

HEXCEL - CASA GRANDE

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1. Introduction

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.

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.

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 the efficacy of the RTO control systems, the final permit V20602.000 required 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 systems¹:~~

~~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:~~

~~Due to the delisting of methyl ethyl ketone from the EPA HAPs list in December, 2005, the facility has disputed whether it constitutes a "major source" within the meaning of CAA §112². If found to be a major source under CAA §112, the facility would fall subject to regulation under several MACT standards, namely 40 CFR Part 63, Subpart JJJ, paper and other web surface coating, and Subpart GG Aerospace Manufacturing. A compliance plan has been incorporated into the permit in order to definitely determine the HAP source status of the facility, and applicability of 40 CFR 63, Subpart JJJ:~~

~~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_x 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. Allowable NO_x emissions from this facility exceed the major source threshold, and without the limitations on the emergency units, the PSD threshold could likely be triggered:~~

~~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.*~~

PERMIT HISTORY

- 1) Permit revision 'R07 authorizes the addition of 3 additional double capacity purge/cure ovens (#26, #27, #28), a set of Four-Block oven carts, one additional R169 dip tank (R169 Dip Tank #2), a replacement for F660 dip tank, a replacement for F124 dip tank and an additional Acousti-Cap Dip/Blot machine. Hexcel will also be controlling the CCC Machine #1 and #2 emissions by routing them to an existing RTO. The proposed emissions increase from this revision will be 61.29 tons per year of VOC, which exceeds the 40 tpy PSD significance threshold. Looking at the

¹In 2006, Permittee conducted tests to determine such captured. As part of this revision 'R05, Permittee is increasing the capture in the diproom and once again the permit will require a demonstration of the capture.

²MEK was de-listed as a HAP in 2006. Since then, Permittee is working to demonstrate that this source is not a major source of HAPs for phenol and formaldehyde.

5-year look-back of emissions increases and decreases, the net emissions increase is less than 100 tpy.

This revision is a major modification, and since Hexcel is an existing PSD major source, the facility is subject to PSD review for VOC emissions, and therefore has to apply Best Available Control Technology (BACT). The corresponding Technical Support Document for this revision includes all the information pertaining PSD review, as well as explanation on other changes made to this permit during this revision.

- 2) Permit revision 'R06 authorizes the addition of double oven #25, an indirect-fired natural gas oven. The addition of oven #25 increases potential VOC emissions by 17 tpy.
- 3) Permit revision 'R05 authorizes the replacement of RTO #1 with a new oxidizer system. The oxidizer system capacity will be larger than the previous one, and in addition to controlling the same Purge/Cure oven emissions as the current RTO #1, Permittee will also be capturing emissions within the Dip Room that in the past went uncontrolled, and venting them to the new RTO. These previously uncontrolled emissions are:
 - Emissions from dip room vents (411-1 through, 411-5).
 - In the past, when there was no demand for make-up air for the purge/cure ovens, pressure relief louvers would vent the air that was captured from within the diproom to the atmosphere. Permittee will also capture these low-level, high volume VOC emissions from the pressure relief lovers and vent them to the new RTO.
 - Dip Room Blow Out Rack (stack #417)

The new oxidizer will be made up of two units of 50,000 cfm each (RTO #3 and RTO #4). These units will be installed in phases to ensure there's adequate emissions control at all times during the transition. The addition of this new RTO system and the additional capture of emission points previously vented to the atmosphere represents a decrease in VOC emissions of 39 tpy.

As part of this revision, Permittee will also be conducting the following changes: 1) the replacement of the PAA oven by a 3 MMBtu/hr oven, 2) the replacement of the fans for Purge/Cure ovens 17-21, with larger capacity fans, to decrease the length of the cycle and therefore increasing the number of cycles that can occur in a given amount of time, and 3) the addition of double oven #24, an indirect-fired natural gas oven. No additional VOCs will be emitted from the replacement of the PAA oven. The fan upgrades in ovens 17-21 represent an increase of 4.36 tpy (or 0.87 tpy per oven) in potential VOC emissions, and the addition of oven #24 increases potential emissions by 17 tpy.

This revision also approves an administrative change regarding the deviation reporting of the RTOs. The permit currently requires permittee to report any shutdown of the RTO as a deviation of the permit. Since Permittee does conduct planned shutdowns for required maintenance and repair, they've been reporting deviations in accordance to the permit, even though the operations routed to such RTO are also shutdown, or bypassed to another RTO during these maintenance and repairs. This revision revises the language in the permit to require reporting only on deviations of the temperatures or pressure drops that occur when the oxidizer is operating and controlling emissions.

Due to the changes approved by this revision, there will be an emissions increase of 26.20 tpy of

NOx due to the larger capacity of RTOs #3 and #4, the PAA oven replacement, and new oven #24.

