cause, suffer, allow or permit a building or its appurtenances or open area to be used, constructed, repaired, altered, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other types of particulates shall be kept to a minimum by such measures as wetting down, covering, landscaping, paving, treating or by other reasonable means.

6. Abrasive Blasting Controls (Code §5-4-160)

Any abrasive blasting operation shall use at least one of the following control measures:

- a. Confined blasting.
- b. Wet abrasive blasting.
- c. Hydroblasting.
- d. A control measure that is determined by the Control Officer to be equally effective to control particulate emissions.

- C. CAA §112 MACT Limitations (Code §3-1-081)

1. Aerospace Manufacturing and Rework Facilities MACT (40 CFR Part 63, Subpart GG; 40 CFR §63.740 *et seq.*)
  - a. General Standards (40 CFR §63.743(a)): Permittee shall comply with the following sections of 40 CFR Part 63, as provided in 40 CFR §63.743(a):
    - I. §63.4, Prohibited activities and circumvention;
    - ii. §63.5, Construction and reconstruction; and
    - iii. §63.6 Compliance with standards and maintenance requirements.
  - b. Housekeeping Measures (40 CFR §63.744): Cleaning of the metallic and nonmetallic honeycomb cores shall comply with the requirements in the following paragraphs:
    - I. Place used solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.
    - ii. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, in closed containers.
    - iii. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.
  - c. Recordkeeping requirements (40 CFR §63.752(a)):

Permittee shall fulfill all recordkeeping requirements specified in §63.10(a), (b), (d) and (f).
  - d. Reporting Requirements (40 CFR §63.753)
    - I. Permittee shall fulfill the requirements contained in §63.9(a) through (e) and (h) through (j), Notification requirements, and §63.10(a), (b), (d), and (f), Recordkeeping and reporting requirements, of the General Provisions, 40 CFR Part 63, Subpart A.
    - ii. Permittee shall submit semiannual reports occurring every 6 months from the date of the notification of the compliance status that identify:

A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months, and as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1).

If the operations have been in compliance for the semiannual period, Permittee shall submit a statement that the cleaning operations have been in compliance with the applicable standards. Permittee shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

2. Paper and Other Web Surface Coating MACT (40 CFR Part 63, Subpart JJJJ; 40 CFR §63.3280 *et seq.*)<sup>4</sup>

a. Notification

Not later than December 5, 2004, permittee shall either:

- I. Demonstrate that Subpart JJJJ does not apply to this facility; or
- ii. Obtain a revision to this permit that negates the applicability of Subpart JJJJ; or
- iii. Submit an application for revision of this permit, supported by a demonstration that Subpart JJJJ was never applicable to this facility; or
- iv. Submit a notification in accord with 40 CFR §63.3400.b.1., with duplicate copies to:

- Air Permits Office  
United States Environmental Protection Agency  
Region IX  
75 Hawthorne Street  
San Francisco, California 94105-3901

- MACT Compliance Officer  
Pinal County Air Quality District  
P.O. Box 987  
Florence, Arizona 85232.

b. Emission Standards

Upon submission of a notification under the preceding subparagraph, permittee shall subsequently comply with the limitations of Subpart JJJJ, which are attached to this permit as Appendix C, and are incorporated herein.

3. Surface Coating of Miscellaneous Metal Parts and Products MACT (40 CFR Part 63, Subpart MMMM; 40 CFR §63.3880 *et seq.*)<sup>5</sup>

a. Notification

Not later than January 2, 2005, permittee shall either:

- I. Demonstrate that Subpart MMMM does not apply to this facility; or
- ii. Obtain a revision to this permit that negates the applicability of Subpart MMMM; or
- iii. Submit an application for revision of this permit, supported by a demonstration that Subpart MMMM was never applicable to this facility; or
- iv. Submit a notification in accord with 40 CFR §63.3910, with duplicate copies to:

- Air Permits Office  
United States Environmental Protection Agency

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<sup>4</sup> The applicant continues to assess whether this facility actually falls subject to the applicability provisions of this MACT standard.

<sup>5</sup> The applicant continues to assess whether this facility actually falls subject to the applicability provisions of this MACT standard.

Region IX  
75 Hawthorne Street  
San Francisco, California 94105-3901

- MACT Compliance Officer  
Pinal County Air Quality District  
P.O. Box 987  
Florence, Arizona 85232.

b. Emission Standards

Upon submission of a notification under the preceding subparagraph, permittee shall subsequently comply with the limitations of Subpart Mmmm, which are attached to this permit as Appendix D, and are incorporated herein.

D. Nitrogen Oxides Emission

- 1. Boilers and Water Heaters *[PGCAQCD Reg. 7-3-5.1.B approved as a SIP element at 43 FR 50531 (11/15/78)]* (Code §5-22-970)

The steam boilers and water heaters shall not emit more than 0.20 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when gaseous fuel is fired, and 0.30 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is fired.

- 2. Unclassified Sources (Code §5-24-1030.A.3.)

The Permittee shall not emit more than 500 parts per million of nitrogen oxides expressed as NO<sub>2</sub> from any unclassified source.

E. Sulfur Dioxide Emissions

- 1. Boilers and Water Heaters (Code §5-22-960)

The steam boilers and water heaters shall not emit more than 0.80 pounds of sulfur dioxide, maximum two hour average, per million Btu heat input when oil is fired.

- 2. Unclassified Sources (Code §5-24-1030.A.2)

The permittee shall not emit more than 600 parts per million of sulfur dioxide from any unclassified source.

F. Fuel Use Limitations (Code §§3-1-081.)

- 1. Primary Fuels

a. The Permittee is allowed to burn natural gas in the thermal oxidizers, engines, heaters, boilers, ovens, and other devices.

- b. Diesel Fuel Limitations (Code §5-23-1010)

The Permittee is allowed to burn diesel fuel in the emergency units, provided the sulfur content of that fuel shall never equal or exceed 0.90% by weight.

- 2. Other Fuels (Code §§3-1-081.G, 5-23-1010.F)

The Permittee shall not use used oil, used oil fuel, hazardous waste, and hazardous waste fuel (as defined in federal, state, or county codes and rules) without first obtaining a separate permit or an appropriate permit revision.

G. Partwashers (Code §5-15-620.)

1. Solvent cleaners/degreasers shall:

- a. Provide a leak-free container for solvents and articles being cleaned;
- b. Except for a remote reservoir cleaner using unheated solvent, be equipped with a cover which prevents the solvent from evaporating when not processing work;
- c. Be equipped with a drain configured to return solvent drained from cleaned parts to the container;
- d. Be clearly labeled to identify the solvent and explain the proper operation of the cleaner;
- e. A degreaser/cleaner with a remote reservoir shall:
  - I. Be equipped with a sink-like work area sloped sufficiently toward a drain so as to prevent pooling of the solvent;
  - ii. Be equipped with drain from the sink to the reservoir, with a maximum drain area of 15.5 in<sup>2</sup>;
  - iii. Unless a low-volatility solvent with a boiling point above 248° f is utilized and the solvent is never heated above 120° f., a stopper shall be used to seal the drain opening or a cover placed over the sink when the device is not in use.
- f. A degreaser/cleaner without a remote reservoir shall:
  - I. If the degreaser utilizes a low-volatility solvent with a boiling point above 248° f., and the solvent is not agitated in use, Permittee shall maintain a minimum 6" freeboard and keep the cover closed when the apparatus is not in use;
  - ii. A cold degreaser using solvents which are not low volatility or which are agitated or are heated above 120° F shall have internal drainage and:
    - (1) Have a freeboard ratio of 0.75 or greater; or
    - (2) A water cover may be used to meet the freeboard requirement if the solvent is insoluble in and denser than water; and
    - (3) A cover shall be used that is of a sliding or rolling type which is designed to easily open and close without disturbing the vapor zone.
  - iii. Be equipped with a clear and conspicuous mark for the maximum allowable solvent level;
  - iv. As an alternative to the foregoing freeboard requirement, be equipped with a hood or enclosure with a ventilation rate of no less than 65 cfm per ft.<sup>2</sup> of evaporative surface, unless a more stringent requirement applies pursuant to OSHA requirements, and the overall control efficiency of emissions from the cleaner, considering both capture and destruction, shall not be less than 85%.

