HEXCEL CORPORATION - CASA GRANDE

1. INTRODUCTION .............................................................................................................................. 5

2. LISTING OF (FEDERALLY ENFORCEABLE) APPLICABLE REQUIREMENTS ........................................6

3. COMPLIANCE CERTIFICATION .................................................................................................... 7

   A. COMPLIANCE PLAN ......................................................................................................................... 7

   B. COMPLIANCE SCHEDULE .............................................................................................................. 7

4. AUTHORITY TO CONSTRUCT; MAJOR- AND MINOR-NSR PERMIT-BASED LIMITATIONS ................ 7

   A. GENERALLY ......................................................................................................................................... 7

   B. PERMIT-BASED MINOR NSR LIMITATIONS ..................................................................................... 7

       1. Emissions Cap - VOCs ...................................................................................................................... 7

       2. Purge/Cure Ovens #22 and #23 ..................................................................................................... 8

       3. Septum Core Process ....................................................................................................................... 8

   C. V20602.R05 NEW EQUIPMENT MINOR NSR LIMITATIONS ............................................................ 8

       1. Emissions Cap - VOCs ...................................................................................................................... 8

       2. Emissions Cap – NOx ....................................................................................................................... 9

   D. V20602.R06 NEW EQUIPMENT MINOR NSR LIMITATIONS ............................................................ 9

       1. Emissions Cap - VOCs ...................................................................................................................... 9

       2. Operational Limits and Controls - NOx .............................................................................................10

   E. V20602.R07 NEW EQUIPMENT MAJOR-NSR LIMITATIONS ............................................................10

       1. Emissions Caps - Hazardous Air Pollutants (HAPs) ....................................................................10

       2. Monitoring Requirements to Avoid HAP major source status ......................................................10

       3. Best Available Control Technology (BACT) ..................................................................................10

       4. Timing and Progress of Construction (Code §3-3-210.4) ...............................................................10

   F. V20639.R03 MINOR-NSR LIMITATIONS .......................................................................................11

   G. V20639.R04 MINOR-NSR LIMITATIONS .......................................................................................11

   H. V20639.R05 MINOR-NSR LIMITATIONS .......................................................................................12

   I. V20661.000 MINOR-NSR LIMITATIONS .......................................................................................14

   J. V20661.R02 MINOR-NSR LIMITATIONS .......................................................................................14

   K. VOC FACILITY-WIDE PSD CAP .....................................................................................................14

   L. V20602.R07 - PSD-IMPLIED CAP ON VOC EMISSION ..................................................................14

5. OTHER DERIVATIVE NON-NSR PERMIT-BASED LIMITATIONS .......................................................... 15

   A. GENERALLY ......................................................................................................................................... 15

   B. PCAQCD PERMIT NUMBER A20422, ATTACHMENT B LIMITATIONS ....................................................15

       1. Opacity Limitation ............................................................................................................................15

       2. Baghouse Operation ........................................................................................................................15

       3. Labeling of Raw Materials ............................................................................................................15

   C. DERIVATIVE VOC CONTROL LIMITATIONS; CONTINUATION OF CONTROL EFFORT ..................15

       1. Control Required for Affected Group 1 Emission Units ..................................................................15

       2. Control Required for Affected Group 2 Emission Units ..................................................................16

       3. Control Requirement for Affected Group 3 Emission Units ............................................................17

   D. EMISSION TRACKING AT GROUP 1 EMISSION UNITS TO ASSESS NEED FOR ADDITIONAL CAPTURE EFFICIENCY TESTING ............................................................18

       1. Future Changes at Existing Group 1 Emission Units ....................................................................18

       2. Additional Future Emission Units ................................................................................................18

(5/30/18) 1 HEXCEL – CASA GRANDE
E. RTO PLANNED SHUTDOWNSD ................................................................. 19
F. RTO COLLECTION SYSTEM ................................................................. 19
G. RTO OPERATING REQUIREMENTS ..................................................... 19
   1. Minimum Destruction Efficiency ................................................... 19
   2. Temperature Monitoring System ................................................... 19
   3. Minimum Operating Temperature ............................................... 19
   4. Residence Time ........................................................................... 19
   5. Gas Flow Monitoring .................................................................... 20
H. EXCESS EMISSIONS ........................................................................ 20

6. REGULATORY EMISSION LIMITATIONS ........................................... 20

A. ALLOWABLE EMISSIONS ................................................................. 20
   1. General Limitation ....................................................................... 20
   2. Insignificant Activities ................................................................ 20
B. PARTICULATE EMISSIONS LIMITATIONS ......................................... 20
   1. Spray Booth Controls .................................................................. 20
   2. Opaque Limits ............................................................................ 21
   3. Mass Emissions Limitation ......................................................... 21
   4. Fugitive Emission Limitation ...................................................... 22
   5. Abrasive Blasting Controls .......................................................... 22
C. CAA §112 MACT LIMITATIONS ..................................................... 22
   1. Aerospace Manufacturing and Rework Facilities MACT ............... 22
D. NITROGEN OXIDES EMISSION ....................................................... 24
   1. Boilers and Water Heaters ............................................................ 24
   2. RTOs and other Unclassified Sources ......................................... 25
E. SULFUR DIOXIDE EMISSIONS ......................................................... 25
   1. Boilers and Water Heaters ............................................................ 25
   2. RTOs and other Unclassified Sources ......................................... 25
F. FUEL USE LIMITATIONS ................................................................. 25
   1. Primary Fuels ............................................................................. 25
   2. Other Fuels ................................................................................. 25
G. PART WASHERS ............................................................................... 25
H. GENERAL MAINTENANCE OBLIGATION ....................................... 27
I. ADDITIONAL APPLICABLE LIMITATIONS ....................................... 27
   1. Asbestos NESHAP Compliance .................................................... 27
   2. Stratospheric Ozone and Climate Protection .................................. 27
   3. Disposal Limitation .................................................................... 27

7. COMPLIANCE DEMONSTRATION ..................................................... 27

A. GENERAL PROVISIONS ..................................................................... 27
   1. Generally Applicable Test Program Requirements .......................... 27
   2. Recordkeeping ........................................................................... 28
B. COMPLIANCE WITH "AUTHORITY TO CONSTRUCT" LIMITATIONS .......... 28
   1. Compliance with HAP Emission Cap .......................................... 28
   2. Compliance with NOx Emission Cap ........................................... 29
   3. Compliance with the PSD-implied Cap on VOC Emission Changes ............................................................................... 29
   4. Demonstration of Insignificant Emissions ...................................... 29
5. Demonstration of Capture Efficiency ........................................................................................................... 30

C. OTHER COMPLIANCE LIMITATIONS ............................................................................................................ 33
1. Testing Requirement for Existing Group 1 Emission Units - except 335 Printline #1 and #7 Printline ............ 33
2. Non-instrumental emissions monitoring - VOC Emissions; Cap Compliance Verification ....................... 33
3. RTO Operation Monitoring .......................................................................................................................... 34
4. Cure Oven Cool Down Phase monitoring .................................................................................................. 36

D. COMPLIANCE WITH MINOR-NSR LIMITATIONS ..................................................................................... 36
1. RTO Testing - Destruction Efficiency Verification ....................................................................................... 36
2. RTO Operation Monitoring .......................................................................................................................... 37
3. Compliance Assurance Monitoring (CAM) for RTOs .................................................................................. 37

E. COMPLIANCE WITH REGULATORY LIMITATIONS .................................................................................. 39
1. Non-instrumental emissions monitoring - oxides of nitrogen ..................................................................... 39
2. Non-instrumental emissions monitoring - particulate matter ..................................................................... 40
3. Opacity monitoring ....................................................................................................................................... 40
4. NSPS monitoring - Volatile Organic Storage Tanks .................................................................................. 41
5. NESHAP compliance – Chromium Process .................................................................................................. 41
6. Non-instrumental emissions monitoring - Solvent Cleaning VOCs ........................................................... 41

8. OTHER REPORTING OBLIGATIONS ........................................................................................................... 42
A. DEVIATION REPORTING REQUIREMENTS ............................................................................................... 42
B. REGULAR COMPLIANCE REPORTING ....................................................................................................... 42
C. REGULAR COMPLIANCE/COMPLIANCE PROGRESS CERTIFICATION .................................................. 42
D. ANNUAL EMISSIONS INVENTORY ............................................................................................................. 43

9. FEE PAYMENT .............................................................................................................................................. 43

10. GENERAL CONDITIONS .......................................................................................................................... 43
A. TERM ......................................................................................................................................................... 43
B. BASIC OBLIGATION ..................................................................................................................................... 43
C. DUTY TO SUPPLEMENT APPLICATION .................................................................................................... 43
D. RIGHT TO ENTER ........................................................................................................................................ 44
E. TRANSFER OF OWNERSHIP ..................................................................................................................... 44
F. POSTING OF PERMIT .................................................................................................................................. 44
G. PERMIT REVOCATION FOR CAUSE ........................................................................................................... 45
H. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS ........................................................... 45
I. RENEWAL OF PERMIT ............................................................................................................................... 45
J. SEVERABILITY .............................................................................................................................................. 45
K. PERMIT SHIELD ....................................................................................................................................... 45
1. Generally .................................................................................................................................................... 45
L. PERMIT REVISIONS .................................................................................................................................... 46
M. PERMIT RE-OPENING ............................................................................................................................... 46
N. RECORD RETENTION .................................................................................................................................. 46
O. SCOPE OF LICENSE CONFERRED ........................................................................................................... 47
P. EXCESS EMISSION REPORTS; EMERGENCY PROVISION ...................................................................... 47

11. PROVISIONS SPECIFICALLY DESIGNATED AS NOT FEDERALLY ENFORCEABLE .................................. 48

12. EQUIPMENT ............................................................................................................................................... 48
A. EXISTING EQUIPMENT ............................................................................................................................... 49
13. EMISSION INVENTORY TABLE ........................................................................................................59
APPENDIX A: SEMI-ANNUAL REPORT ..............................................................................................60
APPENDIX B: INSIGNIFICANT ACTIVITIES .......................................................................................63
1. Introduction

This permit revision 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, Casa Grande, Arizona upon parcels also identified by Pinal County Assessor's Parcel # 503-46-020C, 503-46-020D, 503-46-021-D, and 503-46-047. The source is situated in an area classified as “nonattainment” for PM10 and "attainment" for all other pollutants.

This Revision V20661.R05 updates the Compliance Assurance Monitoring provisions in Section §7.D.3 of this permit to address the short distance of positive static pressure with respect to the design of the new RTO #5 and RTO #6.

Section 12 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 emitted inside the dip room where a small portion is lost to the atmosphere. However, the bulk of emissions from the dipping, purging and the curing process is collected and transported to oxidizers which substantially reduce emissions. Other VOC- and HAP-generating processes throughout the plant have differing degrees of capture and/or control.