- 4) Permit revision '.R04 re-authorizes the installation of oven #23 previously approved by revision '.R03. Such oven has not been installed yet, and Permittee would like it to install it as a "double" oven. This change does not trigger any additional requirements. Also, as part of this revision, the language from Code §3-1-082, which was previously missing, was added to the permit.
- 5) Permit revision '.R03 authorizes the installation of the "Septum Core" process and Purge/Cure Ovens #22 and #23. While the original Title V permit for this facility (V20602.000) authorized the installation of oven #22 (see §12.B of such permit), Permittee has re-submitted the oven's information with revision R03 emissions and an applicability analysis for the installation of the oven.

The Septum Core process will be used to produce a new type of honeycomb core with pieces of material, or septa, inserted and adhered into each honeycomb cell. The process will involve the addition of a Septum Core Machine, 2 Septum Insertion Machines and a Septum Adhesive Cure Machine. This process will emit Volatile Organic Compounds and Hazardous Air Pollutants due to the application and curing of adhesive. This process is subject to the requirements of 40 CFR 63 Subpart JJJJ³ and therefore emissions will be controlled using enclosures around the process and venting emissions to the oxidizer.

The 2 new ovens will be hot oil heated by existing hot oil heaters. As with the existing purge/cure ovens, VOC-rich portions of the oven cycle will be controlled by a thermal oxidizer and the portions of the cycle with less VOCs will be vented directly to the atmosphere.

- 6) Permit revision ('.R02) reopens the permit to include the applicable requirements of the MACT standard for Paper and Other Web Coating (Subpart JJJJ). Permittee has requested an extension on the compliance date for this standard, since to be able to comply they are installing permanent enclosures around some of their processes. This permit revision is issued with a compliance plan and a compliance schedule in accordance with §63.6(i)(4)(i).

To demonstrate compliance with the requirements of subpart JJJJ, Hexcel intends to use a combination of add-on controls and the use of low-HAP materials. Coating use data will be averaged across all lines, and control efficiencies will be factored in where appropriate in the compliance demonstration. Permanent Total Enclosures (PTE's) will be installed around three of the affected processes to achieve compliance with JJJJ. The VOC emissions increase associated with this change is less than the 40 tons significance level, and does not trigger PSD.

- 7) Permit revision ('.R01) removes the MACT standard for Surface Coating of Miscellaneous Parts (Subpart MMMM) from the permit. The original permit allowed the Permittee until 1/5/05 to submit an applicability notification. On 1/5/05, PCAQCD received notification that such standard was not applicable, and in accordance with section 6.C.3, Hexcel has submitted a permit revision to remove the standard from their permit. Also, since the issuance of the original permit, the MACT standard for Industrial, Commercial, and Institutional Boilers and Process Heaters (Subpart DDDDD) has been promulgated. Revision '.R01 incorporates the standard into the permit. A very brief summary of the changes processed through revision '.R01 can be found in the corresponding Technical Support Document (TSD).

³See TSD for this permit revision for discussion on Subpart JJJJ applicability.

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
- 7-3-1.1 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
- 7-3-4.1 CO Emissions - Industrial
- 7-3-5.1 NOx 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 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:

- 7-3-1.1 Visible Emissions; General
- 7-3-1.7.F Fuel Burning Equipment

C. 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.

D. The New Source Performance Standard ("NSPS") for Volatile Organic Liquid Storage Vessels, 40 CFR Part 60, Subpart Kb [40 CFR §60.116b(b) (2000)].

~~E. 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)].~~

E. 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.

F. PCAQCD permit A20422.000 (1/18/94), imposing certain limits on opacity, baghouse operation, and material labeling.

G. PCAQCD permit revision A20422.R03 (10/9/99), imposing "synthetic minor" limits on operation of newly installed emergency air compressor and emergency generator.

- ~~I. The National Emission Standard for Hazardous Air Pollutants (“MACT”) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD [40 CFR §63.7480 *et seq.*(2004)]⁴~~
- H. 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)]
- I. The National Emission Standard for Hazardous Air Pollutants (“MACT”) - General Provisions [40 CFR §63.1 *et seq.*]
- J. 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)

~~Except as indicated in §3.B,~~ 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)*] [40 CFR 63.6(i)(6)(B)] (Code §§3-1-060.B.1, 3-1-083.A.7.c)

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

~~The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. In order to achieve compliance with the requirements of 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]), the Permittee has installed Permanent Total Enclosures (PTE’s) which meet EPA Method 204 design criteria, around the following three web coating lines: 335 Printline, #7 Printline, and UD Tapeline, in accordance with the Compliance Plan from permit V20602.R02. Pending a demonstration of HAP major source applicability, Permittee has not installed the required continuous parameter monitoring system (CPMS). This compliance plan will ensure that either the facility comes into full compliance with 40 CFR Subpart JJJ, or demonstrates that it is not a major source of HAPs.~~

