

Honeywell - Engines, Systems & Services
111 South 34th Street
Phoenix, AZ
Permit Number V97-008, Issued
January 26, 2006
Significant Revision S06-010 dated November 28, 2006

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APPENDIX A:

EQUIPMENT LISTS

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

The general permit conditions, 1 through 17, are standard conditions that are in every Title V permit. These conditions are the 1-10-05 version.

GENERAL CONDITIONS:

- 1. AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]
The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or State Implementation Plan (SIP) Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).
- 2. CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4(b)]
The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.
- 3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**
[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e]
Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

4. COMPLIANCE:

A. COMPLIANCE REQUIRED:

- 1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]

[County Rule 210 §§301.8b(4) & 302.1h(1)]

- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 §302.1h(2)]

- 3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.2]

- 4) For any major source operating in a nonattainment area designated as serious for PM₁₀, for which the source is classified as a major source for PM₁₀, the source shall comply with the best available control technology (BACT), as defined in County Rule 100.

[County Rule 210 §302.1(h)(7)]

B. COMPLIANCE CERTIFICATION REQUIREMENTS: [County Rule 210 §305.1d]

The Permittee shall file an annual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status;
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter.

C. COMPLIANCE PLAN: [County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the first date of public notice of the proposed conditions for this Permit unless a compliance plan is included in the Specific Conditions section of this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

5. CONFIDENTIALITY CLAIMS:

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
 - B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
- The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

[County Rule 100 §402] [County Rule 200 §411]

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

[County Rule 100 §402]

If the Permittee submits information with an application under a claim of confidentiality under ARS §49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

A. ACID RAIN: [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]

- 1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.

- a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.
- b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
- c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.
- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:
 - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - (2) Exceedances of applicable emission rates.
 - (3) The use of any allowance prior to the year for which it was allocated.
 - (4) Violation of any other provision of the permit.

B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8 - locally enforceable only]
The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68]
Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G]
If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION: [County Rule 210 §301.6]
If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

8. EMERGENCY EPISODES: [County Rule 600 §302] [SIP Rule 600 §302]
If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302.

9. EMERGENCY PROVISIONS: [County Rule 130 §§201 & 402]
An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under this 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.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency 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 or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210 §302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

10. EXCESS EMISSIONS: [County Rule 140 §§103, 400]
NOTE: There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 §200.

- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:

- 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
 - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
 - 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
 - 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.
- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
- 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
 - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
 - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
 - 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
 - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
 - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
 - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.

- C. Affirmative Defense For Startup And Shutdown:
- 1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
 - a. The excess emissions could not have been prevented through careful and prudent planning and design;
 - b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
 - e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
 - g. All emissions monitoring systems were kept in operation, if at all practicable; and
 - h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
 - 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.
- D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph B. of this Permit Condition.
- E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.

- 11. FEES:** [County Rule 200 §409] [County Rule 210 §§302.1i & 401]
The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.

12. MODELING: [County Rule 200 §407] [locally enforceable only]

Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

13. MONITORING / TESTING:

A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.

[County Rule 200 §309] [SIP Rule 41]

B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 §408] [County Rule 210 §302.1.c] [County Rule 270 §§300 & 400]
[SIP Rule 27]

C. The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

- 1) Sampling ports adequate for test methods applicable to such source.
- 2) Safe sampling platform(s).
- 3) Safe access to sampling platforms(s).
- 4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

14. PERMITS:

A. BASIC: [County Rule 210 §302.1h(3)]

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.

B. DUST CONTROL PLAN REQUIREMENTS:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

- 1) The Permittee shall submit to the Control Officer a Dust Control Plan with any permit application that involves earthmoving operations with a disturbed surface area that equals or exceeds 0.1 acre, including both of the following situations:
 - a) When submitting an application for an earthmoving permit involving earth moving operations that would equal or exceed 0.1 acre, and
 - b) Before commencing any routine dust generating operation at the facility.
[County Rule 310 §303.1] [SIP Rule 310 §303.1]
- 2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.
[County Rule 310 §303.4] [SIP Rule 310 §303.4]
- 3) Any Dust Control Plan shall, at a minimum, contain all the information described in Sections 303.1, 303.3 and 304 of Rule 310.
[County Rule 310 §§303.1, 303.3 & 304] [SIP Rule 310 §§303.1, 303.3 & 304]
- 4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times.
[County Rule 310 §303.2] [SIP Rule 310 §303.2]

C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

- 1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.
[County Rule 200 §§301 & 308] [County Rule 210 §§301.4a, b, c, & 400]
- 2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.
[County Rule 210 §§303.1a, 303.2, 405.4, & 406.4]
- 3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.
[County Rule 210 §301.4f]
- 4) No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
[County Rule 210 §302.1j]

D. POSTING:

- 1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311]

- 2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

[County Rule 310 §401] [SIP Rule 310 §401]

E. PROHIBITION ON PERMIT MODIFICATION:

[County Rule 200 §310]

The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

F. RENEWAL:

- 1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.

[County Rule 210 §§301.2a, 301.4a, b, c, d, h & 302.3]

- 2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.

[County Rule 200 §§308 & 309] [County Rule 210 §301.1]

- 3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

- 4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 §403.2] [County Rule 210 §§301.4f & 301.9]

G. REVISION / REOPENING / REVOCATION:

- 1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[County Rules 200 §402.1]

Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term.

[County Rules 200 §402.1a(1) & 210 §302.5]

- 2) This permit shall be reopened and revised under any of the following circumstances:
 - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.
 - b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

- 4) 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.

[County Rule 210 §302.1h(3)]

H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only]

If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

I. REQUIREMENTS FOR A PERMIT:

- 1) Air Quality Permit: Except as noted under the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301,

for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

3) Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

J. RIGHTS AND PRIVILEGES:

[County Rule 210 §302.1h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

K. SEVERABILITY:

[County Rule 210 §302.1g]

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.

L. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.

- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]
[County Rule 210 §407.2]

M. TERM OF PERMIT: [County Rule 210 §§302.1a & 402]
This Permit shall remain in effect for no more than 5 years from the date of issuance.