Liquid/solid wastes from the various solvents used for cleaning as well as residual solvent-based mixtures are disposed of as hazardous waste and handled by EPA authorized disposal facilities. 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 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), the facility requires an operating permit under CAA §501 et seq.

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

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

7-1-1.2 Definitions
7-3-1.1 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


D. 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.

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


I. The New Source Performance Standards ("NSPS") - General Provisions [40 CFR §60.1 et seq.]

3. Compliance Certification

A. Compliance Plan

[Mandated by 40 CFR §70.5(c)(8)] (Code §§3-1-081.C, 3-1-083.A.7)

Since the Permittee has certified that it is currently in compliance, the compliance plan consists of continued adherence to the requirements of this permit.

B. Compliance Schedule

[Mandated by 40 CFR §§ 70.5(c)(8), 70.6(c)(3)] [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.

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

A. Generally

1. This permit section sets forth "applicable requirements" founded upon the federally enforceable provisions of current and 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.

2. Definitions

a. For the purposes of this permit the combustion zone shall be defined as the area in which the primary VOC destruction occurs, in the plenum between the media beds, in accordance with manufacturer specifications.

b. For the purposes of this permit residence time shall be defined as the time a gas intended for destruction resides with in the combustion zone.

B. 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 - 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.

2. 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.

3. 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

a. 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%.

b. 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 3-3-250 (SIP-approved at 61 FR 15717, 4/9/96).] (Code §3-1-081.A)

1. Emissions Caps - Hazardous Air Pollutants (HAPs)

   a. Permittee shall limit the facility-wide HAP emissions to a rolling 12-month total of less than 10 tons of any single HAP or less than 25 tons of a combination of HAPs.

2. Monitoring Requirements to Avoid HAP major source status  
[Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)] (Code §3-1-081.A)

   a. In order to ensure that the HAP emissions cap is not exceeded, permittee shall:

      i. Generate, by the end of the following month, a report of cumulative actual HAP emissions during the preceding calendar month; and

      ii. Generate, by the end of the following month, a report of cumulative actual HAP emissions during the preceding twelve calendar months.

   b. Exceeding the HAPs emission cap shall constitute a violation of this permit for each day that emissions of the offending pollutant were emitted from any part of the facility during:

      i. The calendar month in which the cap was exceeded; and

      ii. Any subsequent calendar month in which the cap continues to be exceeded.

3. 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.

4. 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.

F. V20639.R03 Minor-NSR Limitations
[Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)] (Code §3-1-081.A):

1. Emissions from the following equipment shall be captured upon startup and controlled in the same fashion as similar existing units, by an RTO system, with a minimum destruction efficiency of 95%:
   - Acousti-Cap Oven #1, #2, and #3, and Acousti-Cap Dip/Blot Machine #1, #2 and #3 as revised by V20639.R05;
   - 335 Printlines.

2. All natural gas burning equipment is subject to the NOx, SO2 and PM10 standards included in Sections §§6.B.2, 6.B.3, 6.D.2 and 6.E.2.

G. V20639.R04 Minor-NSR Limitations
[Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)] (Code §3-1-081.A):

1. Emissions from the following equipment shall be controlled in the same fashion as similar existing units, by an RTO system, with a minimum destruction efficiency of 95%:
   - Prime Cure Ovens #121, #122, #123 and #124;
   - Purge Cure Ovens #29, #30, #31;
   - Corrugated Oven #2;
   - AL Flexcore Machine #2.

2. Emissions from the following equipment shall be controlled in the same fashion as similar existing units, by a dust collection system, which is BACT level control as determined in V20602.R07:
   - AL Flexcore Machine #1;
   - AL Flexcore Machine #2;
   - Dust Blow Out Booth;
   - FEMCO Saw #9;
   - FEMCO Saw #10;
   - FEMCO Saw #11.
3. All natural gas burning equipment is subject to the NOx, SO2, PM10, and fuel standards included in Sections §§6.B.2, 6.B.3, 6.D, 6.E, and 6.F of this permit.

4. RTO #5 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.

H. V20639.R05 Minor-NSR Limitations
[Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)] (Code §3-1-081.A):

1. Emissions from the following equipment shall be captured upon startup as described below and controlled by an RTO system, with a minimum destruction efficiency of 98%. The listed capture and control efficiencies are BACT level control as determined in the V20639.R05 Technical Support Document:

- Purge Ovens #1, #2, #3, #4, #5, #6, #7, and #8 (100% capture efficiency);
- Cure Ovens #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, and #24 (100% capture efficiency);

The Cool Down Phase of the Cure Ovens is not subject to control as long as the testing described in §7.B.3.e demonstrates insignificant emissions are released during the Cool Down Phase.

- Post Cure Oven #4 and #5 (100% capture efficiency)

The Cool Down Phase of the Post Cure Ovens is not subject to control as long as the testing described in §7.B.4.e demonstrates insignificant emissions are released during the Cool Down Phase.

- Dip Tanks #1, #2, #3, #4, #5, #6, #7, and #8 (98% capture efficiency);
- HTP Glue Line #2 and #3(100% capture efficiency).

2. Emissions from the following equipment shall be captured upon startup as described below and controlled by an RTO system, with a minimum destruction efficiency of 98%. The listed capture and control efficiencies are requirements requested in lieu of additional testing, recordkeeping and monitoring:

- Prime Cure Ovens #125 and #126 (100% capture efficiency);
- Dip Room (secondary enclosure, negative pressure maintained and monitored);
- Mix Rooms #66a, #66b and #73

Mix tanks within the mix rooms (does not include the mixer impeller shaft) shall have no leakage. No leakage is defined as a VOC concentration below 500 ppmv as methane above background.

Local exhaust units inside of the mix rooms shall have an inward direction of air flow when in use.

Construction on the redesigned Mix Room enclosures and mix tanks shall start within 18 months of the issuance of Permit Revision V20639.R05, or by January 8, 2016.
3. Upon startup of each of the following units, emissions from the following equipment shall be controlled in the same fashion as similar existing units, by a dust collection system, which is BACT level control as determined in V20602.R07:

- FEMCO Saw #12, #13, #14, #15, and #16;
- Non-Metallic Trim Saw;
- Acousti-Cap Trim Saw.

4. Upon startup of each of the following storage tanks, emissions from the storage tanks shall be controlled by installation of fixed roof tanks equipped with pressure/vacuum vents, which is BACT level control as determined in the V20639.R05 TSD:

- Above Ground Storage Tank (AST) #7, #8, #9, #10, #11, and #12

5. All natural gas burning equipment is subject to the NOx, SO2, PM10, and fuel standards included in Sections §§6.B.2, 6.B.3, 6.D, 6.E, and 6.F of this permit.

6. RTO #6 and #7 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.

7. Emissions Caps – Nitrogen Oxides (NOx)

[Federally enforceable provision, pursuant to Code 3-3-250 (SIP-approved at 61 FR 15717, 4/9/96).] (Code §3-1-081.A)

a. Permittee shall limit the facility-wide NOx emissions to a rolling 12-month total of less than 100 tons.

b. Monitoring Requirements to Avoid NOx major source status

[Federally enforceable provision, pursuant to Code §3-1-084(8/11/94)] (Code §3-1-081.A)

i. In order to ensure that the NOx emissions cap is not exceeded, permittee shall:

Generate, by the end of the following month, a report of cumulative actual NOx emissions during the preceding calendar month; and

Generate, by the end of the following month, a report of cumulative actual NOx emissions during the preceding twelve calendar months.

ii. Exceeding the NOx emission cap shall constitute a violation of this permit for each day that emissions of the offending pollutant were emitted from any part of the facility during:

The calendar month in which the cap was exceeded; and

Any subsequent calendar month in which the cap continues to be exceeded.
I. V20661.000 Minor-NSR Limitations

[Federally enforceable provision, pursuant to 40 CFR 63 Subpart WWWW]
(Code §3-1-081.A, 7-1-030):

1. Emissions from the following equipment shall be continuously controlled by the applicable management practices listed in Section §6.C.2 and are subject to the compliance requirements listed in Section §7.E.6 of this permit.

   - CR III Washline – Equipment #110A

J. V20661.R02 Minor-NSR Limitations

[Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)]
(Code §3-1-081.A):

1. Emissions from the following equipment shall be captured and controlled in the same fashion as similar existing units, by an RTO system, with a minimum destruction efficiency of 98%:

   - Acousti-Cap Rework Oven #1 and #2

K. VOC Facility-Wide PSD Cap

[Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)]
(Code §3-1-081.A)

Permittee shall limit the facility-wide VOC emissions to a rolling 12-month total of 300 tons.

L. V20602.R07 - PSD-Implied Cap on VOC Emission

[Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)]
(Code §3-1-081.A)

Before commencing any change in the method of operation that will produce an increase in VOC emissions of 40 tpy or more, Permittee shall obtain approval of a significant revision/major modification of this permit. For purposes of this limitation, change in the method of operation includes introduction of new or substitute VOC-containing product formulations, and including any directly associated modifications. However, this requirement is subject to the following limitations:

1. VOC-Containing Material for purposes of this section shall mean those materials that contain VOCs as defined in Pinal County Code §1-3-140.147 except for materials with anticipated use of less than 2,000 tons per year and with a VOC concentration less than 1% by weight.

2. Where the increased emissions occur as a result of emissions with a unit that already falls subject to a capture-and-control requirement, permittee may invoke the benefit of that inherent control and only the net after-control increase shall count with respect to that 40 tpy threshold.

3. Emission changes associated with independent changes in the method of operation need not be aggregated with respect to the 40 tpy threshold. The burden rests with the Permittee to establish that changes in the method of operation are in fact independent and are not directly associated.
4. Permittee shall establish a log of new or substitute volatile product formulations, and unless a new formulation is subject to a permit revision application as described above, shall provide written notice to the Control Officer within 30 days of the introduction of any VOC-containing product that the Permittee anticipates using in excess of a total mass of 20 tons per year.

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

A. Generally

1. These limitations derive from operating permit limitations imposed under current and 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

   \[\text{Federally enforceable provision, pursuant to Code §3-1-084 (8/11/94)}\] (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 | Nominal Minimum Capture %
--- | --- | --- | --- | ---
120A | 123 | PAA vent | 0.4% | 95%
130 | 131 | Foil coater vent | 1.3% | 95%
210 | 211 | #335 Printline vent | 6.6% | 95%
230A | 231 | #7 Printline vent | 9.9% | 95%
240 | 241 | AI Flexcore Machine vent | 0.8% | 95%
250 | 251 | CNF Printing | 0.1% | 95%
260 series | 261 | HRP/HTP lines | 0.6% | 95%
260A | 262 | HRP Glue Line vent | included in #260 | 95%
260B | 261 | HTP Machine vent | included in #260 | 95%
310 | 311 | Tapeline vent | 0.5% | 95%
410E | 418 | Skybond dip tank vent | (Presumed < 1.0%) | 95%
410K | | F660 Dip Tank | < 1% | 95%

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.