~~1. Schedule of Compliance~~

~~The Permittee shall provide the District and the Administrator with sufficient data to make a HAP source status determination in accordance with the following schedule:~~

- ~~a. By September 30, 2007 Permittee shall conduct an emission factor test for the phenol and formaldehyde emissions from resins, in accordance with the protocol submitted to PCAQCD on 8/6/07.~~
- ~~b. By October 30, 2007 Permittee shall prepare and submit a test report which will~~

⁴Rule vacated on 6/8/07

~~show the emission factors determined by the test required above.~~

~~c. By November 30, 2007, if determined from the test conducted that this facility is a major source of HAPs, Permittee shall:~~

~~i. submit a schedule to the District and the Administrator of activities that will bring the facility into full compliance with 40 CFR 63 Subpart JJJ no later than March 1, 2008:~~

~~ii. submit a report to the District and the Administrator quantifying potential HAP emissions from the facility, broken down by emission unit.~~

~~d. By November 30, 2007, if determined from the test conducted that this facility is an area source of HAPs, Permittee shall submit a report to the District and the Administrator quantifying potential HAP emissions from the facility, broken down by emission unit.~~

~~2. Progress Reports~~

~~On a monthly basis beginning 30 days after the issuance of this permit revision, the Permittee shall submit certified progress reports to the District and to the Administrator. Reports shall cover calendar months, and shall be due within 15 days of the end of each calendar month until either final compliance is achieved with respect to 40 CFR 63 Subpart JJJ or until those provisions are removed from the permit. The reports shall contain, at a minimum the following information:~~

~~a. Dates when the milestones specified in the Schedule of Compliance were achieved; and~~

~~b. An explanation of why any dates specified in the Schedule of Compliance were not or will not be met, and any preventative or corrective measures adopted.~~

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

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_x.

2. Emissions Cap - VOCs

a. Best Available Control Technology (BACT) [*Mandated by 40 CFR §70.6(a)(1)*] (Code §3-3-250)

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

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

3. Purge/Cure Ovens #22 and #23

a. Level of Control

Emissions from ovens #22 and #23 installed under permit revision V20602.R04 (5/24/07) shall be reduced by control in an RTO system, with a minimum destruction efficiency of 95%.

b. Required Capture Efficiency

Emissions from these emission points shall be subject to at least the 75% capture requirement determined per testing conducted in 2006.

4. Septum Core Process

a. Level of Control

VOC emissions from the Septum Core Machine and the Septum Cure Adhesive Machine installed under permit revision V20602.R04 (5/24/07) 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. V20602.R05 New Equipment Minor NSR Limitations [*Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)*] (Code §3-1-081.A)

1. Emissions Cap - VOCs

a. Emission Cap

Permittee shall limit VOC emissions from the new Purge/Cure Oven # 24, Fan upgrades to Ovens #19 through #21, PAA Oven replacement and Oxidizer #1 replacement authorized by revision V20600.R05, in any twelve-month period, to 24 tons.

b. Operational Limits and Controls

To stay within the preceding emission cap for VOC emissions, and thereby also avoid triggering PSD review, Permittee shall:

i. Replace RTO #1 with an RTO system with 2 units rated each at 50,000 cfm at least, in order to provide additional VOC control capacity and redundancy to the system.

A. Each RTO unit shall be equipped with a thermocouple or RTD to measure the temperature in the combustion zone and a differential pressure flow device or fan motor ammeter to measure the gas velocity or flow rate.

ii. Install a capture system for the emissions from the dip room Blow Out Rack (Stack #417), the dip room Vents 1 through 5 (Stacks #411-1 through 411-5) and the exhaust from the header system which provides make up air to the ovens. Emissions from these points shall then be vented to an RTO system with a minimum 95% destruction efficiency.

iii. Replace the fans for ovens 17-21 with new fans each rated at no more than 10,000 cfm. Installation of these fans shall not affect the way the oven emissions are currently vented to an RTO system.

iv. Vent emissions from the purge/cure cycles of oven #24 to an RTO system with a minimum 95% destruction efficiency.

c. Required Capture Efficiency in the Dip Room

Emission points within the dip room shall be subject to a nominal VOC capture of 83%. This capture shall be demonstrated as required by this permit. This increased capture will reduce VOC emissions from the facility by 39 tons per year.