2. Permittee shall operate the cold solvent cleaners/degreasers in accordance with the operating requirements listed in Code §5-15-620.H. Each cold solvent/degreaser shall have a permanent, conspicuous label which summarizes the relevant operating requirements.

H. General Maintenance Obligation (*Code §§3-1-081.A.2, 3-1-081.A.8.a, 3-1-081.E.2, 3-1-081.E.1., approved as Title V permit program elements 61 FR 55910 (10/30/96); also see ARS §§49-481(A), 49-487(B)*)

At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the permitted facility including associated air pollution control

equipment in a manner consistent with good air pollution control practice for minimizing emissions.

I. Additional Applicable Limitations

1. Asbestos NESHAP Compliance [*Currently federally enforceable; 40 CFR Part 61, Subpart M*] (Code §§7-1-030.A.8, 7-1-060)

Permittee shall comply with Code §§7-1-030.A.8 and 7-1-060 and 40 CFR Part 61, Subpart M, when conducting any renovation or demolition activities at the facility.

2. Stratospheric Ozone and Climate Protection [*Currently federally enforceable; 40 CFR Part 82 Subpart F*] (Code §§1-3-140.15, 1-3-140.58.k)

The permittee shall comply with the applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

3. Disposal Limitation [*Code 5-13-390 (10/12/95) approved as a SIP element at 61 FR 15717 (04/09/96)*]

No person shall, during any one day, dispose of a total of more than one and one-half gallons of any photochemically reactive solvent, as defined in §5-12-370, or of any material containing more than one and one-half gallons of any such photochemically reactive solvent, by any means which will permit the evaporation of such solvent into the atmosphere.

7. **Compliance Demonstration**

A. General Provisions [*Mandated by 40 CFR §70.6(a)(3)*]

1. Generally Applicable Test Program Requirements

Unless specified otherwise in defining a particular testing requirement, all required tests shall conform to the following requirements.

a. Test Requirement

Test shall be required as defined elsewhere in this permit. Tests shall be performed at the maximum practical production rate.

b. Test Protocol

Required tests shall use standard EPA test methods (40 CFR Part 60). At least 60 days before the test, Permittee shall submit test protocol to PCAQCD for review and approval; Permittee shall provide notice of the performance test at least 30 days prior to running the test.

c. Timing of initial and subsequent tests

Required tests shall be conducted within 180 days of the issuance of this permit.

d. Test Report

A copy of the test report shall be submitted to the District for approval within forty-five days after the test.

e. Deferrals (Not applicable to Group 1 Units)

For good cause, the Control Officer may extend any of the times specified in this subsection to no later than 12 months after issuing this permit, and the Administrator may extend that by an additional 12 months after the initial deferral.

2. Recordkeeping [*Mandated by 40 CFR §70.6(a)(3)*] (Code §3-1-083)

- a. Permittee shall maintain at the source, a file of all measurements, including continuous monitoring-system-, monitoring-device-, and performance- testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required pursuant to any federally enforceable provision of this permit, recorded in a permanent form suitable for inspection.
- b. Permittee shall maintain records of the occurrence and duration of any start-up, shutdown or malfunction in the operation of the permitted facility or any air pollution control equipment. For purposes of this provision, a "shut-down" means a cessation of operations at the entire facility for more than seven days, and a "start-up" constitutes the reactivation of the facility after a "shut-down."

B. Compliance with "Authority to Construct" Limitations [*Mandated by 40 CFR §70.6(a)(3)*]

1. Non-instrumental emissions monitoring - oxides of nitrogen from emergency units [*Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)*]

- a. As a surrogate measurement for monitoring emissions of oxides of nitrogen, Permittee shall maintain records of the hours of operation of the emergency units.
- b. Permittee shall maintain a rolling twelve month record of the emissions of nitrogen oxides from the emergency units. The emissions shall be calculated by multiplying the hours of operation by the maximum emission rate listed by the manufacturer. If the twelve month total exceeds the "NO<sub>x</sub> Testing Trigger" of twenty tons, or 66.6% of the 30-tpy cap imposed above under §4.B.2.a, Permittee shall run performance tests:
  - I. On one unit if that unit contributed more than 75% of the observed total; or
  - ii. On both units otherwise.

2. Testing - Emergency Unit Performance Tests [*Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)*] (Code §§3-1-160 & 3-1-170)

Permittee shall conduct a performance tests for nitrogen oxides emissions from the emergency units within ninety (90) days after the "NO<sub>x</sub> Testing Trigger" defined above in §7.B.1.b is met or exceeded. The performance stack testing shall use standard EPA test methods (40 CFR Part 60).

C. Compliance with Derivative Non-NSR Limitations [*Mandated by 40 CFR §70.6(a)(3)*]

1. RTO Testing - Destruction Efficiency Verification

Within 12 months of the issuance of this Permit V20602.000, Permittee shall conduct a performance test to verify the destruction efficiency in each of the RTO units using EPA-approved Methods 25, 25A or 25B. Minimum Residence time values, specific to each RTO unit, shall be determined during the first RTO performance test.

This test shall be repeated annually, no later than 12 months after the previous test.

2. Testing Requirement for Existing Group 1 Emission Units

At least 90 days before testing, a test protocol for quantifying capture efficiency shall be submitted to PCAQCD as well as EPA for review and approval.

a. Testing for Group 1 Emission Units Contributing Over 2% RTO Loading

Within 12 months of the issuance of this permit V20602.000, Permittee shall develop and execute a test plan to verify capture efficiency for individual Group 1 emission units that currently contribute 2% or more of VOC loading to RTO units.

b. Tracking Requirement for RTO-contribution from Group 1 Emission Units that have not been tested for Capture Efficiency

On an annual basis, within 30 days of the end of each calendar year, Permittee shall review the emission data records required elsewhere under this permit, and shall identify any Group 1 Emission Units that contributed 2% or more of the VOC loading to the RTO systems, and which Group 1 Emission Units have not previously been tested for capture efficiency.

c. Testing for Group 1 Emission Units that Contribute Over 2% RTO Loading in the Future

To the extent Permittee's review under preceding subparagraph b. identifies any previously un-tested units that contributed more than 2% in the preceding calendar year, Permittee shall, within 180 days, conduct a capture-efficiency-verification-test of such unit(s) in accord with preceding subparagraph a.