---

2 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.
<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Stack #</th>
<th>Stack Description</th>
<th>% VOC Loading to oxidizer³</th>
<th>Nominal Minimum Capture %</th>
</tr>
</thead>
<tbody>
<tr>
<td>270B</td>
<td>272</td>
<td>Corrugated aluminum P/C oven vent</td>
<td>1.2%</td>
<td>95%</td>
</tr>
<tr>
<td>440T/450T/460T</td>
<td></td>
<td>Resin purge/cure &amp; cure ovens</td>
<td>72.1% (nominal)</td>
<td>95%</td>
</tr>
<tr>
<td>440T series</td>
<td>many</td>
<td>Purge/cure oven vents</td>
<td>inc. in 440T/450T/460T</td>
<td>as above</td>
</tr>
<tr>
<td>450T series</td>
<td>many</td>
<td>Purge/cure oven vents</td>
<td>inc. in 440T/450T/460T</td>
<td>as above</td>
</tr>
<tr>
<td>460T series</td>
<td>many</td>
<td>Purge/cure oven vents</td>
<td>inc. in 440T/450T/460T</td>
<td>as above</td>
</tr>
<tr>
<td>470 Series</td>
<td></td>
<td>Corrugated/Graphite Cure Oven Vents</td>
<td>2.4%</td>
<td>99%</td>
</tr>
<tr>
<td>470A</td>
<td>471</td>
<td>Corrug./Graphite oven #1 vent</td>
<td>included in #470 above</td>
<td></td>
</tr>
<tr>
<td>470B</td>
<td>473</td>
<td>Corrug./Graphite oven #4 vent</td>
<td>included in #470 above</td>
<td></td>
</tr>
<tr>
<td>470C</td>
<td>475</td>
<td>Corrug./Graphite oven #5 vent</td>
<td>included in #470 above</td>
<td></td>
</tr>
</tbody>
</table>

b. Required Level of Control

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

c. Required Capture Efficiency

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

3. Control Requirement for Affected Group 3 Emission Units

a. Group 3 Emission Units - Definition

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

<table>
<thead>
<tr>
<th>Emission Stack Unit #</th>
<th>Stack #</th>
<th>Description</th>
<th>%VOC Loading to oxidizer⁴</th>
</tr>
</thead>
</table>

³ 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.

⁴ 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.
Dip room and related emissions

<table>
<thead>
<tr>
<th></th>
<th>72.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>410 Building 66 Dip Room vents 411-1</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>410 Building 66 Dip Room vents 411-2</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>410 Building 66 Dip Room vents 411-4</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>410 Building 66 Dip Room vents 411-5</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>410 Building 66 Dip Room vents 411-6</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>410 Building 66 Dip Room vents 417-2</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>440T Purge/cure oven vents</td>
<td>included in #410 above</td>
</tr>
<tr>
<td>450T Purge/cure oven vents</td>
<td>included in #410 above</td>
</tr>
</tbody>
</table>

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 83% capture requirement as defined above in subparagraph a.

D. 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 RTO 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.

E. 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
b. Controlled by another RTO that is operating within the appropriate temperature and pressure parameters established in this permit.

2. Records shall be kept indicating the date and the time the RTO was shutdown, date and time the RTO was restored, and how process emissions were controlled during the shutdown.

F. RTO Collection System

Negative Pressure Monitoring System; Minimum Negative Pressure Requirement

1. Permittee shall install and operate a pressure differential monitoring system in the trunk of RTO #2, Airex oxidizer #610B, and that monitoring system shall be capable of measuring the differential relative to atmospheric pressure, measured in inches-of-water-column (" w.c."). The system shall include a data recording system, and shall be configured to sample pressure differentials at least once every 15 minutes.

2. Based on a 1-hour average of observed pressure differential values, pressure in the collection duct trunk feeding the Airex oxidizer #610B shall not rise above -1.4" w.c.

G. RTO Operating Requirements

1. Minimum Destruction Efficiency

At a minimum, each RTO shall maintain a destruction efficiency of not less than 98%.

2. Temperature Monitoring System

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

3. Minimum Operating Temperature

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

4. Residence Time

The residence time for each RTO shall be determined as required in §7.D.1.e.
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.

H. Excess Emissions

Other than cure oven emissions occurring during the last 75% of the purge/cure cycle, and this in no way relieves Permittee from controlling emissions from Group 2 units by at least 90%, bypassing emissions from any of the above-scheduled emission units around the oxidizers shall constitute a period of excess emissions.

6. Regulatory Emission Limitations

[mandated by 40 CFR §70.6(a)(1)] (Code §3-1-081.A.2)

A. Allowable Emissions

1. General Limitation

[Code § 3-1-040 approved as a SIP Element at 65 FR79742 (12/20/2000)]

(a) 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.

(b) To the extent a change in material formulation or addition of a process material can produce additional emissions, then that change or addition qualifies as a change in the method of operation.

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

   b. Visibility Limiting Standard
      [Federally enforceable pursuant to PCAQCD Code §2-8-300 (as amended
      5/18/05) approved as a SIP element at 71 FR 15043 (3/27/06)]

      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)]

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

      \[ Y = 1.02X^{0.231}, \] 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)]

      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:

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

      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:

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

\[ E = 1.02Q^{0.769} \]

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. Area Source Standards for Plating and Polishing Operations – CR III Washline
[40 CFR Part 63, Subpart WWWW, 40 CFR Part 63.11507.g]

a. Minimize bath agitation when removing any parts processed in the tank, as
practicable except when necessary to meet part quality requirements.

b. Maximize the draining of bath solution back into the tank, as practicable, by
extending drip time when removing parts from the tank; using drain boards (also
known as drip shields); or withdrawing parts slowly from the tank, as
practicable.

c. Optimize the design of barrels, racks, and parts to minimize dragout of bath
solution (such as by using slotted barrels and tilted racks, or by designing parts
with flow-through holes to allow the tank solution to drip back into the tank), as
practicable.

d. Use tank covers, if already owned and available at the facility, whenever
practicable.

e. Minimize or reduce heating of process tanks, as practicable (e.g., when doing so
would not interrupt production or adversely affect part quality).

f. Perform regular repair, maintenance, and preventive maintenance of racks,
barrels, and other equipment associated with affected sources, as practicable.

g. Minimize bath contamination, such as through the prevention or quick recovery
of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning
of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as
practicable.

h. Maintain quality control of chemicals, and chemical and other bath ingredient
concentrations in the tanks, as practicable.

i. Perform general good housekeeping, such as regular sweeping or vacuuming, if
needed, and periodic washdowns, as practicable.

j. Minimize spills and overflow of tanks, as practicable.

k. Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

l. Perform regular inspections to identify leaks and other opportunities for
pollution prevention.

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
[Federally enforceable pursuant to PCAQCD Code §3-1-081 (as amended 9/5/01) approved as a SIP element at 66 FR 63166 (12/5/01)]

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

2. Other Fuels
   (Code §§3-1-081.G, 5-23-1010.F)
   a. 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. As provided for in Code §5-15-630.B the provisions of these standards shall not apply to any cold solvent degreaser/dip with a liquid surface area of 1 square foot or less, or with a
maximum capacity of 1 gallon or less except that these shall be covered when work is not being processed.

2. 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%.

3. 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 commissioning of new or modified equipment.

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. Compliance with HAP Emission Cap

To comply with the HAPs emissions cap as specified in Section 4.E.1 of this permit, Permittee shall by the end of the following month calculate actual 12 month rolling emissions and a 12-month rolling emissions “budget” ending with the preceding month. This emission budget shall be based on the past 10 months of historical emissions data and the amount of emissions (or emissions budget) that could be allowable in the upcoming 2 months (including the current month) without exceeding the less than 10/25 tons per year HAPs emission cap.
2. Compliance with NOx Emission Cap

To comply with the NOx emissions cap as specified in Section 4.H.7 of this permit, Permittee shall by the end of the following month calculate actual 12 month rolling emissions and a 12-month rolling emissions “budget” ending with the preceding month. This emission budget shall be based on the past 10 months of historical emissions data and the amount of emissions (or emissions budget) that could be allowable in the upcoming 2 months (including the current month) without exceeding the less than 100 tons per year NOx emission cap.

3. Compliance with the PSD-implied Cap on VOC Emission Changes

Permittee shall implement a system to track VOC emission changes resulting from changes in or additions of process materials that will emit VOCs within the facility.

a. Any new or modified VOC-containing material which, based upon projected usage rates, will result in a VOC emissions increase of 1 tpy should be entered into a tracking system.

b. For new/modified VOC-containing materials, which based upon projected usage rates will be used at a rate of less than 20 tpy of total mass per year, purchasing records should be logged on a monthly basis for at least 2 years after introduction. The mass of directly associated product changes should be treated as one mass. Emissions should be reported annually as part of the VOC inventory, based on (permittee's choice) of purchasing records or records of actual use.

c. For new/modified VOC-containing materials, which based upon projected usage rates will be used at a rate of more than 20 tpy of total mass per year, records of actual use should be logged on a monthly basis for at least 2 years after introduction. Corresponding product-specific emissions should be calculated on a monthly basis, and product-specific emissions should be aggregated on a monthly basis for at least 2 years after introduction. Emission calculations may invoke the limitations of the underlying PSD-implied Cap spelled out in this permit. The emissions of directly associated product changes should be treated as one total. Emissions should be reported annually as part of the VOC inventory, based on purchasing records or records of actual use.