N. TRANSFER: [County Rule 200 §404]
Except as provided in ARS §49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures under County Rule 210.

15. RECORDKEEPING:

A. RECORDS REQUIRED: [County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A]
The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

B. RETENTION OF RECORDS:
Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted
[County Rule 100 §504] [SIP Rule 40 C]

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1d(2)]

C. MONITORING RECORDS: [County Rule 210 §§302.1d(1) & 305.1b]
Records of any monitoring required by this Permit shall include the following:
1) The date, place as defined in the permit, and time of sampling or measurements;
2) The date(s) analyses were performed;
3) The name of the company or entity that performed the analysis;

- 4) The analytical techniques or methods used;
- 5) The results of such analysis; and
- 6) The operating conditions as existing at the time of sampling or measurement.

D. **RIGHT OF INSPECTION OF RECORDS:** [County Rule 100 §106] [SIP Rule 40 D]
When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

A. **ANNUAL EMISSION INVENTORY REPORT:** [County Rule 100 §505] [SIP Rule 40 B]
Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03 and ARS §49-480.04.

B. **DATA REPORTING:** [County Rule 100 §502]
When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

C. **DEVIATION REPORTING:** [County Rule 210 §§302.1e & 305.1c]
The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of

any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

- D. EMERGENCY REPORTING: [County Rule 130 §402.4]
(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)
The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
- E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT: [County Rule 100 §503]
Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.
- F. EXCESS EMISSIONS REPORTING: [County Rule 140 §500] [locally enforceable only]
(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)
- 1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
 - a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.
 - b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.
 - 2) The excess emissions report shall contain the following information:
 - a) The identity of each stack or other emission point where the excess emissions occurred;
 - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - c) The time and duration or expected duration of the excess emissions;

- d) The identity of the equipment from which the excess emissions emanated;
 - e) The nature and cause of such emissions;
 - f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
 - g) The steps that were or are being taken to limit the excess emissions; and
 - h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.
- 3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.

G. OTHER REPORTING: [County Rule 210 §302.1h(5)]
The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, 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 to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

[County Rule 100 §105]

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

[County Rule 210 §305.1f] [SIP Rule 43]

- E. To record any inspection by use of written, electronic, magnetic, and photographic media.
 [County Rule 210 §305.1f] [Locally enforceable only]

18. FACILITY WIDE ALLOWABLE EMISSION LIMITS:

A. Opacity Requirements:

- 1) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300 §302.
 [County Rule 300 §301][Locally enforceable only]

- 2) The opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.
 [SIP Rule 30 §A]

- B. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.
 [County Rule 320 §300]
 [SIP Rule 32(A)]

- C. Particulate Matter Limits for Fuel Burning Equipment:
 The Permittee shall not discharge or cause or allow the discharge of particulate matter emissions, caused by combustion of fuel, from any fuel burning operation in excess of amounts determined by the following equation:

$$E = 1.02 Q^{0.769}$$

Where:

E = The maximum allowable emission rate in pounds-mass per hour, and
 Q = The heat output in million BTU per hour.

[SIP Rule 311 §304.1]
 [SIP Rule 31(H)]

D. Facility-Wide Requirements

- 1) The Permittee shall not cause, allow, or permit emissions in excess of the monthly and 12 month rolling limits shown in Table 18.1.

TABLE 18.1: Facility-Wide Emissions Limits

	Rolling 12 - Month Emission Limits
Any Single Hazardous Air Pollutant (HAP)	9.0 tons
Total Hazardous Air Pollutants (HAPs)	22.5 tons

The rolling 12 month limit shall be calculated by summing the monthly emissions from all processes that have HAP emissions for the most recent 12 calendar months.

[County Rule 210 §302.1b][County Rule 100 §§200.16 and 200.49]

19. FACILITY WIDE OPERATIONAL LIMITATIONS AND REQUIREMENTS:

- A. Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkali's, pesticides, fertilizer and manure shall be processed, stored, used and transported in such

a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[SIP Rule 32C][County Rule 320 §302]

- B. Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[SIP Rule 32D][County Rule 320 §303]

- C. Volatile Organic Compound (VOC) Containment and Disposal:

No person shall store, discard, or dispose of VOC or VOC-containing material in a way intended to cause or to allow the evaporation of VOC to the atmosphere. Reasonable measures shall be taken to prevent such evaporation, which include but are not limited to the following:

- 1) All materials from which VOC can evaporate, including fresh solvent, waste solvent and solvent soaked rags and residues, shall be stored in closed containers; and
- 2) Such containers one gallon and larger shall be legibly labeled with their contents; and
- 3) Records of the disposal/recovery of such materials shall be kept. Records of hazardous waste disposal shall be kept in accordance with hazardous waste disposal statutes.

[SIP Rule 32C] [County Rule 330§ 306]

- D. The Permittee shall limit the facility-wide anhydrous ammonia usage to 270,864 pounds per year. The usage calculation shall be made monthly and assessed on a rolling twelve month basis.

[County Rule 210 §302.1b]

20. FACILITY WIDE MONITORING AND RECORD KEEPING REQUIREMENTS

- A. The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[County Rule 210 §302.1c] [SIP Rule 32]

[County Rule 320]

- B. The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:

- 1) The date and time the visible emissions observation or Method 9 opacity reading was taken
- 2) The name of the observer
- 3) Whether or not visible emissions were present
- 4) If visible emissions are present and the controls and facility processes are operating in a mode other than their normal operating conditions, such as startup or shutdown, a description of the operating conditions at the time that the opacity is observed
- 5) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions

- 6) If applicable, a description of any corrective action(s) taken, including the date of such action(s) and
- 7) Any other related information.

[County Rule 300] [County Rule 210 §302.1]

- C. The Permittee shall conduct a weekly facility walk-through and observe for visible emissions. The visible observations shall be conducted for the overall facility (stacks and other general emission points and for any specific emission source specified in this Permit.

[County Rules 300] [County Rule 210 §302.1c]

- D. If visible emissions, other than uncombined water, are observed being discharged into the ambient air, the Permittee shall monitor for compliance with the opacity standards specified in this permit by having a certified visible emissions evaluator determine the opacity of the visible emissions being discharged into the ambient air using the techniques specified in EPA Reference Method 9.