3. Testing Requirement for Existing Group 2 Emission Units

a. The permittee shall develop and execute a test protocol to verify overall control efficiency for Group 2 emission units, namely the ovens. At least 90 days before testing, a test protocol for quantifying capture efficiency shall be submitted to PCAQCD as well as EPA for review and approval.

I. Capture Efficiency Testing

Individually, or on a defensible representative basis explained and justified in the test plan, verify capture efficiency for all Group 2 emission units.

ii. Bypass Emission Quantification

Individually for each oven, or on a defensible representative manner explained in and justified in the test plan, verify the quantity of emissions during the atmospheric bypass portion of the curing cycle, by either:

A. For each resin-formulation utilized in the dip room cured in that oven, testing exhaust flow to quantify VOC emissions during that portion of the purge/cure cycle when oven exhaust is discharged to the atmosphere; or

B. Justifying why testing of selected resin-formulation emissions would ~~fairly~~ characterize emissions from other resin-formulations, and then conducting corresponding tests to quantify emissions ~~fairly~~ reflecting all resin formulations.

4. Testing Requirement for Existing Group 3 Emission Units

After obtaining testing results from the Group 2 Emission Units, but no later than 12 months after the issuance of this permit, Permittee shall develop and execute a test plan to verify the aggregate capture efficiency for all Group 3 emission units. At least 90 days before testing, a test protocol for quantifying capture efficiency shall be submitted to PCAQCD as well as EPA for review and approval.

5. Emissions monitoring for Other Emission Units - Volatile organic compounds and HAPs

a. Graphite/prepreg corrugated line set oven emissions

Permittee shall conduct a performance test to quantify VOC emissions from the graphite/prepreg corrugated line set oven emissions.

b. Aluminum Corrugator Vent #271

Permittee shall conduct a performance test to quantify VOC emissions from the Aluminum Corrugator lay-up machine vent.

6. Non-instrumental emissions monitoring - Volatile organic compound Emissions from Current Materials

As a surrogate means of monitoring emissions of volatile organic compounds, Permittee shall maintain calendar-month records, updated within 15 days of the close of each calendar month, clearly showing:

- a. A list of all VOC-containing products used, which have a potential to emit VOCs to the atmosphere at a rate in excess of three (3) pounds per day.
- b. The number of pounds of VOCs potentially emitted from the products listed in subparagraph a. to the atmosphere monthly.
- c. A mass balance showing the pounds and percentage of the VOCs from subparagraph b which are emitted to the atmosphere, destroyed in the thermal oxidizer, remain in the product, or are otherwise not emitted.

7. RTO Operation Monitoring

- a. On a daily basis, Permittee shall physically inspect all RTO units to verify the structural integrity of each unit and that the units are in operation. The Permittee shall make a record of such inspection.
- b. Should the rolling average temperature in any RTO unit fall below 1500° F(1-hr average), or if one of the RTO units is non-operational, Permittee shall take such actions to curtail emissions, and shall investigate and report the cause and curative action taken within 10 days in accordance with the deviation reporting requirements of this permit.
- c. On a monthly basis, RTO #1 shall be visually inspected for proper seating of the valves, and for accumulation of resin buildup in the valves. The same inspection shall be conducted on RTO #2 on an annual basis. Permittee shall keep records of such inspections.

D. Compliance with Regulatory Limitations *[Mandated by 40 CFR §70.6(a)(3)]*

1. Non-instrumental emissions monitoring - oxides of nitrogen

As a surrogate measurement for monitoring emissions of oxides of nitrogen, Permittee shall maintain records reflecting total fuel consumption in the thermal oxidizers, ovens, engines, and other fuel burning equipment and the amount of VOC's sent to the thermal oxidizers. On an annual basis, no later than March 31<sup>st</sup> to adequately support the annual emission inventory, permittee shall calculate NOx emissions based on the fuel records. For these calculations, Permittee shall use emission factors from the specific equipment manufacturer, if available, or otherwise, AP-42 or other factors as approved by the Director.

2. Compliance Assurance Monitoring

This facility does not fall subject to a compliance assurance monitoring plan under the CAM rule, 40 CFR Part 64.

3. Non-instrumental emissions monitoring - Volatile organic compound Emissions from New Materials

Raw material changes can constitute a change in the method of operation that amounts to a facility modification. To verify that raw material changes do not inadvertently cause a net significant increase in VOC emissions, for any material that Permittee projects using in a quantity of more than 20 tons-per-year, Permittee shall, on a monthly basis, assess the anticipated net additional increase in annual VOC emissions that will result from the material change, and shall record that projected increase. Should a projected increase in VOC emissions exceed 40 tons-per-year, Permittee shall seek an appropriate permit revision before introducing the new raw material.

4. Non-instrumental emissions monitoring - Particulate matter.

a. Baghouses

Since the use of baghouses are required to limit the emissions authorized under this permit, the Permittee shall inspect the baghouses and final exhaust fan at least once each day that the equipment vented to baghouses is operational, to determine that the baghouses are operating properly. Records of these inspections shall be maintained.

b. Spray Booth

i. At least once monthly, the Permittee shall check the spray booth pressure drop and record it in a log. If during any of these checks, the vacuum pressure has dropped below 0.05 inches of water, the Permittee shall investigate and record the curative action taken.

ii. At least once weekly, the Permittee shall inspect the spray booth (process #430) filters to determine if they need to be repaired or replaced. Records of these inspections, repairs and replacements shall be maintained.

5. Opacity monitoring [Code §3-3-260.]

a. Stack Emissions (PGCAQCD Reg. 7-3-1.1 approved as a SIP element at 47 FR 15579 (6/16/80))

On at least a semi-annual basis, Permittee shall conduct a visual opacity screen performed on each process and fuel-burning exhaust stack. If visible emission in excess of 5% opacity are observed, Permittee shall have a full Method 9 opacity test performed by a certified opacity observer, and shall provide a copy of the resulting

report to the District within 10 days. Submission of such a report may constitute cause to reopen this permit to add additional testing and/or control requirements.

- b. Open-area Fugitive Emissions (PGCAQCD Reg. 7-3-1.1 approved as a SIP element at 47 FR 15579 (6/16/80))

On at least a semi-annual basis, Permittee shall conduct a visual opacity screen performed on the open areas of the facility. If visible emission are observed, Permittee shall have a full Method 9 opacity test performed by a certified opacity observer, and shall provide a copy of the resulting report to the District within 10 days. Submission of such a report may constitute cause to reopen this permit to add additional testing and/or control requirements.

- c. Baghouse and Exhaust Fans

On at least a semi-annual basis, Permittee shall conduct a visual opacity screen performed on the baghouse and exhaust fans. If visible emission in excess of 5% opacity are observed, Permittee shall investigate and report the cause and curative action taken within 10 days in accordance with the deviation reporting requirements of this permit.

- d. Abrasive Blasting

On at least a semi-annual basis, Permittee shall conduct a visual opacity screen performed on the abrasive blasting operation. If visible emission in excess of 5% opacity are observed, Permittee shall investigate and report the cause and curative action taken within 10 days in accordance with the deviation reporting requirements of this permit.