4. Demonstration of Insignificant Emissions

a. Permittee shall submit test protocols to the District for the tests described in this section at least 60 days before the test.

b. Permittee shall provide notice of the test to the District at least 15 days prior to running the test.

c. A copy of the test report shall be submitted to the District for approval within 45 days after the test.

d. Purge to Cure Oven Transfer
i. Permittee shall conduct testing within 60 days after achieving maximum production, but no later than 180 days after startup of the separated Purge and Cure Ovens to verify that the emissions during block transfer are insignificant.

ii. Permittee shall remove sample cores from the purge oven right after the completion of purge cycle, place the sample purged core on a scale for a period equal to the longest transit period any core may be subject to, and determine the change in core weight during that time.

iii. The change in core weight shall be recorded and the transit VOC emissions shall be calculated by assuming all weight loss is the result of VOC evaporation from the purged core. In case no measurable weight loss is observed, PCAQCD will consider it a sufficient demonstration that the transit emission is insignificant.

iv. Permittee shall test at least one representative core dipped with each dominant resin mixture (R169 and Clark) for verification of insignificant emissions during block transfer. In case measurable weight loss is recorded during the initial test, two additional cores from each resin shall be tested and the average weight loss from each set of 3 cores shall be used to evaluate block transfer emissions.

v. Should the testing not demonstrate insignificant emissions the Permittee shall develop and submit a compliance plan to the District within 45 days of the test date. Submittal of a compliance plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

e. Cure Ovens – Phase 3, “Cool Down”

i. Permittee shall conduct testing within 60 days after achieving maximum production, but no later than 180 days after startup of the separated Purge and Cure Ovens to verify that the “Cool Down” phase emissions are insignificant.

ii. The test will involve measuring the VOC concentration and flow rate being discharged to the atmosphere and shall utilize EPA Method 320.

iii. Permittee shall test at least one representative core dipped with each dominant resin mixture (R169 and Clark) for verification of insignificant emissions during the cool down phase.

iv. Should the testing not demonstrate insignificant emissions the Permittee shall develop and submit a compliance plan to the District within 45 days of the test date. Submittal of a compliance plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

5. Demonstration of Capture Efficiency
a. Permittee shall submit test protocols to the District for the above tests at least 60 days before the test.

b. Permittee shall provide notice of the test to the District at least 15 days prior to running the test.

c. A copy of the test report shall be submitted to the District for approval within 45 days after the test.

d. Dip Tank Capture Efficiency

i. Permittee shall conduct testing within 60 days after achieving maximum production, but no later than 180 days after startup of the redesigned dip room to demonstrate the capture efficiency of the Dip Tanks.

ii. Testing shall utilize EPA Method 204.

iii. Permittee shall test at least one dip tank with Clark resin mixture, which has a higher VOC and HAP content than R169 resin, for verification of dip tank capture efficiency.

iv. Should the testing not demonstrate at least 98% capture efficiency as required by §4.H.1 the Permittee shall develop and submit a compliance plan to the District within 45 days of the test date. Submittal of a compliance plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

e. Dip Room Negative Pressure Demonstration

i. Permittee shall conduct testing within 60 days after achieving maximum production, but no later than 180 days after startup, of the redesigned Dip Room to demonstrate that the dip room has been designed and built to maintain the room at a negative pressure, thereby allowing all the emissions captured by this secondary enclosure to be routed to an RTO.

ii. Testing shall verify the direction of air flow through all natural draft openings is inward. The continuous inward flow of air shall be verified using streamers, smoke tubes, or tracer gases. The direction of air flow shall be monitored for at least 1 hour, with checks made no more than 10 minutes apart.

iii. Should the testing not demonstrate the ability to maintain a negative pressure the Permittee shall develop and submit a compliance plan to the District within 45 days. Submittal of a compliance plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

f. Mix Rooms VOC Capture Demonstration
i. Permittee shall conduct testing within 60 days after achieving maximum production, but no later than 180 days after startup of the redesigned Mix Rooms to demonstrate that each mix room has tanks or enclosures designed and built to route emissions to a RTO.

ii. Testing for the mix tank lids (does not include the mixer impeller shaft) shall utilize EPA Method 21 to confirm there is no leakage when the tanks are closed. No leakage is defined as a VOC concentration below 500 ppmv as methane above background.

iii. Testing for the local exhaust units inside the mix rooms shall verify the direction of air flow is inward when in use. The continuous inward flow of air shall be verified using streamers, smoke tubes, or tracer gases. The direction of air flow shall be monitored for at least 1 hour, with checks made no more than 10 minutes apart.

iv. Should the testing identify leaks on the mix tanks or demonstrate the inability to maintain inward flow at the local exhaust units the Permittee shall develop and submit a compliance plan to the District within 45 days. Submittal of a compliance plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

g. HTP Glue Lines Capture Efficiency

i. Permittee shall conduct testing within 60 days after achieving maximum production, but no later than 180 days after startup, of the HTP Glue Line #3 to demonstrate the capture efficiency of the unit.

ii. Permittee shall use EPA Method 204.

iii. Should the testing not demonstrate the 100% capture efficiency as required by §4.H.1 the Permittee shall develop and submit a compliance plan to the District within 45 days of the test date. Submittal of a compliance plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

h. Permanent Total Enclosure – Negative Pressure Verification

i. Permittee shall conduct a performance test to verify that the flow at each permanent total enclosure is negative within 60 days after achieving maximum production rate at each enclosure, but no later than 180 days after commissioning of each enclosure emission unit.

ii. Permittee shall use EPA Method 204.

iii. Should the testing not demonstrate the 100% capture efficiency as required the Permittee shall develop and submit a compliance plan to the District within 45 days of the test date. Submittal of a compliance
plan does not relieve the Permittee from any other obligations or potential liability associated with excess emissions.

C. Other Compliance Limitations

[Mandated by 40 CFR §70.6(a)(3)]

1. Testing Requirement for Existing Group 1 Emission Units - except 335 Printline #1 and #7 Printline.

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. 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.

b. 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.

2. Non-instrumental emissions monitoring - VOC Emissions; Cap Compliance Verification

a. Permittee shall maintain a list of all VOC-containing materials used at the facility in the manufacturing process. The list shall contain the following information:

i. Name of the VOC containing material;

ii. Process or equipment where the VOC-containing product is being used;

iii. Manufacturer;

iv. VOC content.

b. To demonstrate compliance with the VOC emission cap under §5.H, the Permittee shall maintain calendar-month records, updated within 15 days of the close of each calendar month, containing the following information:

i. Name of VOC-containing product and manufacturer;
ii. Process or equipment where the VOC-containing product is being used;

iii. VOC content (lb/gal, lb/lb or % by weight);

iv. Source for VOC content data (e.g., MSDS, formulation sheet, container, etc.);

v. Monthly usage of VOC containing product (gal or lb);

vi. Percentage and pounds of VOC retained in the product;

vii. Percentage and pounds of VOC captured in the RTOs;

viii. Percentage and pounds of VOC controlled by the RTOs;

ix. Percentage and pounds of VOC emitted to the atmosphere.

c. Permittee shall maintain all the supporting documentation, including but not limited to calculations, log sheets, MSDS sheets, emission factors, formulations and measurements used to determine VOC emissions and make it readily accessible to the Control Officer upon request.

i. Permittee shall annually review and update the supporting documentation to ensure its accuracy. Records of when this review took place and the changes made shall be kept and made accessible to the Control Officer upon request.

d. Permittee shall maintain calculations of the 12-month rolling total VOC emissions to ensure that the emission cap defined elsewhere in this permit has not been exceeded.

3. 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 basis, all RTOs shall be visually inspected for proper seating of the valves, and for accumulation of resin buildup in the valves. Permittee shall keep records of such inspections.

d. Negative Pressure Monitoring System; Negative Pressure Requirement – applicable 180 days after startup of the redesigned dip room.
i. Permittee shall install and operate a continuous negative pressure monitoring system, consisting of pressure sensors / transducers, at various locations inside the duct system associated with the RTO units. The number and location of sensors / transducers must be strategically selected to monitor the negative pressure at each VOC pickup point. Negative pressure must be present at each VOC pickup point.

ii. The monitoring system shall be linked to an alarm system that notifies the operator when the pressure is no longer negative and is interlocked so that additional material cannot be added to the affected process until negative pressure is restored.

iii. Permittee shall install pressure sensors / transducers that are capable of continuously monitoring negative pressure in the Dip Room. The monitoring device shall be connected to an alarm system capable of notifying the operator when the pressure is no longer negative. Upon notification of lack of negative pressure no additional material shall be added to the process until negative pressure is restored.

iv. Except for planned shutdowns, as defined in this permit, or periods where the Permittee can demonstrate thru operational records that no VOC emitting operations were being conducted in the associated enclosure or room, negative pressure deviations shall be reported pursuant to §8.A

e. Negative Pressure; Maintenance System

i. All Permanent Total Enclosures shall be equipped with self-closing doors, unless the doors are considered overhead doors for moving product in and out of the production area.

f. Dip Room Tank Requirement

i. The Dip Tanks lids shall be equipped with seals to prevent leakage when closed and shall be closed during normal operating conditions, applicable upon startup of the redesigned dip room.

g. Mix Room Tank Requirements

i. The Mix Tank lids (except mixer shaft openings) shall be equipped with seals to prevent leakage when closed and shall be closed except when being accessed, applicable upon startup of the redesigned mix room.

ii. The Mix Tanks while mixing resin or when the lids are open with resin present shall be placed near local exhaust units inside the mix room, applicable upon startup of the redesigned mix room. Mix Tanks that have been emptied and cleaned or that have closed lids (not mixing resin) are not required to remain near the local exhaust units.
h. Calibration and Testing of Negative Pressure System – applicable 180 days after startup of the redesigned dip room.

i. On at least an annual basis, all negative pressure sensors / transducers shall be calibrated per the manufacturer instructions. Permittee shall keep records of such calibration.

ii. Permittee shall annually demonstrate negative flow via testing at 20% of the VOC pickup points, excluding ovens. Testing shall verify the direction of air flow through all natural draft openings is inward when in use. The continuous inward flow of air shall be verified using streamers, smoke tubes, or tracer gases. The direction of air flow shall be monitored for at least 1 hour, with checks made no more than 10 minutes apart.

4. Cure Oven Cool Down Phase monitoring

a. Permittee shall install and operate a Data Acquisition Handling System (DAHS) that records the number of minutes that each Cure and Post Cure Oven spends in “Cool Down” phase and “Cure” phase.

D. Compliance with Minor-NSR Limitations

[Mandated by 40 CFR §70.6(a)(3)]

1. RTO Testing - Destruction Efficiency Verification

a. Permittee shall conduct a performance test to verify the destruction efficiency of any RTO within 60 days after achieving maximum production rate at which the RTO unit will be operated, but no later than 180 days after commissioning using the following EPA-approved methods:

EPA Methods 18 and 25, 25A or 25B for total VOCs,
EPA Method 323 for formaldehyde
EPA SW-846 for phenol

b. Permittee shall submit test protocols to the District for the above tests at least 60 days before the test.

c. Permittee shall provide notice of the test to the District at least 15 days prior to running the test.

d. A copy of the test report shall be submitted to the District for approval within 45 days after the test.

e. 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.
f. The VOC destruction efficiency tests shall be repeated annually, within 10 to 14 months after the previous test of each RTO. The annual destruction efficiency tests shall be conducted using the following methods;
   - EPA Method 18 and EPA Method 25, 25A, or 25B for total VOCs

g. The formaldehyde and phenol destruction efficiency tests shall be repeated once every five years, within 58 to 62 months after the previous test of each RTO. The quinquennial destruction efficiency tests shall be conducted using the following methods;
   - EPA Method 323 for formaldehyde
   - EPA SW-846 for phenol

2. RTO 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 RTO units until individual 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. Compliance Assurance Monitoring (CAM) for RTOs

a. Indicators

   Combustion zone temperature and exhaust gas flow rate for each RTO shall be indicators of the RTOs performance.