2. Emissions Cap - NOx

a. Emission Cap

Permittee shall limit Nox emissions from the new Purge/Cure Oven # 24, PAA

Oven replacement and Oxidizer #1 replacement authorized by revision V20600.R05, in any twelve-month period, to 26 tons.

b. Operational Limits and Controls

Permittee shall only use natural gas to fuel the PAA Oven replacement and Purge/Cure Oven #24, and as auxiliary fuel for RTO system #3 and #4.

D. V20602.R06 New Equipment Minor NSR Limitations [*Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)*] (Code §3-1-081.A)

1. Emissions Cap - VOCs

1. Level of Control

Emissions from Purge/Cure oven #25 installed under permit revision V20602.R06 shall be reduced by control in an RTO system, with a minimum destruction efficiency of 95%.

2. Required Capture Efficiency

Emissions from the oven shall be subject to at least the 95% capture requirement determined per testing conducted in 2005.

2. Operational Limits and Controls - NOx

Permittee shall only use natural gas to fuel the Purge/Cure Oven #25.

E. V20602.R07 New Equipment Major-NSR Limitations [*Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)*] (Code §3-1-081.A)

1. Best Available Control Technology (BACT)[*Mandated by 40 CFR §70.6(a)(1)*] (Code §3-3-250)

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

a. Purge/Cure Ovens #26, #27 and #28;

b. A-Cap Machine;

c. CCC Machines #1 and #2.

2. Timing and Progress of Construction (Code §3-3-210.4)

This permit modification 'R07 shall be subject to termination if the proposed construction has not begun within 18 months of permit issuance, or if during the construction work is suspended for more than 18 months.

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

A. Generally

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

2. Applicable Limitations (Code §3-1-082)

Where different standards or limitations apply under this permit, the most stringent combination shall prevail and be enforceable.

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.

Emission Unit #	Stack #	Stack Description	% VOC Loading to oxidizer ⁵	Nominal Minimum Capture %	Capture-% Confirmation/ Adjustment Required?

⁵ 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.

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= completed Apr. '07
210	211	#335 Printline vent	6.6%	95%	Yes= completed Apr. '07
230A	231	#7 Printline vent	9.9%	95%	Yes= completed Apr. '07
?	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
410F	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 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 Unit #	Stack #	Stack Description	% VOC Loading to oxidizer ⁶	Nominal Minimum Capture %	Capture % Confirmation / Adjustment Required?
270B	272	Corrugated aluminum P/C oven vent	1.2%	95%	No
440/450/460		Resin purge/cure & cure ovens	72.1% (nominal)	95%	Yes - conducted July '05
440 series	many	Purge/cure oven vents	inc. in 440/450/460 above	as above	
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 conducted Aug. '05
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

⁶ 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.

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.

Emission Stack Unit #	Stack #	Description	% VOC Loading to oxidizer ⁷	Nominal Minimum Capture %	Capture Confirmation/Adjustment Required?
Dip room and related emissions			72.1%	90%	Yes conducted May '06
	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 an RTO system, 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.

⁷ 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.

~~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 an RTO system, with a minimum destruction efficiency of 95%:~~

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

~~E. Additional Capture and Control Requirements for the Dip Room~~

~~1. Emissions from the following emission points within the dip room shall be captured at all times and shall be vented to an RTO system with a minimum 95% destruction efficiency:~~

~~i. Blow Out Rack (Stack #417);~~

~~ii, Vents 1 through 5 (Stacks #411-1 through 411-5), and;~~

~~iii. the exhaust from the header system which provides make up air to the ovens.~~

~~2. Subject to the allowance for the Permittee to conduct a capture-testing program to quantify capture efficiency for dip room emission points, given the required increased capture, aggregate emissions from dip room emission points shall be subject to an overall nominal 83% capture requirement.~~

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

G. RTO Planned Shutdowns

Planned Shutdowns of the RTOs shall not be considered a deviation from the required pressure differential values or temperatures specified in this permit, and shall not require deviation reporting as required under §8.A of this permit provided that the following conditions are met:

1. All process emissions normally controlled by the RTO undergoing shutdown are either:

a. Stopped for the duration of the RTO shutdown, or

operational temperature shall not prevent the Permittee from conducting tests that do not trigger the reporting requirements of §8.A during a 6 month shakedown period of the unit, under controlled performance testing conditions, of RTO temperatures below this one. Permittee shall keep precise records of when these tests were conducted with a summary of results.

4. Minimum Residence Time

Each 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 or through engineering design calculations.

5. Gas Flow Monitoring

Within 90 days of the start-up of operation of any RTO, 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.

J. 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

- a. SIP Limitation - *[Federally enforceable pursuant to PGAQCD Reg. 7-3-1.1 (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 greater than 40 percent as determined by reference method 9 in the Arizona Testing Manual.