6. NSPS monitoring -Polymeric Coating of Supporting Substrates *[40 CFR Parts 60.744(b), 60.747(b), 60.747(c), Code §6-1-030.1 and a delegation from the EPA Administrator dated 2/24/93].*

Pursuant to NSPS Subpart VVV, for the UD Tapeline (#160) .and the ceramic prepreg line, Permittee shall:

- a. Make semiannual estimates of the projected annual amount of VOC to be used at the coating operation in that year; and
- b. Maintain records of actual VOC use, and
- c. Maintain records of the semiannual estimates of the projected VOC use, and
- d. Report the first semiannual estimate in which projected annual VOC use exceeds the applicable cutoff to the District; and,
- e. Report the first 12-month period in which the actual VOC use exceeds the applicable cutoff to the District.

7. NSPS monitoring - Volatile Organic Storage Tanks *[40 CFR Part 60.110b(b), Code §6-1-030.1 and a delegation from the EPA Administrator dated 2/24/93].*

Pursuant to NSPS Subpart Kb, since this facility does have affected volatile organic storage tanks with capacities above 10,470 gallons, but does not have any such tanks with a capacity above 19,632 gallons, Permittee shall retain on-site a record of the dimensions of the affected tanks, and a copy of a calculation showing the volumetric capacity of those affected tanks.

Permittee need take no further action to comply with NSPS Subpart Kb.

8. CAA §112 MACT Compliance (Code §3-1-083)
- a. Paper and Other Web Surface Coating MACT (40 CFR Part 63, Subpart JJJJ; 40 CFR §63.3280 *et seq.*)
- Upon submission of an applicability notification pursuant to Subpart JJJJ under the emission limitation provisions of this permit, permittee shall subsequently comply with the compliance demonstration requirements of Subpart JJJJ, which are attached to this permit as Appendix C, and are incorporated herein.
- b. Surface Coating of Miscellaneous Metal Parts and Products MACT (40 CFR Part 63, Subpart MMMM; 40 CFR §63.3880 *et seq.*)
- Upon submission of a permit revision pursuant to Subpart MMMM under the emission limitation provisions of this permit, permittee shall subsequently comply with the compliance demonstration requirements of Subpart MMMM, which are attached to this permit as Appendix D, and are incorporated herein.
9. Non-instrumental emissions monitoring - fuel sulfur
- To verify compliance with the diesel fuel-sulfur limitations under this permit, Permittee shall either:
- a. Maintain a current supplier-certification that all fuel deliveries comply with the fuel-sulfur limitation; or
- b. Test each fuel shipment received to assess compliance.
10. Non-instrumental emissions monitoring - Solvent Cleaning VOCs (Code §5-15-640)
- To verify that solvent changes do not inadvertently cause a net significant increase in VOC emissions, Permittee shall keep the following records:
- a. Type and total amount of make-up solvent used in all solvent cleaning operations.
- b. Determination of emissions from wipe cleaning, which may be made on a facility-wide rather than a per department basis.
- c. Amount of volatile organic compound(s) and of non-precursors (exempt) organic compound(s) contained in each solvent, expressed in pounds per gallon or grams per liter. Such records shall be retained for two years and shall be made available to the Control Officer upon request.

## 8. Other Reporting Obligations

- A. Deviation Reporting Requirements<sup>6</sup> (Code §3-1-083.A.3.b) [*Mandated by 40 CFR §§70.6(a)(3)(ii)(B)*]

Permittee shall report any deviation from the requirements of this permit along with the probable cause for such deviation, and any corrective actions or preventative measures taken to the District within ten days of the deviation unless earlier notification is required by the provisions of this permit.

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<sup>6</sup> Also see permit §9.P regarding reporting of "emergency" incidents.

B. Regular Compliance Reporting *[Mandated by 40 CFR §70.6(a)(3)]* (Code §3-1-083.A.3.a)

Permittee shall submit a semi-annual report containing a summary of the information required to be recorded pursuant to this permit, which summary shall clearly show whether or not Permittee has complied with the operational requirements and emissions limitations under this permit. All instances of deviations from permit requirements shall be clearly identified in such reports. For brevity, such deviation reports may incorporate by reference any written supplemental upset reports filed by Permittee during the reporting period. The report shall be submitted to the District within 30 days after the end of each calendar half. Appendix A of this permit is a form which may be used for the report.

C. Regular Compliance/Compliance Progress Certification *[Mandated by 40 CFR §70.6(c)(5)]* (Code §3-1-083.A.4)

Permittee shall annually submit a certification of compliance with the provisions of this permit. The certification shall be separately submitted to both the District and to the Regional Administrator c/o Air Division Permits Office, EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901. The certification shall:

1. Be signed by a responsible official, as defined in Code §3-1-030.18;
2. Identify each term or condition of the permit that is the basis of the certification;
3. State the compliance status with respect to each such term or condition;
4. State whether compliance with respect to each such term or condition has been continuous or intermittent;
5. Identify the method(s) used for determining the compliance status of the source, currently and over the reporting period; and
6. Be postmarked within thirty (30) days of each anniversary date of the issuance of the permit.

D. Annual emissions inventory [Code §§3-1-103, 3-7-590.C.1.]

Since this source would be subject to an ADEQ permitting requirement, Permittee shall complete and submit to the District an annual emissions inventory, disclosing actual emissions for the preceding calendar year. The submittal shall be made on a form provided by the District. The inventory is due by the latter of March 31, or ninety (90) days after the form is furnished by the District.

9. **Fee Payment** *[Mandated by 40 CFR §§70.6(a)(7), 70.9]* (Code §3-1-081.A.9)

As an essential term of this permit, an annual permit fee shall be assessed by the District and paid by Permittee in accord with the provisions of Code Chapter 3, Article 7 generally, and Code §3-1-081.A.9. specifically. The annual permit fee shall be due on or before the anniversary date of the issuance of an individual permit, or formal grant of approval to operate under a general permit. The District will notify the Permittee of the amount to be due, as well as the specific date on which the fee is due.

10. **General Conditions**

A. Term *[Mandated by 40 CFR §70.6(a)(2)]* (Code §3-1-089)

This permit shall have a term of five (5) years, measured from the date of issuance.