   Leak checks shall be indicators of RTO performance for RTO #5 and RTO #6.

b. Permittee shall install a thermocouple or RTD on each RTO to monitor the combustion zone temperature 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 handling system (DAHS);
   ii. Annually calibrate the thermocouple or RTD.

c. Permittee shall install a differential pressure flow device or fan motor ammeter at each RTO 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 handling system (DAHS);

ii. Annually calibrate the differential pressure flow device or ammeter.

d. Permittee shall perform leak checks on the positive pressure section from the fan to the rotary diverter valve on RTO #5 and RTO #6.

i. Daily visual and odor checks shall be performed when RTO #5 and RTO #6 are operating;

ii. Within 48 hours of odor detection or visual observation of a potential leak a portable VOC analyzer shall be utilized to assess the identified area as described below.

iii. Quarterly a portable VOC analyzer shall be utilized to assess the area from the fan to the rotary diverter valve on RTO #5 and RTO #6 as described below.

iv. Leaks identified with the portable VOC analyzer shall be addressed within 7 calendar days if parts are available or within 30 calendar days if parts must be ordered or manufactured.

v. The portable VOC analyzer shall be calibrated to approximately 100 ppmv. Measurements shall be taken approximately 3 inches from seals, connection points and identified potential leak spots from the fan to the rotary diverter valve for RTO #5 and RTO #6.

vi. VOC concentration measurements below 10 ppmv will be considered 100% capture or leak free.

e. Except during planned RTO shutdown periods, and controlled engineering evaluations as defined in §5.E, 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.

iii. Missing up to a three daily leak checks within a quarter or missing a quarterly leak check in a calendar year for RTO #5 or RTO #6.

f. At least 60 days before the testing required for each RTO, Permittee shall prepare and submit to PCAQCD for approval a testing plan as required in §7.D 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.

g. Any excursion shall trigger corrective action to be initiated. All excursions will be documented and reported.

h. 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.

i. 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.

j. Malfunction of any DAHS, 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.

k. 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.

l. 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.

m. Logs, excursion observations, exceedance observations and summaries of planned shutdowns shall all be subject to the recordkeeping and reporting requirements under the permit.

n. 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 NOx emissions based on the fuel records. For these calculations, Permittee shall use emission factors from the specific equipment manufacturer, if available, or otherwise, AP-42 or other factors as approved by the Director.

2. 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.

3. 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 emissions 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 on the baghouse and exhaust fans. If visible emissions 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 emissions 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.

4. NSPS monitoring - Volatile Organic Storage Tanks

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.

5. NESHAP compliance – Chromium Process

Pursuant to NESHAP Subpart WWWWWW, for CR III Washline, Permittee shall:

a. Annually document continuous compliance with the applicable management practices listed in Section §6.C.2 of this permit via the certification required by Section 8.C of this permit and/or;

b. Document deviations from the applicable management practices listed in Section §6.C.2 of this permit via the reporting requirements listed in Section 8.A of this permit.

6. Non-instrumental emissions monitoring - Solvent Cleaning VOCs

To verify that solvent changes do not inadvertently cause a net significant increase in VOC emissions, Permittee shall keep the following records:

a. Type and total amount of make-up solvent used in all solvent cleaning operations.
b. Determination of emissions from wipe cleaning, which may be made on a facility-wide rather than a per department basis.

c. Amount of volatile organic compound(s) and of non-precursors (exempt) organic compound(s) contained in each solvent, expressed in pounds per gallon or grams per liter. Such records shall be retained for two years and shall be made available to the Control Officer upon request.

8. Other Reporting Obligations

A. Deviation Reporting Requirements

(Mandated by 40 CFR §§70.6(a)(3)(iii)(B)) (Code §3-1-083.A.3.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 Enforcement Office (AIR 5), 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;

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

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©)] (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 exclusions⁷, 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:

⁷ See the Technical Support Document for an explanation of the exclusions.
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.

L. Permit Revisions

[**Mandated by 40 CFR §70.7(d), 70.7(e)**] (Code Chapter 3, Article 2, specifically Code §3-1-081.A.8.c)

1. This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

2. Permit amendments, permit revisions, and changes made without a permit revision shall conform to the requirements in Article 2, Chapter 3, of the Code.

M. Permit Re-opening

[**Mandated by 40 CFR §§70.6(a)(6)(iii), 70.7(f), 70.7(g)**] (Code §3-1-087.)

1. This permit shall be reopened if:

a. Additional applicable requirements under the Clean Air Act (1990) become applicable to this source, and on that date, this permit has a remaining term of three or more years. Provided, that no such reopening under this subparagraph is required if the effective date of the newly applicable requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to Code §3-1-089.C.

b. The Control Officer determines that it contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of it;

c. The Control Officer determines that it needs to be revised or revoked to assure compliance with the applicable requirements; or

d. The EPA Administrator finds that cause exists to terminate, modify, or revoke and reissue this permit.

2. If this permit must be reopened or revised, the District will notify the permittee in accord with Code §3-1-087.A.3.

N. Record Retention

[**Mandated by 40 CFR §70.6(a)(3)(ii)(B)**] (Code §3-1-083.A.2.b)
Permittee shall retain for a period of five (5) years all documents required under this permit, including reports, monitoring data, support information, calibration and maintenance records, and all original recordings or physical records of required continuous monitoring instrumentation.

O. Scope of License Conferred

[mandated by 40 CFR §70.6(a)(6)(iv)] (Code §3-1-081.A.8.d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

P. Excess Emission Reports; Emergency Provision

[mandated by 40 CFR §70.6(g)] (Code §3-1-081.E, Code §8-1-030, A.R.S. §49-514)

1. To the extent Permittee may wish to offer a showing in mitigation of any potential penalty, underlying upset events resulting in excess emissions shall reported as follows:

a. The permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. Such report shall be in two parts:

   i. Notifications by telephone or facsimile within 24 hours or the next business day, whichever is later, of the time when the owner or operator first learned of the occurrence of excess emissions, including all available information required under subparagraph b. below.

   ii. Detailed written notification within 3 working days of the initial occurrence containing the information required under subparagraph b. below.

b. The excess emissions report shall contain the following information:

   i. The identity of each stack or other emission point where the excess emissions occurred.

   ii. The magnitude of the excess emissions expressed in the units of the applicable limitation.

   iii. The time and duration or expected duration of the excess emissions.

   iv. The identity of the equipment from which the excess emissions occurred.

   v. The nature and cause of such emissions.

   vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.

   vii. The steps that were or are being taken to limit the excess emissions. To the extent this permit defines procedures governing operations during periods of start-up or malfunction, the report shall contain a list of steps taken to comply with this permit.
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 8.D Annual emissions inventory
C. Section 10.F Posting of Permit