The initial Method 9 opacity reading shall be taken within one day, (24 hours), of observing visible emissions. If the emitting equipment is not operating on the day that the initial Method 9 opacity reading is required to be taken, then the initial Method 9 opacity reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 opacity reading is required to be performed, and there are no visible emissions (excluding uncombined water) observed from the previously emitting equipment while the equipment is in normal operation, the Permittee shall not be required to conduct the Method 9 opacity readings.

Follow-up Method 9 opacity readings shall be performed by a certified visible emissions evaluator while the emitting equipment is in its standard mode of operation in accordance with the following schedule:

- 1) Daily:
 - a) Except as provided in paragraph 3) of this Permit Condition, a Method 9 opacity reading shall be conducted each day that the emitting equipment is operating until a minimum of 14 daily Method 9 readings have occurred.
 - b) If the Method 9 opacity readings required by this Permit Condition are less than 20% for 14 consecutive days, the frequency of Method 9 opacity readings may be decreased to weekly, in accordance with paragraph 2) of this Permit Condition.
- 2) Weekly:
 - a) If the Permittee has obtained 14 consecutive daily Method 9 readings which do not exceed 20% opacity, the frequency of Method 9 readings may be decreased to once per week for any week in which the equipment is operated.
 - b) If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 opacity readings shall revert to daily, in accordance with paragraph 1) of this Permit Condition.
 - c) If the opacity measured during the required weekly Method 9 readings never exceeds 20%, the Permittee shall continue to obtain weekly opacity readings until the requirements of paragraph 3) of this Permit Condition are met.
- 3) Cease Follow-up Method 9 Opacity Monitoring:

Regardless of the applicable monitoring schedule, follow-up Method 9 opacity readings may cease if the emitting equipment, while in its standard mode of operation, has no visible

emissions, other than uncombined water, during every observation taken during a Method 9 procedure.

[County Rule 210 §302.1c]

E. Opacity Readings

- 1) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.

[40 CFR 60.11.b] [County Rule 300 §501]

- 2) Opacity of visible emissions from intermittent sources as defined by County Rule 300 §201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300 §502] [Locally enforceable only]

F. Determination of Compliance of Organic Solvents:

Determination of the organic solvent content and composition of a solvent or material shall be made as of the time that the solvent or material is in its final form for application or employment, notwithstanding any prior blending, reducing, thinning or other preparation for application or employment. Emissions resulting from air or heat drying of products for the first 12 hours after the removal from any machine, equipment, device or other article shall be included in determining compliance with this rule.

[County Rule 330 §502][locally enforceable only]

G. VOC Containing Materials:

- 1) Current List:

Maintain a current list of coatings, adhesives, makeup solvents, and any other VOC containing materials; state the VOC content of each in pounds per gallon or grams per liter. VOC content shall be expressed less water and non-precursor compounds for materials, which are not used for cleanup.

[County Rule 330 §503][Locally enforceable only]

- 2) Monthly Usage Records:

Maintain monthly records of the amount of each coating; adhesive; makeup solvent; solvent used for surface preparation, for cleanup, and for the removal of materials; and any other VOC-containing material used.

[County Rule 330 §503][Locally enforceable only]

- 3) Discarded VOC Materials:

Maintain records of the type, amount, and method of disposing of VOC-containing materials on each day of disposal.

[County Rule 330 §503][Locally enforceable only]

H. HAPs Emission Limits

The Permittee shall monitor for compliance with the facility-wide HAP emissions limits of these Permit Conditions by monthly calculating and recording the monthly and the rolling 12 month emissions of HAPs. The calculations shall be made no later than the end of the following month. The 12 month rolling emissions total shall be calculated by summing the emissions for the most recent complete 12 calendar months. The monthly and rolling 12

month total emissions of HAPs from the facility shall be calculated based upon the usage records or emission factors for each month.

[County Rule 210 §302.1 c]

I. Ammonia Emission Limits

The Permittee shall monitor for compliance with the facility-wide and nitrifying process ammonia usage limits of these Permit Conditions by monthly calculating and recording the monthly and the rolling 12 month usage of ammonia. The calculations shall be made no later than the end of the following month. The 12 month rolling emissions total shall be calculated by summing the usages for the most recent complete 12 calendar months. The monthly and rolling 12 month total emissions of ammonia from the facility and the nitrifying process shall be calculated based upon the usage records for each month.

[County Rule 210 §302.1 c]

21. FACILITY-WIDE REPORTING REQUIREMENTS:

The Permittee shall file semiannual monitoring reports with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6-month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed by the end of the month following the reporting period. The semi-annual monitoring report shall be certified as to its truth, accuracy and completeness by a responsible official in the manner required by County Rule 210 §§301.7 and 305.1(e) and shall contain the following information, at a minimum:

A. Deviation Reporting:

The Permittee shall identify all instances of deviations from the permit requirements in the semi-annual monitoring report. The Permittee shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[County Rule 210 §302.1e]

B. Odor Log:

The Permittee shall provide a copy of the portion of the odor log that covers the applicable 6-month reporting period. If no complaints were received during the reporting period, a statement to that effect may be substituted for a copy of the odor log.

[County Rule 210 §302.1e(1)]

C. Visible Emissions:

- 1) The dates of any week that the required visible emissions observations were not taken, an explanation for the deviation from the monitoring requirement, and a description of any action taken to ensure that future observations are performed, if applicable.
- 2) The source and location from which visible emissions were observed;
- 3) Any date which visible emissions were observed;
- 4) The approximate time of the observation;
- 5) The name of the observer;
- 6) A description of any corrective actions taken, if any, to reduce the visible emissions;
- 7) If a follow-up Method 9 reading was required, the opacity of the emissions determined by Method 9, a copy of the visual determination of opacity record showing all information required by the Method and any other related information.