B. Basic Obligation *[Mandated by 40 CFR §§70.4(b)(15), 70.6(a)(6)(I), 70.6(a)(6)(ii), 70.7.b]* (Code §3-1-081.)

1. The owner or operator ("Permittee") of the facilities shall operate them in compliance with all conditions of this permit, the Pinal County Air Quality Control District ("the District") Code of Regulations ("Code"), and consistent with all State and Federal laws, statutes, and codes relating to air quality that apply to these facilities. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application and may additionally constitute a violation of the Clean Air Act (1990).
  2. All equipment, facilities, and systems used to achieve compliance with the terms and conditions of this permit shall at all times be maintained and operated in good working order.
  3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- C. Duty to Supplement Application *[Mandated by 40 CFR §§70.5(b), 70.6(a)(6)(v)]* (Code §3-1-081.A.8.e.)
- Permittee shall furnish to the District within a reasonable time, which shall not exceed thirty days unless the Control Officer fixes some other time period for response, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking, reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required under this permit. For information claimed to be confidential, Permittee shall submit along with the requested information or records a showing as required under Code §3-1-120, and shall separately submit a full duplicate copy to the EPA Regional Office (Regional Administrator c/o Air Division Permits Office, EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901).
- D. Right to Enter *[Mandated by 40 CFR §70.6(e)(2)]* (Code §§ 3-1-083.A.6, 3-1-132)
- Authorized representatives of the District shall, upon presentation of proper credentials and while observing reasonable standard safety requirements as set forth by the owner or operator of the source, be allowed for purposes of ascertaining compliance with this permit and with other applicable requirements:
1. to enter upon the premises where the source is located, where emissions-related activity is conducted, or in which any records are required to be kept under the terms and conditions of this permit;
  2. to inspect any equipment, operation, or method required in this permit;
  3. to sample or monitor emissions from the source, or other substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements;
  4. to have access to and copy, at reasonable times, any records that are required to be kept under the terms of this permit; and
  5. to record any inspection by use of written, electronic, magnetic and photographic media.
- E. Transfer of Ownership *[Mandated by 40 CFR §70.7(d)(4)]* (Code §3-1-090)
- This permit may be transferred under an administrative permit amendment from one person to another by notifying the District at least 30 days in advance of the transfer. The notice shall contain all the information and items required by Code § 3-1-090. The transfer may take place if not denied by the District within 10 days of the receipt of the transfer notification.
- F. Posting of Permit (Code §3-1-100)

Permittee shall firmly affix the permit, an approved facsimile of the permit, or other approved identification bearing the permit number, upon such building, structure, facility or installation for which the permit was issued. In the event that such building, structure, facility or installation is so constructed or operated that the permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.

G. Permit Revocation for Cause *[Mandated by 40 CFR §70.6(a)(6)(iii)]* (Code §3-1-140)

The Director of the District ("Director") may issue a notice of intent to revoke this permit for cause pursuant to Code §3-1-140, which cause shall include occurrence of any of the following:

1. The Director has reasonable cause to believe that the permit was obtained by fraud or material misrepresentation;
2. Permittee failed to disclose a material fact required by the permit application form or a regulation applicable to the permit;
3. The terms and conditions of the permit have been or are being violated.

H. Certification of Truth, Accuracy, and Completeness *[Mandated by 40 CFR §§70.5(a)(2), 70.6(a)(3)(iii)(B)] [Code §§3-1-083.A.5, 3-1-175 (as amended 10/12/95) approved as SIP Elements at 61 FR 15717 (4/9/96)]*

Any application form, report, or compliance certification submitted pursuant to the Code shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 3 of the Code shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

I. Renewal of Permit *[Mandated by 40 CFR §§70.5(a)(1)(iii), 70.7(c)]* (Code §3-1-050.C.2)

An application for renewal of this permit shall be submitted at least six months prior to the expiration of this permit unless notified of a different requirement by the District pursuant to Code §§ 3-1-050. or 3-1-089.

J. Severability *[Mandated by 40 CFR §70.6(a)(5)]* (Code §3-1-081.A.7)

Pursuant to Code § 3-1-081.A.7., the provisions of this permit are severable, and if any provision of this permit is held invalid the remainder of this permit shall not be affected thereby.

K. Permit Shield *[Mandated by 40 CFR §70.6(f)]* (Code § 3-1-102.)

1. Generally

Subject to the following schedule of exclusions<sup>7</sup>, compliance with the terms of this permit shall be deemed compliance with any applicable requirement identified in this permit, including the Federally Enforceable requirements listed in Section 2. The permit-shield exclusions include:

- a. PGCAQCD Rule §7-2-1.8 ANTI-DEGRADATION;
- b. PGCAQCD Rule §7-3-1.3 OPEN BURNING;
- c. PGCAQCD Rule §7-3-4.1 INDUSTRIAL - CARBON MONOXIDE EMISSIONS;
- d. PGCAQCD Rule §7-1-2.6 RECORD KEEPING AND REPORTING;
- e. PCAQCD Rule §3-3-200 through §3-3-285 PERMIT REQUIREMENTS FOR NEW

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<sup>7</sup> See the Technical Support Document for an explanation of the exclusions.

MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES.

2. NSPS Subpart VVV
 

The permit shield for Subpart VVV shall be void if the actual VOC emissions exceed the 95 Mg VOC threshold.
  
- L. Permit Revisions *[Mandated by 40 CFR §70.7(d), 70.7(e)]* (Code Chapter 3, Article 2, specifically Code §3-1-081.A.8.c)
  1. This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
  2. Permit amendments, permit revisions, and changes made without a permit revision shall conform to the requirements in Article 2, Chapter 3, of the Code.
  
- M. Permit Re-opening *[Mandated by 40 CFR §§70.6(a)(6)(iii), 70.7(f), 70.7(g)]* (Code §3-1-087.)
  1. This permit shall be reopened if:
    - a. Additional applicable requirements under the Clean Air Act (1990) become applicable to this source, and on that date, this permit has a remaining term of three or more years. Provided, that no such reopening under this subparagraph is required if the effective date of the newly applicable requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to Code §3-1-089.C.
    - b. The Control Officer determines that it contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of it;
    - c. The Control Officer determines that it needs to be revised or revoked to assure compliance with the applicable requirements; or
    - d. The EPA Administrator finds that cause exists to terminate, modify, or revoke and reissue this permit.
  2. If this permit must be reopened or revised, the District will notify the permittee in accord with Code §3-1-087.A.3.
  
- N. Record Retention *[Mandated by 40 CFR §70.6(a)(3)(ii)(B)]* (Code §3-1-083.A.2.b)
 

Permittee shall retain for a period of five (5) years all documents required under this permit, including reports, monitoring data, support information, calibration and maintenance records, and all original recordings or physical records of required continuous monitoring instrumentation.
  
- O. Scope of License Conferred *[Mandated by 40 CFR §70.6(a)(6)(iv)]* (Code §3-1-081.A.8.d)
 

This permit does not convey any property rights of any sort, or any exclusive privilege.
  
- P. Excess Emission Reports; Emergency Provision *[Mandated by 40 CFR §70.6(g)]* (Code §3-1-081.E, Code §8-1-030, A.R.S. §49-514)

1. To the extent Permittee may wish to offer a showing in mitigation of any potential penalty, underlying upset events resulting in excess emissions shall reported as follows:
  - a. The permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. Such report shall be in two parts:
    - I. Notifications by telephone or facsimile within 24 hours or the next business day, whichever is later, of the time when the owner or operator first learned of the occurrence of excess emissions, including all available information required under subparagraph b. below.
    - ii. Detailed written notification within 3 working days of the initial occurrence containing the information required under subparagraph b. below.
  - b. The excess emissions report shall contain the following information:
    - I. The identity of each stack or other emission point where the excess emissions occurred.
    - ii. The magnitude of the excess emissions expressed in the units of the applicable limitation.
    - iii. The time and duration or expected duration of the excess emissions.
    - iv. The identity of the equipment from which the excess emissions occurred.
    - v. The nature and cause of such emissions.
    - vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
    - vii. The steps that were or are being taken to limit the excess emissions. To the extent this permit defines procedures governing operations during periods of start-up or malfunction, the report shall contain a list of steps taken to comply with this permit.
    - viii. To the extent excess emissions are continuous or recurring, the initial notification shall include an estimate of the time the excess emissions will continue. Continued excess emissions beyond the estimated date will require an additional notification.
2. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
3. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of the following subparagraph are met.
4. The affirmative defense of emergency pursuant to A.R.S. §49-514 shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- d. The permittee submitted notice of the emergency to the Control Officer by certified mail or hand delivery within 72 hours of the time when emissions limitations were exceeded due to emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