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

<table>
<thead>
<tr>
<th>EQUIP. NO.</th>
<th>EQUIPMENT NAME</th>
<th>MANUFACTURER/DATE</th>
<th>SERIAL NO.</th>
<th>MODEL NO.</th>
<th>SIZE/CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>110A</td>
<td>CR III Washline</td>
<td>Hexcel/1994</td>
<td>NA</td>
<td>NA</td>
<td>110 fpm</td>
</tr>
<tr>
<td>120A</td>
<td>PAA/Primer Line</td>
<td>2007</td>
<td>NA</td>
<td>NA</td>
<td>3 MMBTU/HR</td>
</tr>
<tr>
<td>120B</td>
<td>PAA Acid Fume Scrubber</td>
<td>Tri-Mer Corp/1995</td>
<td>3130</td>
<td>F/S-1</td>
<td>2000 cfm</td>
</tr>
<tr>
<td>130</td>
<td>Foil Coater</td>
<td>Hexcel/1995</td>
<td>NA</td>
<td>NA</td>
<td>40 fpm</td>
</tr>
<tr>
<td>140C</td>
<td>Continuous Carbon Corrugator #1</td>
<td>Rosenthal Sheeter/1996</td>
<td>80403</td>
<td>WM-3-HHEC-24</td>
<td>25 fpm</td>
</tr>
<tr>
<td>140D</td>
<td>F35 Corrugator</td>
<td>Hexcel/1994</td>
<td>NA</td>
<td>NA</td>
<td>5 fpm</td>
</tr>
<tr>
<td>140E</td>
<td>F50 Corrugator</td>
<td>Hexcel/1994</td>
<td>NA</td>
<td>NA</td>
<td>5 fpm</td>
</tr>
<tr>
<td>140F</td>
<td>Continuous Carbon Corrugator #2</td>
<td>Rosenthal Sheeter/1998</td>
<td>80565</td>
<td>WM-3-HHC-24</td>
<td>25 fpm</td>
</tr>
<tr>
<td>200A</td>
<td>Mix Room 66a</td>
<td>Hexcel</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>200B</td>
<td>Mix Room 66b</td>
<td>Hexcel</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>200C</td>
<td>Mix Room 73</td>
<td>Hexcel</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>210</td>
<td>#335 Printline</td>
<td>Hexcel/1968</td>
<td>NA</td>
<td>NA</td>
<td>1.6 MMBTU/HR</td>
</tr>
<tr>
<td>210A</td>
<td>#335 Printline</td>
<td></td>
<td></td>
<td></td>
<td>1.6 MMBTU/HR</td>
</tr>
<tr>
<td>230A</td>
<td>#7 Printline</td>
<td>Hexcel/1966</td>
<td>NA</td>
<td>NA</td>
<td>1.2 MMBTU/HR</td>
</tr>
<tr>
<td>230B</td>
<td>Aluminum Printline</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>1.2 MMBTU/HR</td>
</tr>
<tr>
<td>240</td>
<td>Al Flexcore Machine #1</td>
<td>Hexcel/1994</td>
<td>NA</td>
<td>NA</td>
<td>45,000 BTU/HR</td>
</tr>
<tr>
<td>240A</td>
<td>Al Flexcore Machine #2</td>
<td></td>
<td></td>
<td></td>
<td>50,000 BTU/HR</td>
</tr>
<tr>
<td>250</td>
<td>CNF Machine</td>
<td>Hexcel/1993</td>
<td>NA</td>
<td>NA</td>
<td>1000 °F</td>
</tr>
<tr>
<td>260A</td>
<td>HRP Glue Line</td>
<td>Hexcel/1975</td>
<td>NA</td>
<td>NA</td>
<td>30 fpm</td>
</tr>
<tr>
<td>260B</td>
<td>HTP Glue Line #1</td>
<td>Hexcel/2000</td>
<td>NA</td>
<td>NA</td>
<td>30 fpm</td>
</tr>
<tr>
<td>260D</td>
<td>HTP Glue Line #2</td>
<td>Wright Industries/2008</td>
<td>NA</td>
<td>NA</td>
<td>30 fpm</td>
</tr>
<tr>
<td>260E</td>
<td>HTP Glue Line #3</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>30 fpm</td>
</tr>
<tr>
<td>270A</td>
<td>Aluminum Corrugator</td>
<td>La Young Co./1970</td>
<td>27505</td>
<td>NA</td>
<td>10-15 fpm</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>270B</td>
<td>Aluminum Corrugator P/C Oven</td>
<td>Mayberry/1997</td>
<td>NA</td>
<td>NA</td>
<td>1.6 BTU/HR</td>
</tr>
<tr>
<td>280A</td>
<td>Graphite/HRP Printing &amp; Layup</td>
<td>1994</td>
<td>NA</td>
<td>NA</td>
<td>Various layup tables</td>
</tr>
<tr>
<td>280B</td>
<td>Graphite/HRP Roll Coater</td>
<td>Black Brow./1996</td>
<td>196321</td>
<td>NA</td>
<td>15 fpm</td>
</tr>
<tr>
<td>280C</td>
<td>Graphite/HRP Roll Coater</td>
<td>Black Bros./1997</td>
<td>200985</td>
<td>NA</td>
<td>15 fpm</td>
</tr>
<tr>
<td>310</td>
<td>Tapeline (Steec)</td>
<td>Eclipse/1977</td>
<td>NA</td>
<td>NA</td>
<td>375 °F</td>
</tr>
<tr>
<td>310A</td>
<td>Skin Stick Machine #2</td>
<td></td>
<td></td>
<td></td>
<td>0.8 MM BTU/HR</td>
</tr>
<tr>
<td>410A</td>
<td>Dip Tank #1 (R-169)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410B</td>
<td>Dip Tank #2 (R-169)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410C</td>
<td>Dip Tank #3 (R-169)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410D</td>
<td>Dip Tank #4 (Clark)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410E</td>
<td>Dip Tank #5 (Clark)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410F</td>
<td>Dip Tank #6 (Skybond)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410G</td>
<td>Dip Tank #7 (F-124)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410H</td>
<td>Dip Tank #8 (F-660)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410I</td>
<td>Dip Tank #9</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410B-T</td>
<td>Dip Tank Center</td>
<td>Hexcel/1966</td>
<td>NA</td>
<td>NA</td>
<td>1500 Gallons</td>
</tr>
<tr>
<td>410C-T</td>
<td>Dip Tank South (2)</td>
<td>Hexcel/1982</td>
<td>NA</td>
<td>NA</td>
<td>1000 Gallons</td>
</tr>
<tr>
<td>410D-T</td>
<td>Dip Tank East</td>
<td>Southwest/1984</td>
<td>84-616</td>
<td>NA</td>
<td>4388 Gallons</td>
</tr>
<tr>
<td>410E-T</td>
<td>Skybond Dip Tank</td>
<td>Skybond/1995</td>
<td>NA</td>
<td>NA</td>
<td>300 Gallons</td>
</tr>
<tr>
<td>410F-T</td>
<td>Dip Room Blow Out Rack</td>
<td>Hexcel/1985</td>
<td>NA</td>
<td>NA</td>
<td>3000 cfm</td>
</tr>
<tr>
<td>410G-T</td>
<td>F124 Dip Tank</td>
<td>Hexcel 2009</td>
<td>NA</td>
<td>NA</td>
<td>500 Gallons</td>
</tr>
<tr>
<td>410H-T</td>
<td>Northeast Dip Tank</td>
<td>Hexcel/1966</td>
<td>NA</td>
<td>NA</td>
<td>4000 Gallons</td>
</tr>
<tr>
<td>410K-T</td>
<td>F660 Dip Tank</td>
<td>2009</td>
<td>NA</td>
<td>NA</td>
<td>300 gallons</td>
</tr>
<tr>
<td>410L-T</td>
<td>R169 Dip Tank #2</td>
<td>2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>430</td>
<td>Building 73 Spray Booth</td>
<td>Hexcel/1973</td>
<td>NA</td>
<td>NA</td>
<td>5000 cfm</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>--------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>440A</td>
<td>Cure Oven #1 (Single Oven)</td>
<td>Young &amp; Bertke /1994</td>
<td>NA</td>
<td>NA</td>
<td>26 HP</td>
</tr>
<tr>
<td>440B</td>
<td>Cure Oven #2 (Single Oven)</td>
<td>Young &amp; Bertke /1994</td>
<td>NA</td>
<td>NA</td>
<td>26 HP</td>
</tr>
<tr>
<td>440C</td>
<td>Cure Oven #3 (Single Oven)</td>
<td>Southwest Systems /1998</td>
<td>NA</td>
<td>NA</td>
<td>30 HP</td>
</tr>
<tr>
<td>440D</td>
<td>Cure Oven #4 (Single Oven)</td>
<td>Southwest Systems /1998</td>
<td>NA</td>
<td>NA</td>
<td>30 HP</td>
</tr>
<tr>
<td>440E</td>
<td>Cure Oven #5 (Single Oven)</td>
<td>Southwest Systems /1999</td>
<td>NA</td>
<td>NA</td>
<td>30 HP</td>
</tr>
<tr>
<td>440F</td>
<td>Cure Oven #6 (Single Oven)</td>
<td>Southwest Systems /1999</td>
<td>NA</td>
<td>NA</td>
<td>30 HP</td>
</tr>
<tr>
<td>440G</td>
<td>Cure Oven #7 (Single Oven)</td>
<td>Southwest Systems /1999</td>
<td>NA</td>
<td>NA</td>
<td>30 HP</td>
</tr>
<tr>
<td>440H</td>
<td>Cure Oven #8 (Single Oven)</td>
<td>2006</td>
<td>NA</td>
<td>NA</td>
<td>30 HP</td>
</tr>
<tr>
<td>440I</td>
<td>Cure Oven #9 (Double Oven)</td>
<td>2006</td>
<td></td>
<td></td>
<td>4.80 MMBtu/hr</td>
</tr>
<tr>
<td>440J</td>
<td>Cure Oven #10 (Double Oven)</td>
<td>2007</td>
<td></td>
<td></td>
<td>4.80 MMBtu/hr</td>
</tr>
<tr>
<td>440K</td>
<td>Cure Oven #11 (Double Oven)</td>
<td>2008</td>
<td></td>
<td></td>
<td>4.80 MMBtu/hr</td>
</tr>
<tr>
<td>440L</td>
<td>Cure Oven #12 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440M</td>
<td>Cure Oven #13 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440N</td>
<td>Cure Oven #14 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440O</td>
<td>Cure Oven #15 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440P</td>
<td>Cure Oven #16 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440Q</td>
<td>Cure Oven #17 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440R</td>
<td>Cure Oven #18 (Double Oven)</td>
<td>2009</td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------</td>
<td>---------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>440S</td>
<td>Cure Oven #19 (Double Oven)</td>
<td></td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440T</td>
<td>Cure Oven #20 (Double Oven)</td>
<td></td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440U</td>
<td>Cure Oven #21 (Double Oven)</td>
<td></td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440V</td>
<td>Cure Oven #22 (Double Oven)</td>
<td></td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>440W</td>
<td>Cure Oven #23 (Double Oven)</td>
<td></td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>4440X</td>
<td>Cure Oven #24 (Double Oven)</td>
<td></td>
<td></td>
<td></td>
<td>100 HP</td>
</tr>
<tr>
<td>441</td>
<td>Cooling Lane</td>
<td></td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>440A-T</td>
<td>Purge/Cure Oven #7 (single)</td>
<td>Southwest/1984</td>
<td>84-613</td>
<td>NA</td>
<td>23 HP</td>
</tr>
<tr>
<td>440F-T</td>
<td>Purge/Cure Oven #12 (single)</td>
<td>Southwest/1986</td>
<td>86-222</td>
<td>NA</td>
<td>26 HP</td>
</tr>
<tr>
<td>440H-T</td>
<td>Purge/Cure Oven #14 (single)</td>
<td>Young &amp; Bertke/1994</td>
<td>NA</td>
<td>NA</td>
<td>26 HP</td>
</tr>
<tr>
<td>440I-T</td>
<td>Purge/Cure Oven #15 (single)</td>
<td>Young &amp; Bertke/1994</td>
<td>NA</td>
<td>NA</td>
<td>26 HP</td>
</tr>
<tr>
<td>440J-T</td>
<td>Purge/Cure Oven #16 (single)</td>
<td>Young &amp; Bertke/1994</td>
<td>NA</td>
<td>NA</td>
<td>26 HP</td>
</tr>
<tr>
<td>440K-T</td>
<td>Purge/Cure Oven #17 (single)</td>
<td>Southwest Systems/1998</td>
<td>NA</td>
<td>NA</td>
<td>50 HP</td>
</tr>
<tr>
<td>440L-T</td>
<td>Purge/Cure Oven #18 (single)</td>
<td>Southwest Systems/1998</td>
<td>NA</td>
<td>NA</td>
<td>50 HP</td>
</tr>
<tr>
<td>440M-T</td>
<td>Purge/Cure Oven #19 (single)</td>
<td>Southwest Systems/1999</td>
<td>NA</td>
<td>NA</td>
<td>50 HP</td>
</tr>
<tr>
<td>440N-T</td>
<td>Purge/Cure Oven #20 (single)</td>
<td>Southwest Systems/1999</td>
<td>NA</td>
<td>NA</td>
<td>50 HP</td>
</tr>
<tr>
<td>440P-T</td>
<td>Purge/Cure Oven #21 (single)</td>
<td>Southwest Systems/1999</td>
<td>NA</td>
<td>NA</td>
<td>50 HP</td>
</tr>
<tr>
<td>450A</td>
<td>Purge Oven #1</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>450B</td>
<td>Purge Oven #2</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>450C</td>
<td>Purge Oven #3</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>450D</td>
<td>Purge Oven #4</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>450E</td>
<td>Purge Oven #5</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>450F</td>
<td>Purge Oven #6</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>450G</td>
<td>Purge Oven #7</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>450H</td>
<td>Purge Oven #8</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>38 HP</td>
</tr>
<tr>
<td>457-T</td>
<td>Purge/Cure Oven #22 (single)</td>
<td>2006</td>
<td>NA</td>
<td></td>
<td>50 HP</td>
</tr>
<tr>
<td>458-T</td>
<td>Purge/Cure Oven #23 (double)</td>
<td>2006</td>
<td>NA</td>
<td>NA</td>
<td>100 HP</td>
</tr>
<tr>
<td>459-T</td>
<td>Purge/Cure Oven #24 (quad)</td>
<td>2007</td>
<td>NA</td>
<td>NA</td>
<td>4.8 MMBtu/hr</td>
</tr>
<tr>
<td>460A</td>
<td>Prime Cure Oven #121 (single)</td>
<td>Southwest/1968</td>
<td>82-22</td>
<td>NA</td>
<td>2.0 MMBTU/HR</td>
</tr>
<tr>
<td>460B</td>
<td>Prime Cure Oven #122 (single)</td>
<td>Mayberry/1998</td>
<td>97-31</td>
<td>NA</td>
<td>2.0 MMBTU/HR</td>
</tr>
<tr>
<td>460C</td>
<td>Post Cure Oven #4 (single)</td>
<td>Hexcel Asset #7376</td>
<td></td>
<td></td>
<td>4.0 MMBTU/HR</td>
</tr>
<tr>
<td>460D</td>
<td>Prime Cure Oven #123 (single)</td>
<td></td>
<td></td>
<td></td>
<td>2.0 MMBTU/HR</td>
</tr>
<tr>
<td>460E</td>
<td>Prime Cure Oven #124 (single)</td>
<td></td>
<td></td>
<td></td>
<td>2.0 MMBTU/HR</td>
</tr>
<tr>
<td>460F</td>
<td>Prime Cure Oven #125 (single)</td>
<td></td>
<td></td>
<td></td>
<td>2.0 MMBtu/HR</td>
</tr>
<tr>
<td>460G</td>
<td>Prime Cure Oven #126 (single)</td>
<td></td>
<td></td>
<td></td>
<td>2.0 MMBtu/HR</td>
</tr>
<tr>
<td>460H</td>
<td>Post Cure Oven #5</td>
<td></td>
<td></td>
<td></td>
<td>4.0 MMBtu/HR</td>
</tr>
<tr>
<td>470A</td>
<td>Corrugated Oven #1 (single)</td>
<td>Despatch/1994</td>
<td>68211</td>
<td>NA</td>
<td>1.5 MMBTU/HR</td>
</tr>
<tr>
<td>470C</td>
<td>Corrugated Oven #5 (single)</td>
<td>Mayberry/1998</td>
<td>97-15</td>
<td>NA</td>
<td>4.0 MMBTU/HR</td>
</tr>
<tr>
<td>470D</td>
<td>Corrugated Oven #2 (single)</td>
<td></td>
<td></td>