- b. Locally Enforceable Limitation (Code §2-8-300)

The opacity of any plume or effluent from any point source not subject to a New Source Performance Standard adopted under Chapter 6 of the Code, and not subject to an opacity standard in Chapter 5 of the Code, shall not be greater than 20% as determined in Method 9 in 40 CFR 60, Appendix A.

3. 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:

$Y = 1.02X^{-.231}$, where Y = 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.

4. 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.

5. 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 JJJ; 40 CFR §63.3280 *et seq.*)~~

~~a. Affected Sources~~

~~The following emission sources are affected by Subpart JJJ:~~

Equipment ID	Building Location	Source Description
00424	66	Continuous Carbon Corrugator #1
00423	66	Continuous Carbon Corrugator #2
00427	66	Foil Coater (Corrugated Products)
00353	66	335 Printline
00362	66	#7 Printline
00381	66	Aluminum Flexcore
00355	66	Continuous Nomex Flexcore (CNF)
00350	66	HRP
00612	66	HFP
00361	73	CR3 Washline
00363	73	PAA Line
00499	73	Tapeline (Steecc)
00366	73	UD Tapeline
00514	73	Ceramic Prepreg Tower
00295	94	Aluminum Corrugator
260C	???	Septum Core Machine

b. Emission Standards (40 CFR §63.3320(b)(2) and (3))

Permittee must limit organic HAP emissions to:

- i. No more than 4% of the mass of coating materials applied each month at existing affected sources, or
- ii. No more than 20% of the mass of coating solids applied each month at existing sources.

c. Operating Limits (40 CFR §63.3321(a), Table 1)

Permittee shall meet the following operating limits:

- i. Thermal Oxidizers:

The average combustion temperature in any 3-hour period must not fall below the combustion temperature established during the thermal

oxidizer performance testing according to §63.3360(e)(3)(i).

~~ii. Capture systems:~~

- ~~1. Permittee shall install Permanent Total Enclosures (PTEs) meeting EPA Method 204 design criteria around the 335 Printline, #7 Printline and UD Tapeline web coating lines. The PTEs shall be installed in accordance with the schedule provided in §3.B.1 of this permit.~~
- ~~2. Permittee shall develop a site-specific monitoring plan that identifies operating parameters to be monitored in accordance with §63.3350(f). This monitoring plan must be available for inspection by the Department upon request.~~

~~d. Monitoring Requirements (40 CFR §63.3350)~~

~~i. Bypass and Coating Use Monitoring:~~

~~At web coating lines with intermittently-controlled work stations, Permittee shall monitor bypasses of the control device and the mass of each coating material applied at the work station during any such bypass. The bypass monitoring shall be conducted using at least one of the procedures in §63.3550(c)(1) through (4).~~

~~ii. Continuous Parameter Monitoring System (CPMS):~~

~~Permittee shall install, calibrate, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications. The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months or the chart recorder, data logger, or temperature indicator must be replaced. The temperature monitoring equipment shall be equipped with a continuous recorder with an accuracy of ± 1 percent of the temperature being monitored in degrees Celsius, or $\pm 1^\circ$ Celsius, whichever is greater. The thermocouple sensor shall be installed in the combustion chamber at a location in the combustion zone.~~

- ~~A. Each CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period. Permittee shall have a minimum of four equally spaced successive cycles of CPMS operation to have a valid hour of data.~~
- ~~B. Permittee shall have valid data from at least 90% of the hours during which the process operated.~~
- ~~C. Permittee shall determine the hourly average of all recorded readings using at least three of four equally spaced data values from that hour for a CPMS that is not out of control. If all the readings show compliance with the standard, Permittee is not required to determine the hourly average of all recorded~~

readings.

- ~~D. Permittee shall determine the rolling 3-hour average of all recorded readings for each operating period using at least two of three of the hourly averages for that period using only average values that are based on valid data.~~
- ~~E. Permittee shall record the results of each inspection, calibration, and validation check of the CPMS.~~
- ~~F. Permittee shall maintain the monitoring system in proper order at all times including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.~~
- ~~G. Permittee shall conduct the monitoring at all times that the unit is operating except during malfunctions, repairs, or required QA/QC activities. Data recorded during these periods shall not be used for purposes of calculating the emissions concentrations and percent reductions. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.~~
- ~~H. Any averaging period for which Permittee does not have valid monitoring data and such data are required constitutes a deviation.~~

~~e. Notification Requirements~~

- ~~i. Notification of Performance Test (40 CFR §63.3400(d))~~

~~Permittee shall submit a Notification of Performance Tests as specified in §§63.7 and 63.9(e). The notification shall identify the operating parameters to be monitored.~~
- ~~ii. Notification of Compliance Status (40 CFR §63.3400(e))~~