[County Rule 210 §302.1e]

- D. Emissions Calculations:
The Permittee shall include the results of the monthly and the rolling 12-month HAP emissions calculations for each month in the six-month reporting period.
[County Rule 210 §302.1e]
- E. Ammonia Usage Calculations:
The Permittee shall include the results of the monthly and the rolling 12-month facility wide and nitriding process ammonia usage calculations for each month in the six-month reporting period.
[County Rule 210 §302.1e]

**NOTE: Additional reporting requirements are found in the Specific Permit Conditions.*

SPECIFIC PERMIT CONDITIONS:

22. ABRASIVE BLASTING OPERATIONS

- A. Operational Requirements
- 1) All abrasive blasting performed at the facility shall be in a confined enclosure with a forced air exhaust through a Department approved emission control device.
[County Rule 312 §303][SIP Rule 312 §302.1]
 - 2) The Permittee shall not discharge or cause or allow the discharge of particulate matter into the ambient air from the thermal spray coating operation in excess of the allowable hourly emission rate determined by the following equation:
$$E = 3.59 P^{0.62}$$

Where:
E = Emissions in pounds per hour, and
P = Process weight rate in tons per hour.
[County Rule 311 §301.1][SIP Rule 311 §301.1]
- B. Conditions for Confined Blasting
- 1) Allowable Emissions:
 - a) The Permittee shall not discharge into the atmosphere from any abrasive blasting operation any air contaminant for an observation period or periods aggregating more than three minutes in any sixty minute period an opacity equal to or greater than 20 percent. An indicated excess will be considered to have occurred if any cumulative period of 15-second increments totaling more than three minutes within any sixty minute period was in excess of the opacity standard.
[County Rule 312 §305] [Locally enforceable only]
 - b) The Permittee shall not discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one-hour period which is a shade or density darker than 20 percent opacity.
[SIP Rule 312 §301]
 - 2) Requirements for Confined Blasting:

Dry abrasive blasting in a confined enclosure with a forced air exhaust shall be conducted by implementing either of the following:

- a) Using a certified abrasive, or
- b) Venting to an ECS

[County Rule 312 §303] [Locally enforceable only]

3) Operational Requirements for Emission Control System

Note: There are five dust collectors that require weekly monitoring of the pressure differential and weekly visible emission checks according to this permit condition, (Permit Condition 22. B.3). They include maintenance number 92401649 in Building 105, maintenance number 92401472 in Building 202, maintenance number 92401360 in Building 110, maintenance number 92401352 in Building 404, and maintenance number 92401739 in Building 105 (MAC2 dust collector).

- a) The Permittee shall install, operate and maintain an approved emission control system (ECS) on all abrasive blasting equipment vented outdoors. Such abrasive blasting equipment shall be vented to the control device without bypass.

[County Rule 100 §301][County Rule 241 §302] [SIP Rule 3]

- b) The Permittee shall operate the ECSs at a parametric range of 1.0 to 6.0 inches of water except for the MAC2 Dust Collector in Building 105 Maintenance Number 92401739, which shall be operated at a parametric range of 1.0 to 5.0 inches of water.

[County Rule 210§302.1][SIP Rule 3]

- c) The Permittee shall comply with all the identified actions and schedules provided in the O&M Plan.

[County Rule 312 §304.1] [Locally enforceable only]

- d) The Permittee shall install and maintain in calibration, pressure monitors in good working order and in operation for all control devices that capture the exhaust for abrasive blasting units that;

- (1) Have a blasting volume of equal to or greater than fifty cubic feet and,
- (2) Use a blasting media that is not CARB certified, and
- (3) Vent to the ambient air.

[County Rule 312 §304.2] [Locally enforceable only]

- e) The Permittee shall record weekly pressure differential readings. The Permittee shall log all pressure differential readings, including the date when the reading was taken, identify each ECS and the name or initials of the person who took the reading. The Permittee shall investigate the cause of any reading outside the range of the O&M plan to identify, correct or repair the problem and record in a log book the cause of the problem and the corrective action initiated to remedy the abnormal pressure differential reading. The Department may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 312 §304] [Locally enforceable only]

- f) Visible Emissions Monitoring

The Permittee shall observe for visible emissions weekly from each of the ECS exhaust streams during normal operation.

[County Rules 300] [County Rule 210 §302.1c]

- (1) If visible emissions, other than uncombined water, are observed being discharged into the ambient air, the Permittee shall monitor for compliance with the opacity standards specified in this permit by having a certified visible emissions evaluator determine the opacity of the visible emissions being discharged into the ambient air using the techniques specified in EPA Reference Method 9.

The initial Method 9 opacity reading shall be taken within one day, (24 hours), from the time of observing visible emissions. If the emitting equipment is not operating on the day that the initial Method 9 opacity reading is required to be taken, then the initial Method 9 opacity reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 opacity reading is required to be performed, and there are no visible emissions (excluding uncombined water) observed from the previously emitting equipment while the equipment is in normal operation, the Permittee shall not be required to conduct the Method 9 opacity readings.

Follow-up Method 9 opacity readings shall be performed by a certified visible emissions evaluator while the emitting equipment in its standard mode of operation in accordance with the following schedule:

- (a) Daily:
 - i) Except as provided in paragraph (c) of this Permit Condition, a Method 9 opacity reading shall be conducted each day that the emitting equipment is operating until a minimum of 14 daily Method 9 readings have occurred.
 - ii) If the Method 9 opacity readings required by this Permit Condition are less than 20% for 14 consecutive days, the frequency of Method 9 opacity readings may be decreased to weekly, in accordance with paragraph (b) of this Permit Condition.
- (b) Weekly:
 - i) If the Permittee has obtained 14 consecutive daily Method 9 readings which do not exceed 20% opacity, the frequency of Method 9 readings may be decreased to once per week for any week in which the equipment is operated.
 - ii) If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 opacity readings shall revert to daily, in accordance with paragraph (a) of this Permit Condition.
 - iii) If the opacity measured during the required weekly Method 9 readings never exceeds 20%, the Permittee shall continue to obtain weekly opacity readings until the requirements of paragraph (c) of this Permit Condition are met.
- (c) Cease Follow-up Method 9 Opacity Monitoring:

Regardless of the applicable monitoring schedule, follow-up Method 9 opacity readings may cease if the emitting equipment, while in its standard mode of operation, has no visible emissions, other than uncombined water, during an observation taken during a Method 9 procedure.