**11. Provisions Specifically Designated as Not Federally Enforceable** (Code §3-1-081.B.2)

Subject to the following specific exclusions, all terms and conditions of this permit are enforceable by the Administrator and citizens under the Clean Air Act. The exclusions include:

- A. Section 1. Introduction
- B. Section 6.B.3 Opacity Limits (Not yet SIP-approved)
- C. Section 6.D.1 Fuel Use Limitations (Not yet SIP-approved)
- D. Section 8.D Annual emissions inventory
- E. Section 10.F Posting of Permit
- F. Section 13 Emission Inventory Table

**12. Equipment [Mandated by 40 CFR §70.5(c)(3)(ii)]** (Code §3-1-050.B)

- A. Existing Equipment

EQUIP. NO.	EQUIPMENT NAME	MANUFACTURER/ DATE	SERIAL NO.	MODEL NO.	SIZE/CAPACITY
010	Ceramic Prepreg Tower	Glenro/1974	NA	NA	6 MMBTU/HR
110A	CR III Washline	Hexcel/1994	NA	NA	110 fpm
120A	PAA/Primer Line	Walgren/1995	NA	NA	0.16 MMBTU/HR
120B	PAA Acid Fume Scrubber	Tri-Mer Corp/1995	3130	F/S-1	2000 cfm
130	Foil Coater	Hexcel/1995	NA	NA	40 fpm
140A	3/8" Graphite/HPR Corrugator #1	Hexcel/1994	NA	NA	5 fpm
140B	3/16" Graphite/HPR Corrugator #2	Hexcel/1994	NA	NA	5 fpm
140C	Continuous Carbon Corrugator #1	Rosenthal Sheeter/1996	80403	WM-3-HHEC-24	25 fpm
140D	F35 Corrugator	Hexcel/1994	NA	NA	5 fpm
140E	F50 Corrugator	Hexcel/1994	NA	NA	5 fpm
140F	Continuous Carbon Corrugator #2	Rosenthal Sheeter/1998	80565	WM-3-HHC-24	25 fpm

EQUIP. NO.	EQUIPMENT NAME	MANUFACTURER/ DATE	SERIAL NO.	MODEL NO.	SIZE/CAPACITY
160	UD Tapeline	Hexcel/1997	NA	NA	5 fpm
210	#335 Printline	Hexcel/1968	NA	NA	1.2 MMBTU/HR
230A	#7 Printline	Hexcel/1966	NA	NA	1.2 MMBTU/HR
240	AI Flexcore Machine	Hexcel/1994	NA	NA	45,000 BTU/HR
250	CNF Machine	Hexcel/1993	NA	NA	1000 °F
260A	HRP Glue Line	Hexcel/1975	NA	NA	30 fpm
260B	HTP Glue Line	Hexcel/2000	NA	NA	30 fpm
270A	Aluminum Corrugator	La Young Co./1970	27505	NA	10-15 fpm
270B	Aluminum Corrugator P/C Oven	Mayberry/1997	NA	NA	1.6 BTU/HR
280A	Graphite/HRP Printing & Layup	1994	NA	NA	Various layup tables
280B	Graphite/HRP Roll Coater	Black Brow./1996	196321	NA	15 fpm
280C	Graphite/HRP Roll Coater	Black Bros./1997	200985	NA	15 fpm
310	Tapeline (Steec)	Eclipse/1977	NA	NA	375 °F
410B	Dip Tank Center	Hexcel/1966	NA	NA	1500 Gallons
410C	Dip Tank South (2)	Hexcel/1982	NA	NA	1000 Gallons
410D	Dip Tank East	Southwest/1984	84-616	NA	4388 Gallons
410E	Skybond Dip Tank	Skybond/1995	NA	NA	300 Gallons
410F	Dip Room Blow Out Rack	Hexcel/1985	NA	NA	3000 cfm
410G	F124 Dip Tank	Hexcel/1994	NA	NA	500 Gallons
410H	Northeast Dip Tank	Hexcel/1966	NA	NA	4000 Gallons
410I	Clark Blowout/Flipper	Mayberry/2001	NA	NA	3000 cfm
410K	F660 Dip Tank	2002	NA	NA	300 gallons
420	Flow Coat Booth	Hexcel/1984	NA	NA	15.5 cfm
430	Building 73 Spray Booth	Hexcel/1973	NA	NA	5000 cfm
440A	Purge/Cure Oven #7	Southwest/1984	84-613	NA	23 HP
440B	Purge/Cure Oven #8	Southwest/1985	85-449	NA	26 HP
440C	Purge/Cure Oven #9	Despatch/1985	135565	NA	26 HP
440D	Purge/Cure Oven #10	Despatch/1986	135886-87	NA	26 HP
440E	Purge/Cure Oven #11	Despatch/1986	135887-87	NA	26 HP
440F	Purge/Cure Oven #12	Southwest/1986	86-222	NA	26 HP
440G	Purge/Cure Oven #13	Young & Bertke/1994	NA	NA	26 HP
440H	Purge/Cure Oven #14	Young & Bertke/1994	NA	NA	26 HP
440I	Purge/Cure Oven #15	Young & Bertke/1994	NA	NA	26 HP

440J	Purge/Cure Oven #16	Young & Bertke/1994	NA	NA	26 HP
440K	Purge/Cure Oven #17	Southwest Systems/1998	NA	NA	50 HP
440L	Purge/Cure Oven #18	Southwest Systems/1998	NA	NA	50 HP
440M	Purge/Cure Oven #19	Southwest Systems/1999	NA	NA	50 HP
440N	Purge/Cure Oven #20	Southwest Systems/1999	NA	NA	50 HP
440P	Purge/Cure Oven #21	Southwest Systems/1999	NA	NA	50 HP
460A	Prime Cure Oven #121	Southwest/1968	82-22	NA	200,000 BTU/HR
460B	Prime Cure Oven #122	Mayberry/1998	97-31	NA	1.6 MMBTU/HR
460C	Cure Oven #4	Southwest/1970	80-125	NA	2.0 MMBTU/HR
470A	Graphite Oven #1	Despatch/1994	68211	NA	1.5 MMBTU/HR
470B	Graphite Oven #4	Despatch/1994	89-112	NA	1.0 MMBTU/HR
470C	Graphite Oven #5	Mayberry/1998	97-15	NA	4.0 MMBTU/HR
510A	#1 Dust Collector	Torit-Donaldson/2001	IG648137	138HP11	11,000 CFM
510B	#2 Dust Collector	Torit-Donaldson/1988	106121	48-HPT8	6300 CFM
510C	#3 Dust Collector	Torit-Donaldson/1998	16510577	96-HPT8	5000 CFM
510D	#4 Dust Collector	Farr Co./1998	95DC22928	116771-1	1000 CFM
510E	#5 Dust Collector	Torit-Donaldson/1995	IGO 47276	3DF6	5000 CFM
520A	Vacuum Bond Oven	Wisconsin Oven/1991	NA	NA	1.5 MMBTU/HR
520B	Stress Relief Oven	1995	Asset #216-1	NA	1.8 MMBTU/HR
520C	Heat Form Oven	Southwest/1985	NA	NA	1.6 MMBTU/HR
520E	Graphite Oven #3	Southwest Systems/1994	117277	NA	1.5 MMBTU/HR
520F	Graphite Oven #6	Mayberry/1998	98-20	NA	1.5 MMBTU/HR
550A	Femco #1 Saw	Femco/1967	Asset #730004	NA	10 HP
550B	Femco #2 Saw	Femco/1967	60048-7597-80	A14-64	10 HP
550C	Femco #3 Saw	Femco/1985	NA	NA	10 HP
550D	Femco #4 Saw	Femco/1990	NA	NA	58"X120"X40"
550E	Blow Out Booth	Donaldson Co./1989	NA	ECB-3	100 fpm, 9 hp
550F	162 Saw	Tannewitz/1967	15506	GIN-E	15 HP
550G	Trim Saw	Do-All/1966	36463899	V36	120"X40"X72"
550H	197 Saw	Do-All/1975	Asset #730006	NA	10 HP
550I	720 Graphite Saw	Woodward & Powell/1975	Asset #660004	NA	10 hp
550J	Femco #5 Saw	Femco/1998	146226	NA	