~~Permittee shall submit a Notification of Compliance Status as specified in §63.9(h). This notification shall also include a performance test report as specified in §63.10(d)(2).~~

~~f. Recordkeeping Requirements (40 CFR §63.3410)~~

~~Permittee shall keep monthly records in accordance with the requirements of §63.10(b)(1) and as specified in §63.10(b)(2) of all measurements needed to demonstrate compliance with Subpart JJJ.~~

~~g. Reporting Requirements~~

- ~~i. Semiannual Report: Permittee shall submit a semiannual compliance report in accordance with §63.3400(c).~~

ii. Startup, Shutdown and Malfunction Report: Permittee shall submit startup, shutdown, and malfunction reports as specified in §63.10(d)(5).

h. Performance Test Requirements

The following performance tests and establishing of operating limits shall be conducted within the time limits specified in §63.7(a)(2):

i. Organic HAP content:

Permittee shall determine the organic HAP mass fraction of each coating material “as purchased” by following one of the procedures in §63.3360(c)(1) through (3) and shall determine the organic HAP mass fraction of each coating material “as applied” by following the procedures in §63.3360(c)(4).

ii. Volatile organic and coating solids content:

Permittee shall determine the as-purchased volatile organic content and coating solids content of each coating material applied by following the procedures in §63.3360(d)(1) or (2) and the as-applied volatile organic content and coating solids content of each coating material by following the procedures in §63.3360(d)(3).

iii. Thermal Oxidizer efficiency:

As required in §7.C.1 of the permit, Permittee shall conduct a performance test on the thermal oxidizers to determine the destruction or removal efficiency following the procedures of §63.3360(e).

During the performance test, permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three runs and shall monitor the temperature in the firebox or immediately downstream of the firebox. Permittee shall use the data collected to calculate and record the average combustion temperature, which will be the minimum operating limit for the thermal oxidizer.

iv. Capture efficiency - Permanent Total Enclosures (PTEs)

Permittee may assume that the capture efficiency of the PTEs for the equal 100% if the PTEs meet the requirements of section 6 of EPA Method 204 of 40 CFR part 51, appendix M, and all the exhaust gases from the enclosures are delivered to a control device. Alternatively, Permittee may determine capture efficiency according to the protocols specified in Method 204 and 204A through F of 40 CFR part 51, appendix M.

v. Volatile matter retained in the coated web or otherwise emitted to the atmosphere:

Permittee shall develop a testing protocol to determine the mass of

~~volatile matter retained in the coated web or otherwise not emitted to the atmosphere and submit this protocol to the District and the Administrator for approval in conjunction with the other testing protocol required by this subpart.~~

~~2. Industrial, Commercial, and Institutional Boilers and Process Heaters MACT (40 CFR Part 63, Subpart DDDDD, 40 CFR §63.7480 *et seq.*)~~

~~a. Notification and Emission Standards (40 CFR §63.7506(c))~~

~~The Steam Boilers (Equipment # 620A through E), Hot Oil Heaters (Equipment #630A through C) and Hot Water Boilers (Equipment #660A and B) are not subject to the initial notification requirements in §63.9(b) and are not subject to any requirement in Subpart DDDDD or in subpart A (i.e., emission limits, work practice standards, performance testing, monitoring, SSM plans, site-specific monitoring plans, recordkeeping and reporting requirements, or any other requirements in subpart A).~~

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. RTOs and other Unclassified Sources (Code §5-24-1030.A.3.)

The Permittee shall not emit more than 500 parts per million of nitrogen oxides expressed as NO₂ from the RTOs and 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. RTOs and other Unclassified Sources (Code §5-24-1030.A.2)

The permittee shall not emit more than 600 parts per million of sulfur dioxide from the RTOs and 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 in²;
 - 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.² 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_x Testing Trigger" of twenty tons, or 66.6% of the 30-tpy cap imposed above under §4.B.1, 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_x 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#2 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 - except 335 Printline, #7 Printline and UD Tapeline⁸.

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 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. [MET - Testing conducted on April '07, report submitted 6/8/07]~~

⁸Testing requirements for 335 Printline, #7 Printline and UD Tapeline are listed under §6.C.2 Paper and Other Web Surface Coating MACT (40 CFR Part 63, Subpart JJJ, 40 CFR §63.3280 *et seq.*)

- 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 characterize emissions from other resin-formulations, and then conducting corresponding tests to quantify emissions reflecting all resin formulations. [MET - Testing conducted in July '05, report 9/1/05]~~

~~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 permit V20602.000, 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. **[MET - Testing conducted in Feb&May '06, report on 6/28/06]**

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. - **ALREADY COMPLETED**~~

~~b. Aluminum Corrugator Vent #271~~

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

6. Non-instrumental emissions monitoring - VOC 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. Except for during planned shutdowns, as defined in this permit, 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 an ~~annual~~ **monthly** basis, ~~all RTOs~~ **all RTOs** 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.