[County Rule 210 §302.1c]

3) Opacity Observations

Opacity shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 and with the following provisions:

- (a) Emissions from unconfined blasting shall be observed at the densest point of the emission from the closest point of discharge, after a major portion of the spent abrasives has fallen out.
- (b) Emissions from unconfined blasting employing multiple nozzles shall be considered a single source unless it can be demonstrated by the owner or operator that each nozzle, evaluated separately, meets the emission standards of County Rule 312.
- (c) Emissions from confined blasting shall be observed at the densest point after the air contaminant leaves the enclosure or associated ECS.

[County Rule 312 §505] [Locally enforceable only]

g) Partial Exemptions

Equipment that meets the following two criteria and is operated and maintained in accordance with manufacturers' specifications is exempt from the Operational Requirements of the ECS of this section.

- (1) Self-contained and the total internal volume of the blast section is 50 cubic feet or less, and
- (2) Vented to an ECS

[County Rule 312 §304] [SIP Rule 312 §§501.1,501.2,501.3]

4) Work Practices

At the end of the work shift, the Permittee shall clean up spillage, carry-out, and or trackout of any spent abrasive material with the potential to be transported during a wind event.

[County Rule 312 §308] [Locally enforceable only]

5) Recordkeeping Requirements for Blasting Operations

The Permittee shall keep the following records onsite and maintain all of the specified records for a total of five years and shall make them available to the control officer upon request:

- a) A list of the blasting equipment
- b) A description of the type of blasting
- c) The locations of the blasting equipment
- d) A description of the ECS associated with the blasting operation
- e) The days of the week blasting occurs
- f) The normal hours of operation

[County Rule 312 §501.1][County Rule 210§302.1 d]

- g) The type and amount of solid abrasive material consumed on a monthly basis.
Include name of certified abrasive used, if applicable
[County Rule 312 §501.3][County Rule 210§302.1 d]
- h) The Permittee shall maintain records of the weekly differential pressure readings for the ECS required by the O&M Plans.
- i) The Permittee shall log all visual observations and readings including the following:
- (1) The date and time that a visible observation or Method 9 reading was taken;
 - (2) The name of the person who made the observation or reading;
 - (3) Whether or not visible emissions were present;
 - (4) The opacity of visual emissions determined by a Method 9 reading, if applicable;
 - (5) A description of any corrective actions taken, including date, if applicable;
- [County Rule 210 §302.1d]
- 6) Reporting Requirements:
**NOTE: Additional reporting requirements are found in the general conditions of this permit and in the Specific Permit Conditions.*

Semi-Annual Monitoring Report

The Permittee shall submit a semi-annual monitoring report, which shall be certified as to its truth, accuracy and completeness by a responsible official in the manner required by County Rule 210 §§301.7 and 305.1(e), and which shall contain the following information, at a minimum:

- a) Deviation Reporting
The Permittee shall identify all instances of deviations from permit requirements for abrasive blasting in the semi-annual monitoring report. The Permittee shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
[County Rule 210 §302.1e(1)]
- b) Visible Emissions
- (1) The dates of any week that the required visible emissions observations were not taken, an explanation for the deviation from that monitoring requirement, and a description of any action taken to ensure that the future observations are performed, if applicable.
 - (2) Any date on which visible emissions were observed;
 - (3) The approximate time of the observation;
 - (4) Name of the observer;
 - (5) A description of any corrective actions taken, if any, to reduce the visible emissions;
 - (6) If a follow-up Method 9 reading was required, the opacity of the emissions determined by Method 9 and a copy of the visual determination of opacity record showing all information required by the Method 9.
- [County Rule 210 §302.1e]

C. Performance Test Requirements:

1) Testing Requirements:

The Permittee shall conduct performance tests on the following equipment within 60 days after the permit issuance date or within 60 days after the new applicable equipment has achieved the capability to operate at its maximum production rate on a sustained basis, whichever occurs last. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days after the permit issuance date.

[County Rule 270 §401][SIP Rule 27 §A][40 CFR §60.8(a)]

a) Building 105 Dust Collector (92401739):

- (1) The Permittee shall measure the PM10 emission rate of the dust collector to demonstrate compliance with an emission rate of 0.0170 grains per standard cubic foot. The compliance test shall be conducted when at least 500 pounds of abrasive is being used in the abrasive blasting equipment.
- (2) A visible emissions evaluation shall demonstrate that emissions do not exceed 20 percent opacity.
- (3) Following the initial performance test for this permit, the Permittee shall conduct a performance test at least once every 36 months.

2) Testing Criteria:

Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified unless the Control Officer and Administrator specifies or approves minor changes in methodology to a reference method, approves the use of an equivalent test method, approves the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waives the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard. For NSPS facilities, only EPA has the authority to waive initial testing requirements.

[County Rule 270 §402][SIP Rule 27 §B][40 CFR §60.8(b)]

3) Test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.

[County Rule 270 §301.1][SIP Rule 27 §B]

a) Building 105 Dust Collector (92401739):

- (1) PM10 testing shall be conducted in accordance with EPA Test Method 5.
- (2) The visible emissions evaluation shall be conducted in accordance with EPA Test Method 9.

4) Operating Conditions:

Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently approved O&M Plan or according to its operations manual if no O&M Plan is required.

The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or permit conditions.

[County Rule 270 §403][40 CFR §60.8(c)]

5) Monitoring Requirements:

The Permittee shall record all process and control equipment information that are necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.

[County Rule 270 §301.1][SIP Rule 27 §B]

a) Building 105 Dust Collector (92401739):

The Permittee shall record the dust collector pressure drop during the performance test. This and any additional operational parameters shall be identified in the test protocol and recorded during testing.

6) Test Protocol Submittal:

The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test. The test protocol shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.

[County Rule 270 §301.1][SIP Rule 27 §B][40 CFR §60.8(d)]

7) Notice of Testing:

The Permittee shall notify the Department in writing at least two weeks in advance of the actual date and time of each performance test so that the Department may have a representative attend.