550K	CN Router	Accu-Router/1998	9046A001	46A	
550L	Femco #6 Saw	Femco/1998	NA	A-14	
550M	Femco #7 Saw	Femco/2000	00405	NA	
610A	Thermal Oxidizer #1	Combustion Engr /1990	89041/89042 89043/90044	3-43.OR95NGI	6.0 MMBTU/HR
610B	Thermal Oxidizer #2	Airex/1999	228130-RT02067	30.ORT095	8.5 MMBTU/HR
620A	Steam Boiler #1	Hurst/2000	S-400-250-1	NA	2.7 MMBTU/HR
620B	Steam Boiler #2	Hurst/2001	S-400-250-2	UNK	2.7 MMBTU/HR
620C	Steam Boiler #3	Eclipse/1974	43777	80SMGL-FSFM	2.7 MMBTU/HR
620D	Steam Boiler #4	Holman Bros./1997	7906	NA	3.3 MMBTU/HR
620E	Steam Boiler #5	Kewanee/1997	P7849	H35-200-G0	6.7 MMBTU/HR
630A	Hot Oil Heater #1	Fulton/1984	1359C	FT-0600-C	7.7 MMBTU/HR
630B	Hot Oil Heater #2	Fulton/1994	2322C	FT-0600-C	7.7 MMBTU/HR
630C	Hot Oil Heater #3	Fulton/1998	2754C	FT-0600-C	7.7 MMBTU/HR
640A	Chiller Engine A	Tecochill/1996	00383	150 TON	1.42 MMBTU/HR
640B	Chiller Engine B	Tecochill/1996	00381	150 TON	1.42 MMBTU/HR
640C	Chiller Engine C	Tecochill/1996	00382	150 TON	1.42 MMBTU/HR
650A	UST #16	BMT Corp/1988	94995	UL58/STI-P3	10,000 GALLONS
650B	UST #17	BMT Corp/1988	94996	UL58/STI-P3	10,000 GALLONS
650C	UST #18	BMT Corp/1988	94997	UL58/STI-P3	8,000 GALLONS
650D	UST #19	BMT Corp/1988	94998	UL58/STI-P3	8,000 GALLONS
650E	UST #20	BMT Corp/1988	94999	UL58/STI-P3	4,000 GALLONS
650F	UST #21	BMT Corp/1988	95000	UL58/STI-P3	4,000 GALLONS
650G	UST #22	Nogales Tank & Steel/1997	242277	STI-P3	12,000 GALLONS
650H	UST #23	Nogales Tank & Steel/1997	242278	STI-P3	12,000 GALLONS
650I	UST #24	Nogales Tank & Steel/1997	242276	STI-P3	12,000 GALLONS
660A	Hot Water Boiler #1	Teledyne Laars/2000	NA	HH3600EN09K	3.6 MMBTU/HR
660B	Hot Water Boiler #2	Teledyne Laars/2000	NA	HH3600EN09K	3.6 MMBTU/HR
1000	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
10001	Partwasher - Cold Degreaser/Cleaner				38 GALLONS
1002	Partwasher - Cold Degreaser/Cleaner				28 GALLONS
1003	Part Washer - Remote reservoir				30 GALLONS
1004	Partwasher - Cold Degreaser/Cleaner				38 GALLONS
1005	Partwasher - Cold Degreaser/Cleaner				28 GALLONS
1006	Partwasher - Cold Degreaser/Cleaner				38 GALLONS

1007	Partwasher - Cold Degreaser/Cleaner				28 GALLONS
1008	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
1009	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
1010	Partwasher-Remote Reservoir				55 GALLONS
1011	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
1013	Partwasher - Cold Degreaser/Cleaner				38 GALLONS
1014	Partwasher - Cold Degreaser/Cleaner				40 GALLONS
1015	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
1016	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
1017	Partwasher - Cold Degreaser/Cleaner				28 GALLONS
1018	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
1019	Partwasher - Cold Degreaser/Cleaner				13 GALLONS
1020	Partwasher - Cold Degreaser/Cleaner				38 GALLONS
1021	Partwasher - Cold Degreaser/Cleaner				19 GALLONS
NONE	Emergency Generator	Caterpillar/2001	NA	NA	1341 HP
NONE	Emergency Air Compressor	John Deere/2001	NA	NA	80 HP

## B. Future Equipment

The following items are allowed to be installed during the five-year duration of this permit.

EQUIP. NO.	EQUIPMENT NAME	MANUFACTURER/ DATE	SERIAL NO.	MODEL NO.	SIZE/CAPACITY
230B	Aluminum Printline				1.2 MMBTU/HR
440R	Purge/Cure Oven #22				26 hp
520I	Product Forming Oven				1.0 MMBTU/HR

**13. Emission Inventory Table**

The following are the anticipated emissions<sup>8</sup> including emissions from equipment expected to be installed during the term of this permit. This table is for information only and does not represent enforceable emission limits.

**A. Sources with VOC and HAP emissions vented to Thermal Oxidizers (610A/B)**

Source		Pollutant (Tons/Year)					
		NO <sub>x</sub>	SO <sub>x</sub>	VOC	PM <sub>10</sub>	CO	HAPS
010	Ceramic Prepreg Tower -	-	0.40	-	-	0.02	
120A	PAA	0.06	-	0.00	-	0.06	-
130	Foil Coater -	-	2.53	-	-	-	
160	UD Tapeline	0.12	0.00	9.49	0.01	0.10	9.49
210	#335 Printline	0.05	0.00	2.02	0.00	0.04	0.20
230A	#7 Printline 0.52	0.00	5.91	0.04	0.43	5.82	
230B	Aluminum Printline 0.52	-	3.48	0.04	0.43	3.45	
240	Al Flexcore Printing 0.02	0.00	0.57	0.00	0.02	0.08	
250	CNF Printing	-	-	0.05	-	-	0.01
260	HRP/HTP Printing -	-	1.34	-	-	0.25	
270B	Aluminum Corrugation P/C	0.68	0.00	1.69	0.06	0.58	1.69
310	Tapeline (Steec)	0.34	0.00	0.19	0.03	0.29	0.07
410 to 460	Dip Room, Cure Ovens, 1.85 Purge/Cure Ovens, & Prime Cure Ovens	0.01	28.02	0.14	1.55	3.90	
470A-D	Graphite Core Curing 2.57	0.02	2.37	0.21	2.16	-	
Total VOC & HAP emissions			58.06			24.98	

**B. VOC and HAP emissions from sources vented to Thermal Oxidizers which are not captured**

Source		Pollutant (Tons/Year)					
		NO <sub>x</sub>	SO <sub>x</sub>	VOC	PM <sub>10</sub>	CO	HAPS
Total VOC & HAP not captured -		-	92.40	-	-	24.28	

<sup>8</sup> VOC totals do not include acetone which has been deregulated by the EPA.