8. Back-up graphite/prepreg oven Notification⁹

Permittee shall notify the District within 14 days of resuming use of the Graphite Oven #3 (Equip.#520E) for sheet cure production. The notification shall include an explanation of whether the oven is being used as back-up or in addition to oven #6 (Equip. #520F).

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

1. RTO #3 and #4 Testing - Destruction Efficiency Verification

- a. Permittee shall conduct a performance test to verify the destruction efficiency RTO #3 within 60 days after achieving maximum production rate at which the RTO unit will be operated, but no later than 180 days after installation using EPA-approved methods 25, 25A or 25B.
- b. Permittee shall conduct a performance test to verify the destruction efficiency of RTO#4 within 60 days after achieving maximum production rate at which the RTO unit will be operated, but no later than 180 days after installation using EPA-approved methods 25, 25A or 25B.
- c. Permittee shall submit test protocols to the District for the above tests at least 60 days before the test.
- d. Permittee shall provide notice of the test to the District at least 15 days prior to running the test.
- e. A copy of the test report shall be submitted to the District for approval within 45 days after the test.
- f. Minimum Residence time values, specific to each RTO unit, shall be determined during the initial RTO performance test for each unit or shall be determined by engineering calculation, and shall be repeated if required in the event of the RTO being structurally modified.
- g. The destruction efficiency tests shall be repeated annually, no later than 12 months after the previous test of RTO #4.

2. RTO #3 and #4 Operation Monitoring

Except for during planned shutdowns, as defined in this permit, 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.
The 1500 °F operational limit shall apply to the new RTO units #3 and #4 until individual

⁹Permittee is testing Graphite Oven #6 and considering the resulting per unit emissions to be representative of either oven since Oven #3 is used mostly as back-up to Oven #6.

operating ranges are established by testing as required by this permit. This interim operational temperature shall not prevent the Permittee from conducting tests that do not trigger the reporting requirements of §8.A during a 6 month shakedown period of the unit, under controlled performance testing conditions, of RTO temperatures below this one. Permittee shall keep precise records of when these tests were conducted with a summary of results.

3. Additional Dip room Capture Demonstration
 - a. Permittee shall notify the District in writing, within 10 days of the completion of the dip room capture improvements.
 - b. No later than 180 days after the dip room capture improvements are completed, as required by V20602.R05, Permittee shall develop and execute a test plan to verify the aggregate capture efficiency.
 - c. At least 60 days before testing, a test protocol for quantifying capture efficiency shall be submitted to PCAQCD for review and approval.
 - d. A copy of the test report shall be submitted to the District for approval within 45 days after the test.

4. Compliance Assurance Monitoring (CAM) for RTOs #3 and #4 [**Currently federally enforceable; see 40 CFR §64.1 et seq. (1997)**]
 - a. Indicators

Combustion zone temperature and exhaust gas flow rate for each RTO #3 and #4 shall be indicators of the RTOs performance.
 - b. Permittee shall install a thermocouple or RTD on each RTO to monitor the combustion zone temperature, in accordance with §4.C.1.b of this permit and shall monitor the temperature in the combustion zone as follows:
 - i. Automatically record the temperature at least every 15 minutes in units of Degrees Fahrenheit or Celsius (°F or °C), using a digital data acquisition system (DAS);
 - ii. Annual calibration of the thermocouple or RTD.
 - c. Permittee shall install a differential pressure flow device or fan motor ammeter at each RTO, in accordance with §4.C.1.b of this permit and shall monitor the change in pressure of the gas velocity or flow rate through the RTO as follows:
 - i. Automatically record the exhaust flow rate at least every 15 minutes in units of cubic feet per minute (flow), or amps (current) using a digital data acquisition system (DAS);
 - ii. Annual calibration of the differential pressure flow device or ammeter.
 - d. Except during planned RTO shutdown periods, and controlled engineering

evaluations as defined in §5.G, any of the following shall constitute an “excursion” during operations:

- i. Temperatures in the combustion zone outside of the range established in §7.D.3.e of this permit;
 - ii. Flow rates measured at the outlet of the RTO outside the range established in §7.D.3.e of this permit.
- e. At least 60 days before the testing required for each RTO #3 and #4, Permittee shall prepare and submit to PCAQCD for approval a testing plan as required in §7.C that will demonstrate the destruction efficiency required by this permit and establish an operational range of temperature in the combustion zone and exhaust flow rate.