[County Rule 270 §404][40 CFR §60.8(d)]

8) Testing Facilities Required:

The Permittee shall install any and all sample ports or platforms necessary to conduct the performance tests, provide safe access to any platforms and provide the necessary utilities for testing equipment.

[County Rule 270 §405][SIP Rule 42][40 CFR §60.8(e)]

9) Minimum Testing Requirements:

Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be conducted for both the inlet and outlet measurements, if applicable, which must be conducted simultaneously. Emissions

rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.

[County Rule 270 §406][40 CFR §60.8(f)]

10) Test Report Submittal:

The Permittee shall complete and submit a separate test report for each performance test to the Department within 30 days after the completion of testing. The test report shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Report Submittal Form" shall accompany each test report.

[County Rule 270 §301.1][SIP Rule 27 §B]

11) Compliance with Emission Limits:

Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes, if applicable.

[County Rule 270 §407]

12) All test extension requests, test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1][SIP Rule 27 §B]

23. SOLVENT (DIP) CLEANING

A. Operational Limitations:

All cleaning machines shall be one of the following types:

- 1) Batch loaded cold cleaners with remote reservoir;
- 2) Batch loaded cold cleaners without a remote reservoir (such as a solvent dip tank).
- 3) Shall use only low VOC cleaner (A low VOC cleaner is any solution or homogeneous suspension that, as used, contains less than 50 grams of VOC per liter of material (0.42 lb. VOC/gal) or is at least 95% water by weight or volume as determined by an applicable test method in Section 502 of County Rule 331).
- 4) The Permittee shall not use any heated, agitated or non-conforming solvent in its batch cleaning machines.

[County Rule 210§ 302.1]

B. Solvent Handling Requirements:

- 1) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leak-free containers that are opened only when adding or removing material. Rags used for wipe cleaning shall be stored in closed containers when not in use. Each container shall be clearly labeled with its contents.
- 2) If a cleaning-solvent escapes from a container:
 - a) Wipe up or otherwise remove immediately if in accessible areas.
 - b) For areas where access is not feasible during normal production, remove as soon as reasonably possible.
- 3) Unless records show that VOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.
[County Rule 331 §301][SIP Rule 331 §301]

C. Equipment Requirements:

- 1) The Permittee shall provide a leak-free container (degreaser) for the solvents and the articles being cleaned.
 - a) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.
 - b) No surface of any freeboard required by this rule shall have an opening or duct through which VOC can escape to the atmosphere except as required by OSHA.
[County Rule 331 §302.1] [SIP Rule 331 §302.1]
- 2) The Permittee shall maintain and operate all cleaning machine equipment required by this rule and any of its emission controls required by this rule.
[County Rule 331 §302.2] [SIP Rule 331 §302.2]

D. Specific Operating & Signage Requirements:

- 1) The Permittee shall conform to the following operating requirements when cleaning with cleaning-solvents other than Low-VOC Cleaners:
 - a) Comfort fans shall not be used near cleaning machines;
 - b) Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine;
 - c) Drain cleaned parts for at least (15) fifteen seconds after cleaning or until dripping ceases, whichever is later;
 - d) When cleaning-solvent spray system:
 - (1) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
 - (2) Pressure at the orifice from which the solvent emerges shall not exceed (10) ten- psig and shall not cause liquid solvent to splash outside the solvent container.
 - (3) In an in-line-cleaning machine, a shower-type spray is allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.
 - (4) Exceptions to the foregoing subsections 1), 2), and 3) are provided for in Special Non-vapor Cleaning Situations in the section titled the same below.
 - e) The Permittee shall not cause agitation of a cleaning-solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds (15) fifteen seconds;

- f) The Permittee shall not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood, and rope. No object with a sealed wood handle, including a brush, is allowed;
- g) The ventilation rate at the cleaning machine shall not exceed 65 cfm per square foot of evaporative surface ($20 \text{ m}^3/\text{min}/\text{m}^2$), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional engineer experienced in ventilation, to meet health and safety requirements;
- h) Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and (11) eleven ft/min (3.3 m/min);
- i) The Permittee shall prevent cross contamination of solvents regulated by Section 304 of Rule 331 with solvents that are not so regulated. Use signs, separated work-areas, or other effective means for this purpose. This includes those spray gun cleaning solvents that are regulated by another rule.

[County Rule 331 §303.1] [SIP Rule 331 §303.1]

- 2) When using cleaning-solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank, the Permittee shall provide the following signage requirements on the machine, or within 3¼ feet (1 meter) of the machine, a permanent, conspicuous label, or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:
 - a) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)
 - b) "Drain parts until they can be removed without dripping."
 - c) "Do not blow off parts before they have stopped dripping."
 - d) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
 - e) "Don't leave cloth or any absorbent materials in or on this tank."
 - f) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post: "Operating instructions can be obtained from _____" where the Permittee shall list a person or place where the instructions are available.

[County Rule 331 §303.2] [SIP Rule 331 §303.2]

E. Solvent Specification:

All cleaning solvents, except Low-VOC Cleaners, shall be conforming solvents. A conforming solvent is one which has a total VOC vapor pressure at 68°F (20°C) not exceeding one (1) millimeter of mercury column maximum total VOC vapor pressure.

[County Rule 331 §304] [SIP Rule 331 §304]

F. Batch Cleaning Machines:

- 1) The Permittee shall equip each batch-cleaning machine with remote reservoir, including the cabinet type(s), with the following:
 - a) A sink-like work area or basin which is sloped sufficiently towards the drain so as to prevent pooling of cleaning-solvent.
 - b) A single, unimpeded drain opening or cluster of openings served by a single drain for the cleaning-solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5 square inches (100 cm^2).