<td></td>
<td>2.0 MMBTU/HR</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>480-T</td>
<td>Purge/Cure Oven #25 (double)</td>
<td>2008</td>
<td>NA</td>
<td>NA</td>
<td>4.8 MMBTU/HR</td>
</tr>
<tr>
<td>481-T</td>
<td>Purge/Cure Oven #26 (double)</td>
<td>2009</td>
<td>NA</td>
<td>NA</td>
<td>4.8 MMBTU/HR</td>
</tr>
<tr>
<td>482-T</td>
<td>Purge/Cure Oven #27 (double)</td>
<td>2009</td>
<td>NA</td>
<td>NA</td>
<td>4.8 MMBTU/HR</td>
</tr>
<tr>
<td>483-T</td>
<td>Purge/Cure Oven #28 (double)</td>
<td>2009</td>
<td>NA</td>
<td>NA</td>
<td>4.8 MMBTU/HR</td>
</tr>
<tr>
<td>484-T</td>
<td>Purge/Cure Oven #29 (double)</td>
<td></td>
<td></td>
<td></td>
<td>60 HP</td>
</tr>
<tr>
<td>485-T</td>
<td>Purge/Cure Oven #30 (double)</td>
<td></td>
<td></td>
<td></td>
<td>60 HP</td>
</tr>
<tr>
<td>490-T</td>
<td>Four-Block Oven Cart (1)</td>
<td>2009</td>
<td>NA</td>
<td>NA</td>
<td>Used at Purge Cure Oven #24</td>
</tr>
<tr>
<td>510A</td>
<td>Dust Collector #1</td>
<td>Torit-Donaldson /2001</td>
<td>IG648137</td>
<td>138HP11</td>
<td>11,000 CFM</td>
</tr>
<tr>
<td>510E</td>
<td>Dust Collector #5</td>
<td></td>
<td></td>
<td></td>
<td>5,000 CFM</td>
</tr>
<tr>
<td>510H</td>
<td>Dust Collector #8</td>
<td></td>
<td></td>
<td></td>
<td>24,000 CFM</td>
</tr>
<tr>
<td>510I</td>
<td>Dust Collector #9</td>
<td></td>
<td></td>
<td></td>
<td>24,000 CFM</td>
</tr>
<tr>
<td>510J</td>
<td>Dust Collector #10</td>
<td></td>
<td></td>
<td></td>
<td>24,000 CFM</td>
</tr>
<tr>
<td>510K</td>
<td>Dust Collector #11</td>
<td></td>
<td></td>
<td></td>
<td>24,000 CFM</td>
</tr>
<tr>
<td>510L</td>
<td>Dust Collector #12</td>
<td></td>
<td></td>
<td></td>
<td>24,000 CFM</td>
</tr>
<tr>
<td>510M</td>
<td>Dust Collector #13</td>
<td></td>
<td></td>
<td></td>
<td>24,000 CFM</td>
</tr>
<tr>
<td>520A</td>
<td>Vacuum Bond Oven (single)</td>
<td>Wisconsin Oven/1991</td>
<td>NA</td>
<td>NA</td>
<td>1.5 MMBTU/HR</td>
</tr>
<tr>
<td>520B</td>
<td>Stress Relief Oven (single)</td>
<td>1995</td>
<td>Asset #216-1</td>
<td>NA</td>
<td>1.8 MMBTU/HR</td>
</tr>
<tr>
<td>520C</td>
<td>Heat Form Oven #1 (single)</td>
<td>Southwest/1985</td>
<td>NA</td>
<td>NA</td>
<td>1.6 MMBTU/HR</td>
</tr>
<tr>
<td>520D</td>
<td>Heat Form Oven #2 (single)</td>
<td></td>
<td></td>
<td></td>
<td>1.6 MMBTU/HR</td>
</tr>
<tr>
<td>520F</td>
<td>Corrugated Oven #6 (single)</td>
<td>Mayberry/1998</td>
<td>98-20</td>
<td>NA</td>
<td>1.5 MMBTU/HR</td>
</tr>
<tr>
<td>520L</td>
<td>Stress Relief Oven #2</td>
<td></td>
<td></td>
<td></td>
<td>1.80 MMBtu/HR</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>530A</td>
<td>Acousti-Cap Dip/Blot Machine #1</td>
<td>2006</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530B</td>
<td>Acousti-Cap Oven #1</td>
<td>2006</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530C</td>
<td>Acousti-Cap Dip/Blot Machine #2</td>
<td>TBD</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530D</td>
<td>Acousti-Cap Oven #2</td>
<td>TBD</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530E</td>
<td>Acousti-Cap Dip/Blot Machine #3</td>
<td>TBD</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530F</td>
<td>Acousti-Cap Oven #3</td>
<td>TBD</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530G-H</td>
<td>Septum Insertion Machines #1-2</td>
<td>2006</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530I-P</td>
<td>Septum Insertion Machines #3-10</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>530Q</td>
<td>Acousti-Cap Rework Oven #1</td>
<td>Mayberry/2006</td>
<td>NA</td>
<td>NA</td>
<td>5 HP</td>
</tr>
<tr>
<td>530R</td>
<td>Acousti-Cap Rework Oven #2</td>
<td>Mayberry/2006</td>
<td>NA</td>
<td>NA</td>
<td>2 HP</td>
</tr>
<tr>
<td>531A-P</td>
<td>Septum Insertion Machines #11-26</td>
<td>TBD</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>540D</td>
<td>Steec Press</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>550A</td>
<td>Femco #1 Saw</td>
<td>Femco/1967</td>
<td>Asset #730004</td>
<td>NA</td>
<td>10 HP</td>
</tr>
<tr>
<td>550B</td>
<td>Femco #2 Saw</td>
<td>Femco/1967</td>
<td>60048-7597-80</td>
<td>A14-64</td>
<td>10 HP</td>
</tr>
<tr>
<td>550C</td>
<td>Femco #3 Saw</td>
<td>Femco/1985</td>
<td>NA</td>
<td>NA</td>
<td>10 HP</td>
</tr>
<tr>
<td>550D</td>
<td>Femco #4 Saw</td>
<td>Femco/1990</td>
<td>NA</td>
<td>NA</td>
<td>58&quot;X120&quot;X40&quot;</td>
</tr>
<tr>
<td>550E</td>
<td>Blow Out Booth</td>
<td>Donaldson Co./1989</td>
<td>NA</td>
<td>ECB-3</td>
<td>100 fpm, 9 hp</td>
</tr>
<tr>
<td>550F</td>
<td>162 Saw</td>
<td>Tannewitz/1967</td>
<td>15506</td>
<td>G1N-E</td>
<td>15 HP</td>
</tr>
<tr>
<td>550G</td>
<td>Trim Saw</td>
<td>Do-All/1966</td>
<td>36463899</td>
<td>V36</td>
<td>120&quot;X40&quot;X72&quot;</td>
</tr>
<tr>
<td>550H</td>
<td>Femco #9 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20HP</td>
</tr>
<tr>
<td>550I</td>
<td>Femco #10 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/ DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>550J</td>
<td>Femco #5 Saw</td>
<td>Femco/1998</td>
<td>146226</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>550K</td>
<td>CN Router</td>
<td>Accu-Router/1998</td>
<td>9046A001</td>
<td>46A</td>
<td></td>
</tr>
<tr>
<td>550L</td>
<td>Femco #6 Saw</td>
<td>Femco/1998</td>
<td>NA</td>
<td>A-14</td>
<td></td>
</tr>
<tr>
<td>550M</td>
<td>Femco #7 Saw</td>
<td>Femco/2000</td>
<td>00405</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>550N</td>
<td>Femco #12 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550O</td>
<td>Femco #13 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550P</td>
<td>Femco #14 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550Q</td>
<td>Femco #15 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550R</td>
<td>Femco #16 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550S</td>
<td>Non-Metallic Trim Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550T</td>
<td>ACAP Trim Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>550U</td>
<td>Dust Blow Out Booth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>550V</td>
<td>Femco #11 Saw</td>
<td></td>
<td></td>
<td></td>
<td>20 HP</td>
</tr>
<tr>
<td>610B</td>
<td>Thermal Oxidizer #2</td>
<td>Airex/1999</td>
<td>228130-RT02067</td>
<td>30.ORT095</td>
<td>8.5 MMBTU/HR</td>
</tr>
<tr>
<td>610C</td>
<td>Thermal Oxidizer #3</td>
<td>Adwest/2007</td>
<td>2232</td>
<td>48.ORTO</td>
<td>12.6 MMBTU/HR</td>
</tr>
<tr>
<td>610D</td>
<td>Thermal Oxidizer #4</td>
<td>Adwest/2007</td>
<td>2233</td>
<td>480.ORTO</td>
<td>12.6 MMBTU/HR</td>
</tr>
<tr>
<td>610E</td>
<td>Thermal Oxidizer #5</td>
<td></td>
<td></td>
<td></td>
<td>13 MMBTU/HR</td>
</tr>
<tr>
<td>610F</td>
<td>Thermal Oxidizer #6</td>
<td></td>
<td></td>
<td></td>
<td>13 MMBTU/HR</td>
</tr>
<tr>
<td>610G</td>
<td>Thermal Oxidizer #7</td>
<td></td>
<td></td>
<td></td>
<td>13 MMBTU/HR</td>
</tr>
<tr>
<td>620A</td>
<td>Steam Boiler #1</td>
<td>Hurst/2000</td>
<td>S-400-250-1</td>
<td>NA</td>
<td>2.7 MMBTU/HR</td>
</tr>
<tr>
<td>620B</td>
<td>Steam Boiler #2</td>
<td>Hurst/2001</td>
<td>S-400-250-2</td>
<td>UNK</td>
<td>2.7 MMBTU/HR</td>
</tr>
<tr>
<td>620C</td>
<td>Steam Boiler #3</td>
<td>Eclipse/1974</td>
<td>43777</td>
<td>80SMGL-FSFM</td>
<td>2.7 MMBTU/HR</td>
</tr>
<tr>
<td>620D</td>
<td>Steam Boiler #4</td>
<td>Holman Bros./1997</td>
<td>7906</td>
<td>NA</td>
<td>3.3 MMBTU/HR</td>
</tr>
<tr>
<td>620E</td>
<td>Steam Boiler #5</td>
<td>Kewanee/ 1997</td>
<td>P7849</td>
<td>H35-200-G0</td>
<td>6.7 MMBTU/HR</td>
</tr>
<tr>
<td>620F</td>
<td>Steam Boiler #6</td>
<td></td>
<td></td>
<td></td>
<td>8.2 MMBTU/HR</td>
</tr>
<tr>
<td>620G</td>
<td>Steam Boiler #7</td>
<td></td>
<td></td>
<td></td>
<td>8.2 MMBTU/HR</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>620H</td>
<td>Steam Boiler #8</td>
<td></td>
<td></td>
<td></td>
<td>8.2 MMBTU/HR</td>
</tr>
<tr>
<td>630B</td>
<td>Hot Oil Heater #2</td>
<td>Fulton/1994</td>
<td>2322C</td>
<td>FT-0600-C</td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>630C</td>
<td>Hot Oil Heater #3</td>
<td>Fulton/1998</td>
<td>2754C</td>
<td>FT-0600-C</td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>630D</td>
<td>Hot Oil Heater #4</td>
<td></td>
<td></td>
<td></td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>630E</td>
<td>Hot Oil Heater #5</td>
<td></td>
<td></td>
<td></td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>630F</td>
<td>Hot Oil Heater #6</td>
<td></td>
<td></td>
<td></td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>630G</td>
<td>Hot Oil Heater #7</td>
<td></td>
<td></td>
<td></td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>630H</td>
<td>Hot Oil Heater #8</td>
<td></td>
<td></td>
<td></td>
<td>7.7 MMBTU/HR</td>
</tr>
<tr>
<td>640A</td>
<td>Chiller Engine A</td>
<td>Tecochill/1996</td>
<td>00383</td>
<td>150 TON</td>
<td>1.42 MMBTU/HR</td>
</tr>
<tr>
<td>640B</td>
<td>Chiller Engine B</td>
<td>Tecochill/1996</td>
<td>00381</td>
<td>150 TON</td>
<td>1.42 MMBTU/HR</td>
</tr>
<tr>
<td>650A</td>
<td>AST #1 IPA Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>6,462 GALLONS</td>
</tr>
<tr>
<td>650B</td>
<td>AST #2 MEK Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>6,462 GALLONS</td>
</tr>
<tr>
<td>650C</td>
<td>AST #3 Synasol Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>650D</td>
<td>AST #4 R169 Resin Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>650E</td>
<td>AST #5 Clark Resin Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>650F</td>
<td>AST #6 Acetone Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>650G</td>
<td>AST #7 IPA Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>6,462 GALLONS</td>
</tr>
<tr>
<td>650H</td>
<td>AST #8 MEK Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>6,462 GALLONS</td>
</tr>
<tr>
<td>650I</td>
<td>AST #9 Synasol Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>650J</td>
<td>AST #10 R169 Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>650K</td>
<td>AST #11 Clark Resin Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>EQUIP. NO.</td>
<td>EQUIPMENT NAME</td>
<td>MANUFACTURER/DATE</td>
<td>SERIAL NO.</td>
<td>MODEL NO.</td>
<td>SIZE/CAPACITY</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------</td>
<td>-------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>650L</td>
<td>AST #12 Acetone Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,152 GALLONS</td>
</tr>
<tr>
<td>660B</td>
<td>Hot Water Boiler #2</td>
<td>Teledyne Laars/2000</td>
<td>NA</td>
<td>HH3600EN09 K</td>
<td>3.6 MMBUT/HR</td>
</tr>
<tr>
<td>670F</td>
<td>Guspro Oven #1</td>
<td></td>
<td></td>
<td>Lab</td>
<td></td>
</tr>
<tr>
<td>670F</td>
<td>Guspro Oven #2</td>
<td></td>
<td></td>
<td>Lab</td>
<td></td>
</tr>
<tr>
<td>NONE</td>
<td>Direct Contact Water Heater</td>
<td></td>
<td>090935175</td>
<td>DC-1-50</td>
<td></td>
</tr>
<tr>
<td>680A</td>
<td>UST #1 IPA Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,000 GALLONS</td>
</tr>
<tr>
<td>680B</td>
<td>UST #2 R169 Resin Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,000 GALLONS</td>
</tr>
<tr>
<td>680C</td>
<td>UST #3 Clark Resin Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>10,000 GALLONS</td>
</tr>
<tr>
<td>680D</td>
<td>UST #7 Acetone Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>12,000 GALLONS</td>
</tr>
<tr>
<td>680E</td>
<td>UST #10 Synasol Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>6,000 GALLONS</td>
</tr>
<tr>
<td>680F</td>
<td>UST #11 Acetone Storage Tank</td>
<td></td>
<td></td>
<td></td>
<td>6,000 GALLONS</td>
</tr>
<tr>
<td>1000</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>25 GALLONS</td>
</tr>
<tr>
<td>1001</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>40 GALLONS</td>
</tr>
<tr>
<td>1002</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>15 GALLONS</td>
</tr>
<tr>
<td>1004</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>40 GALLONS</td>
</tr>
<tr>
<td>1005</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>25 GALLONS</td>
</tr>
<tr>
<td>1006</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>40 GALLONS</td>
</tr>
<tr>
<td>1007</td>
<td>Partwasher - Cold Degreaser/Cleaner</td>
<td></td>
<td></td>
<td></td>
<td>40 GALLONS</td>
</tr>
</tbody>
</table>
### 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 V20661.R05