The testing plan shall provide for a demonstration of compliance for the chosen range of temperature and flow rate set at the minimum and maximum levels

Permittee shall within 45 days after the submittal of the test report, submit to the Department and the Administrator, the operational ranges for the RTOs.

- f. Any excursion shall trigger corrective action to be initiated. All excursions will be documented and reported.
- g. Permittee shall maintain the monitoring equipment, including but not limited to maintaining necessary parts for routine repair of the monitoring equipment, in accordance with manufacturer’s specifications.
- h. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance of control activities, Permittee shall conduct all monitoring at all times when the plant is operating.
- i. Malfunction of any DAS, thermocouple or the differential pressure flow device, shall constitute a monitoring malfunction. Records shall identify the emission point or points affected by any monitoring malfunction.
- j. Any excursion, exceedance or monitoring malfunction shall require the operator to restore operation of the control and/or monitoring system to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of startup, shutdown or malfunction, and taking necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance.
- k. Permittee shall submit a Quality Improvement Plan (QIP) in accordance with 40 CFR §64.8 if any combination of excursions or monitoring malfunctions exceeds 3% of operating time, defined as 3 events in any given 100 calendar day period for a single RTO.
- l. Logs, excursion observations, exceedance observations and summaries of planned shutdowns shall all be subject to the recordkeeping and reporting

requirements under the permit.

- m. If Permittee identifies a failure to achieve compliance with the CAM requirements, Permittee shall promptly notify the Department, and if necessary submit a revision to the permit to address the necessary monitoring changes.

E. 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 31st to adequately support the annual emission inventory, permittee shall calculate NO_x 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. 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.

3. 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.

4. 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.

5. 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.
6. 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.

7. 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.

8. 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 Requirements¹⁰ (Code §3-1-083.A.3.b) [**Mandated by 40 CFR §§70.6(a)(3)(iii)(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.

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 the start of the calendar year.

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.

¹⁰ Also see permit §10.P regarding reporting of "emergency" incidents.

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(c)(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)

Expiration of this permit will terminate the facility's right to operate unless either a timely application for renewal has been submitted in accordance with §§3-1-050, 3-1-055 and 3-1-060, or a substitute application for a general permit under §3-5-490. For Class I permit renewals, a timely application is one that is submitted at least 6 months, but not greater than 18 months prior to the date of the permit expiration. For Class II or Class III permit renewals, a timely application is one that is submitted at least 3 months, but not greater than 12 months prior to the date of permit expiration.

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 exclusions¹¹, 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 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.

¹¹ See the Technical Support Document for an explanation of the exclusions.

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.F 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	2007	NA	NA	3 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

EQUIP. NO.	EQUIPMENT NAME	MANUFACTURER/ DATE	SERIAL NO.	MODEL NO.	SIZE/CAPACITY
140F	Continuous Carbon Corrugator #2	Rosenthal Sheeter/1998	80565	WM-3-HHC-24	25 fpm
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
230B	Aluminum Printline		NA	NA	1.2 MMBTU/HR
240	Al 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
260C	Septum Core Machine	2006	NA	NA	
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 (Steece)	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 2009	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 2009	NA	NA	300 gallons
410L	R169 Dip Tank #2	2009			
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
457	Purge/Cure Oven #22	2006	NA		50 HP
458	Purge/Cure Oven #23(double oven)	2006	NA	NA	100 HP
459	Purge/Cure Oven #24	2007	NA	NA	4.8 MMBtu/hr
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
480	Purge/Cure Oven #25	2008	NA	NA	4.8 MMBTU/HR
481	Purge/Cure Oven #26	2009	NA	NA	4.8 MMBTU/HR
482	Purge/Cure Oven #27	2009	NA	NA	4.8 MMBTU/HR
483	Purge/Cure Oven #28	2009	NA	NA	4.8 MMBTU/HR
490	Block Oven Carts (4)	2009			
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
520J	Product Forming Oven				1.0 MMBTU/HR
530A	Septum Insertion Machine #1	2006	NA	NA	
530B	Septum Insertion Machine #2	2006	NA	NA	
530C	Septum Adhesive Cure Machine	2006	NA	NA	
530D	ACAP Machine (Dip/Blot)	2009			
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	G1N-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
610C	Thermal Oxidizer #3 & #4	Adwest/2007	2232	48.ORTO	50 MMBTU/HR
610D	Thermal Oxidizer #4	Adwest/2007	2233	480.RTO	50 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

13. Emission Inventory Table

The technical support document for this permit revision, as well as TSDs for previous revisions include tables with proposed emissions from this facility;

Appendix A

Semi-annual Report

Permit V20602.R07

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_x 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

~~Maintained the records required under §6.C.2.f? (MACT Subpart JJJ 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.