- c) Provide a means for drainage of cleaned parts such that the drained solvent is returned to the cleaning machine.
[County Rule 331 §305.1] [SIP Rule 331 §305.1]

2) The Permittee shall equip each batch-cleaning machine without a remote reservoir with all of the following:

- a) Have and use an internal drainage rack or other assembly that confines within the freeboard all cleaning-solvent dripping from parts and returns it to the hold of the cleaning machine (degreaser).
- b) Have an impervious cover which when closed prevents cleaning-solvent vapors in the cleaning machine from escaping into the air/atmosphere when not processing work in the cleaning machine. The cover shall be fitted so that in its closed position the cover is between the cleaning-solvent and any lip exhaust or other safety vent, except that such position of cover and venting may be altered by an operator for valid concerns of flammability established in writing and certified to by a Certified Safety Professional or a Certified Industrial Hygienist to meet health and safety requirements.
- c) The freeboard height shall be no less than 6 inches (15.2 cm). Freeboard height for batch cleaning machines is the vertical distance from the solvent/air interface to the least elevated point of the top-rim when the cover is open or removed, measured during idling mode.
- d) The freeboard zone shall have a permanent, conspicuous mark that locates the maximum allowable solvent level which conforms to the applicable freeboard requirements.

[County Rule 331 §305.2][SIP Rule 331 §305.2]

G. Special Non-Vapor Cleaning Situations:

- 1) Blasting/Misting with Conforming Solvent: Any person blasting or misting with conforming solvent shall operate and equip the device(s) as follows:
 - a) Equipment: The device shall have internal drainage, a reservoir or sump, and a completely enclosed cleaning chamber, designed so as to prevent any perceptible liquid from emerging from the device; and
 - b) Operation: The device shall be operated such that there is no perceptible leakage from the device except for incidental drops from drained, removed parts.

[County Rule 331 §307.1][SIP Rule 331 §307.1]

H. Monitoring and Record Keeping:

- 1) The Permittee shall maintain a current list of cleaning-solvents; state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material.
- 2) If the Permittee uses any cleaning-solvent subject to the vapor-pressure limits of County Rule 331 §304.1 shall have on site the written value of the total VOC vapor pressure of each such solvent in one of the following forms:
 - a) A manufacturer's technical data sheet,
 - b) A manufacturer's safety data sheet (MSDS), or
 - c) Actual test results.
- 3) The Permittee shall record the amount of cleaning-solvent used at the end of each month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent.

- 4) Annually the Permittee shall document the use of concentrate that is used only in the formulation of Low VOC Cleaner.
- 5) Annually the Permittee may, for purposes of recording usage, give cleaning-solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all products in that group are then recorded under just one name. (In such case the Permittee shall also keep a separate list that identifies the product names of the particular solvents included under the group name.) To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10th of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.

[County Rule 331 §501][SIP Rule 331 §501]

I. Reporting:

The Permittee shall include the following information in each semiannual compliance report:

- 1) Certification from a responsible company official stating the Permittee's compliance status with the permit conditions specifically applicable to the Permittee's solvent cleaning.
- 2) The monthly summary of the solvent usage and legal disposal of solvents for the six month semiannual reporting period
- 3) A summary of any testing that may have been performed during the period.

[County Rule 210 §302.1.e]

J. Partial Exemption

Small Cleaners: The provisions of Sections 303 through 307 of County Rule 315 do not apply to any non-vapor cleaning machine (degreaser) or dip-tank fitting either of the following descriptions, except that these shall be covered when work is not being processed:

- 1) A small cleaner having a liquid surface area of 1 square foot (0.09 square meters) or less, or
- 2) A small cleaner having a maximum capacity of one gallon (3.79 liters) or less.

[County Rule 331 § 308.2][SIP Rule 331 § 308.2]

24. SOLVENT USE OTHER THAN DIP CLEANING:

A. Operational Requirements:

The following requirements apply to solvent cleaning operations:

- 1) Hand-wipe cleaning: Cleaning solvents used in hand-wipe cleaning operations shall utilize an aqueous cleaning solvent, or have a VOC composite vapor pressure less than or equal to 45 millimeters of mercury (mm Hg) at 20°F.
- 2) Flush Cleaning: For cleaning solvents used in the flush cleaning of parts, assemblies, and coating unit components, the used cleaning solvent (except semi-aqueous cleaning solvents) must be emptied into an enclosed container or collection system that is kept closed when not in use or captured with wipers, provided they comply with the VOC Containment and Disposal requirements located in this section of the Permit Conditions.

[County Rule 348 §305] [SIP 348 §305]

B. VOC Containment and Disposal:

All fresh and used VOC containing material, including but not limited to cleaning solvents, coatings, thinners, rags, and their residues, shall be stored in closed, leak free, legibly labeled containers when not in use. In addition, the Permittee must implement handling and transfer

procedures to minimize spills during filling and transferring the cleaning solvent to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or used cleaning solvents.

[County Rule 348 §307] [SIP 348 §307]

C. Record Keeping:

- 1) Maintain a current list of all aqueous and semi-aqueous hand-wipe cleaning solvents used with corresponding water contents.
- 2) Maintain a current list of all vapor pressure compliant hand-wipe cleaning solvents in use with their respective vapor pressures or, for blended solvents, VOC composite vapor pressures and records of the monthly usage of such cleaning solvents.
- 3) Maintain a current list of all hand-wipe cleaning processes using cleaning solvents with a vapor pressure greater than 45 mm Hg and records of the monthly usage of such cleaning solvents.

[County Rule 348 §501.2] [SIP 348 §501.2]

D. Reporting:

The Permittee shall include the following information in each semiannual compliance report.

- 1) Certification from a responsible company official stating the Permittee's compliance status with these permit conditions.
- 2) A summary of the usage records for each solvent and of any testing that may have been performed during the period.
- 3) This requirement can be combined with "Dip Cleaning" requirements contained within this Permit.

[County Rule 210 §302.1.e]

E. Solvent Cleaning Exemptions:

The following are exempt from the solvent cleaning requirements of County and SIP Rule 348 section 305 and the conditions of this permit that are based on that requirement.