Abstract

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

**Reporting Period** - January-June ___ Or 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

**Emissions report**

Volatile organic compounds emitted during reporting period ........................................... _______ Tons

HAP emission report ..................................................................................................................................... Total HAPs _________ tons

............................................................................................................................................ Single HAP (highest single HAP) _________ tons

NOx emission report .................................................................................................................................... Total NOx _________ tons

**Operations report**

Has Permittee:

Maintained records and submitted reports required under §6.C.1 (NESHAP Subpart GG requirements)?
.................................................................................................................................................................. YES / NO

Implemented the management practices as required under §6.C.2 (NESHAP Subpart WWWWWW requirements)? 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 §§6.I.1 and 6.I.2 of the permit during the reporting period.

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

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

Maintained records required under §7.B.1 (HAPs emissions budget)? ............................................................. YES / NO

Maintained records required under §7.B.2 (NOx emissions budget)? ............................................................... YES / NO

Reported all changes in VOC-containing materials in accordance with §7.B.3? ...................................................... YES / NO

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

(5/30/18) 60 HEXCEL – CASA GRANDE
At calendar year-end, conducted the assessment required under §7.C.1.b (Screen for unit-specific emissions above 2% threshold)? ................................................................................................................................................ YES / NO

Maintained monthly records required under §7.C.2 (VOC mass balance accounting)?..................................YES / NO

Conducted the annual review required by §7.C.2.c (Supporting documentation)? ....................................... YES / NO

Maintained records of inspections and monitoring required under §7.C.3 (RTO inspections and negative pressure monitoring)? ........................................................................................................ YES / NO

Conducted total VOC destruction efficiency testing within the last 10-14 months as required by §7.D.1? ............................................................................................................................................... YES / NO

Conducted Formaldehyde and phenol destruction efficiency testing within the last 58-62 months as required by §7.D.1? ............................................................................................................................................... YES / NO

Maintained records required under §7.D.3 (RTO operations)? ...................................................................... YES / NO

Maintained records required under §7.E.1 (Fuel consumption)? .................................................................... YES / NO

Maintained records required under §7.E.2 (Baghouse and spray booth inspections)? ................................... YES / NO

Maintained monthly records required under §7.E.3 (periodic opacity screening) ......................................... YES / NO

Maintained the records required under §7.E.5 (NSPS Subpart Kb monitoring requirements) .......................... YES / NO

Documented compliance as required under §7.E.6 (NESHAP Subpart WWWWWW requirements) .......... YES / NO

Maintained records required under §7.E.7 (Solvent Cleaning VOCs)? ........................................................... YES / NO

Submitted all reports required under §8.A? (Upset reports) ............................................................................ 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 ______________________________________

Printed Name ______________________________________

Title _______________________________________

Date ___________________   Contact Phone Number ____________________

(5/30/18)  61  HEXCEL – CASA GRANDE
Mail to: Pinal County Air Quality Control District  
P.O. Box 987  
Florence, AZ 85132
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:
   a. Guspro Oven #1 and #2

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.

8. Cooling Lane (Equipment No. 441)

9. Steec Press (Equipment No. 540D)

10. Septum Insertion Machines #1-2 (Equipment No. 530A-B respectively)

11. Mix tanks with a rated capacity of 5 cubic feet (37 gallons) or less