**C. Other sources**

Source	Pollutant (Tons/Year)					
	NO <sub>x</sub>	SO <sub>x</sub>	VOC	PM <sub>10</sub>	CO	HAPS
110A CR III Washline	2.15	0.01	0.73	0.16	1.80	0.14
140A-F Graphite/HRP Flexcore Corrugators	-	-	4.74	-	-	-
200 Adhesive/Resin Mixing -	-	14.05	-	-	0.70	-
220 Paper Printing	0.04	0.00	-	0.00	0.03	-
270A Al Corrugator Printing -	-	35.84	-	-	12.48	-
280A-C Graphite/HRP Flexcore - Printing & Layup	-	13.32	-	-	0.06	-
420 Flowcoating	-	-	0.00	-	-	-
430 Spray Coating	-	-	0.26	-	-	0.26
510A-E Dust Collectors	-	-	-	0.12	-	-
520A-J Product Forming Ovens 3.23	0.00	-	0.24	2.72	-	-
550A-K Saw Equipment	-	-	-	-	-	-
570 Building 95 Work Space	-	-	0.5	-	-	-
610A/B Thermal Oxidizers 6.23	0.04	-	0.48	5.23	-	-
620A-E Steam Boilers	7.78	0.06	-	0.79	6.53	-
630A-C Hot Oil Heaters	9.93	0.06	-	0.75	8.34	-
640A-C Natural Gas-Fired Chillers	42.93	0.00	-	0.21	29.85	-
650A-I Resin/Solvent Underground Storage Tanks (USTs)	-	-	1.82	-	-	0.74
660 Hot Water Boilers	3.10	0.02	-	0.38	2.60	-
None Emergency Units	2.31	0.31	0.32	0.13	2.59	-
XXX Fugitive Emissions -	-	30.92	-	-	12.93	-
<b>Grand totals</b>	<b>84.00</b>	<b>0.53</b>	<b>252.96</b>	<b>3.76</b>	<b>64.99</b>	<b>76.57</b>

NO<sub>x</sub> = Nitrogen oxides  
CO = Carbon monoxide  
PM<sub>10</sub> = Particulate matter  
VOC = Volatile organic compounds  
SO<sub>2</sub> = Sulfur dioxide  
HAPS = Hazardous Air Pollutants

**Appendix A**

**Semi-annual Report**

**Permit V20602.000**

**Abstract**

This constitutes a semi-annual report of all required monitoring, documenting emissions during the subject reporting period.

**Reporting Period** - January-June  July-December  Year

**Facility** - Hexcel Corporation  
1214 W. Gila Bend Hwy 84, Casa Grande, Arizona

**Parametric emissions report**

Natural gas burned during reporting period ..... \_\_\_\_\_ therms

Emergency generator operating time ..... \_\_\_\_\_ hours

Emergency air compressor operating time ..... \_\_\_\_\_ hours

**VOC emissions report**

Volatile organic compounds emitted during reporting period ..... \_\_\_\_\_ pounds

Per NSPS Subpart VVV, do projected VOCs exceed 95 Mg (104.72 tons) per 12-month period? ..... YES/NO

Per NSPS Subpart VVV, do actual VOCs exceed 95 Mg (104.72 tons) per 12-month period? ..... YES/NO

**Operations report**

Has Permittee:

Maintained records required under §7.A.2 (generic recordkeeping)? ..... YES/NO

Maintained records required under §7.B.1.a (Hours of operation)? ..... YES/NO

Maintained records required under §7.B.1.b (Monthly calculation of annual NO<sub>x</sub> emissions)? ..... YES/NO

At calendar year-end, conducted the assessment required under §7.C.2.b (Screen for unit-specific emissions above 2% threshold)?  
..... YES/NO

Maintained monthly records required under §7.C.6 (VOC mass balance accounting)? ..... YES/NO

Maintained records of inspections required under §7.C.7 (RTO inspections)? ..... YES/NO

Maintained monthly records of the new-product screening required under §7.D.3 ..... YES/NO

Maintained records required under §7.D.4 (baghouse inspections)? ..... YES/NO

Maintained monthly records required under §7.D.5 (periodic opacity screening) ..... YES/NO

Maintained the records required under §7.D.6? (NSPS Subpart VVV monitoring requirements) ..... YES/NO

Maintained the records required under §7.D.7? (NSPS Subpart Kb monitoring requirements) ..... YES/NO

Submitted all reports required under §8.A? (Upset reports) ..... YES/NO

During the reporting period, did Permittee comply with any applicable testing requirements that came due under §7? ..... YES/NO

On a separate sheet, describe and explain any monitoring activity or recordkeeping that occurred with respect to the Asbestos NESHAP or Stratospheric Ozone requirements respectively defined in §§5.F.1 and 5.F.2 of the permit during the reporting period.

Is such a supplemental disclosure attached? ..... YES/NO

On a separate sheet, describe and explain any previously un-reported deviations from the terms of this permit. Is such a supplemental disclosure attached? ..... YES/NO

**Certification by Responsible Official**

I certify that, based on information and belief formed after reasonable inquiry, that the statements and information in this report are true, accurate and complete.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**Mail to** - Pinal County Air Quality Control District  
PO Box 987  
Florence, AZ 85232

## Appendix B

### INSIGNIFICANT ACTIVITIES

#### A. General information (Code §§ 1-3-140.74A, 3-1-050)

1. An insignificant is one which accounts for less than 1 percent of a source's emissions of conventional air pollutants or generates less than 200 pounds per year of regulated air pollutants. Additionally, an activity specifically listed as such in the Code is insignificant.
2. Permit application need not provide emissions data regarding insignificant activities and such activities need not be listed in the permit. Insignificant activities need only be listed in the permit application.

#### B. Non-exclusive list of insignificant activities.

Activities which may generate emissions in insignificant amounts include but are not limited to the following:

1. Short term maintenance activities including but not limited to:
  - a. Abrasive blasting
  - b. Painting
  - c. Solvent use
  - d. Steam cleaning
  - e. Equipment removal and replacement
  - f. Welding, brazing, and soldering operations
2. Operation of lab equipment
3. Operation of cooling water, plant water, wastewater, and other water systems.
4. Emissions from testing and sampling
5. Research and development facilities
6. Storage of chemicals and fuels
7. Operation of emergency and standby equipment rated at less than 325 brake horsepower and used less than 72 hours per year.