- 1) Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen.
- 2) Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g. nitrogen tetroxide, liquid oxygen, hydrazine);
- 3) Cleaning and surface activation prior to adhesive bonding;
- 4) Cleaning of electronics parts and assemblies containing electronic parts;
- 5) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic systems;
- 6) Cleaning of fuel cells, fuel tanks, and confined spaces;
- 7) Surface cleaning of solar cells, coated optics, and thermal control surfaces;
- 8) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used on the interior of the aircraft;
- 9) Cleaning of metallic and nonmetallic materials used to honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;
- 10) Cleaning of aircraft transparencies, polycarbonate, or glass substrates;
- 11) Cleaning and solvent usage associated with research and development, quality control, or laboratory testing;

- 12) Cleaning operations using nonflammable liquids conducted within 5 feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and
- 13) Cleaning operations identified in an Essential Use Waiver, which has been reviewed and approved by the U.S. EPA and the voting parties of the International Protocol Committee [Sections 604(d)(1) and (g)(2) of the ACT]
[County Rule 348 §308.3] [SIP 348 §308.3]

F. General Exemptions:

Cotton-tipped swabs used for very small cleaning operations and aqueous cleaning solvents are exempt from the VOC containment and disposal requirements of Rule 348 section 307 and the conditions of this permit that are based on that requirement.
[County Rule 348 §308.4] [SIP 348 §308.4]

G. Compliance Determination:

- 1) For aqueous and semi-aqueous cleaning solvents, manufacturers' supplied data shall be used to determine the water content.
- 2) For hand-wipe cleaning solvents, manufacturers' supplied data or standard engineering reference texts or other equivalent methods shall be used to determine the vapor pressure or VOC composite vapor pressure for blended cleaning solvents.
[County Rule 348 §502.1c] [SIP 348 §502.1c]

25. SPRAY COATING OPERATIONS (NON-THERMAL)

A. Operational Limitations:

- 1) The Permittee shall operate all spray coating equipment inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object(s) being coated.
 - a) For three-sided enclosures, the Permittee shall direct the spray in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.
 - (1) For three-sided enclosures, the Permittee shall direct the spray in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.
 - (2) For enclosures with three sides and a roof, or for complete enclosures, the Permittee shall direct the spray into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of any open top of the enclosure.
[County Rule 315 §301.1][Locally enforceable only]
 - b) The Permittee shall install and operate a filtering system on any spray booth or enclosure with forced air exhaust.
 - (1) The filtering system shall have an average overspray removal efficiency of at least 92% by weight, as specified in writing by the manufacturer, for the type of material being sprayed.

- (2) No gaps, sags or holes shall be present in the filters and all exhaust must be discharged into the atmosphere.
 [County Rule 315 §301.2] [Locally enforceable only]
- 2) The Permittee shall be exempt from Subsection A of this Permit Condition if the spray coating operation is one of the following:
- Spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating;
 - Spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating;
 - Spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'W x 25'L x 8'H;
 - Enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air; or
 - Coating operations utilizing only hand-held aerosol cans.
 [County Rule 315 §302][Locally enforceable only]
- 3) The Permittee shall not apply any surface coating including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits in Tables 25.1 and 25.2.

TABLE 25.1 VOC EMISSION LIMITS

PRIMER or TOPCOAT TYPE	VOC LIMITS (g/L)
All Primers (except Specialty or General Aviation Rework Facility Primers)	350 g/l
All Topcoats (except Specialty or General Aviation Rework Facility Topcoats)	420 g/l
General Aviation Rework Facility Primers	540 g/l
General Aviation Rework Facility Topcoats	540 g/l

TABLE 25.2 VOC EMISSION LIMITS

Type of Specialty Coating	VOC Limits (g/L)
Ablative Coating	600
Adhesion Promoter	890
Adhesive Bonding Primers: Cured at 250°F or below	850
Adhesive Bonding Primers: Cured above 250°F	1030
Adhesives: Commercial Interior	760
Adhesives: Cyanoacrylate	1,020
Adhesives: Fuel Tank	620
Adhesives: Nonstructural	360
Adhesives: Rocket Motor Bonding	890
Adhesives: Rubber-based	850
Adhesives: Structural Autoclavable	60
Adhesives: Structural Nonautoclavable	850
Antichafe Coating	660
Bearing Coating Compounds	620
Caulking and Smoothing Compounds	850

Chemical Agent-Resistant Coating	550
Clear Coating	720
Commercial Exterior Aerodynamic Structure Primer	350
Compatible Substrate Primer	350
Corrosion Prevention Compound	710
Cryogenic Flexible Primer	350
Cryoprotective Coating	600
Coatings Related To Electromagnetism And/Or Other Radiation Electric Or Radiation-Effect Coating	600
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	800
Type of Specialty Coating	VOC Limits (g/L)
Elevated Temperature Skydrol Resistant Commercial Primer	350
Epoxy Polyamide Topcoat	420
Fire-Resistant (Interior) Coating	800
Flexible Primer	350
Flight-Test Coatings: Missile or Single Use Aircraft	420
Flight-Test Coatings: All Other	840
Fuel-Tank Coating	720
High-Temperature Coating	850
Insulation Covering	740
Intermediate Release Coating	750
Lacquer	830
Maskant: Bonding Maskant	420
Maskant: Critical Use and Line Sealer Maskant	420
Maskant: Seal Coat Maskant	420
Metallized Epoxy Coating	740
Mold Release	780
Optical Anti-Reflective Coating	750
Part Marking Coating	850
Pretreatment Coating	780
Rain Erosion-Resistant Coating	420
Resin Surface Sealer	695
Rocket Motor Nozzle Coating	660
Scale Inhibitor	880
Screen Print Ink	840
Sealants: Extrudable/Rollable/Brushable Sealant	240
Sealants: Sprayable Sealant	600
Self-priming Topcoat	420
Silicone Insulation Material	850
Solid Film Lubricant	880
Specialized Function Coating	890
Temporary Protective Coating	250
Thermal Control Coating	800
Wet Fastener Installation Coating	675
Wing Coating	420

[County Rule 348 §301][SIP Rule 348 §301]

- 4) **Application Equipment:**
The Permittee shall use one or more of the following application techniques in applying any primer or topcoat to aerospace vehicles or components: flow/curtain coat; dip coat; roll coating; brush coating; cotton-tipped swab application; electro deposition (DIP) coating; high volume low pressure (HVLP) spraying; electrostatic spray; or any other coating application methods that can demonstrate and be approved by the Control Officer as having at least 65% transfer efficiency, which is equivalent to the transfer efficiency of HVLP or electrostatic spray application methods.

[County Rule 348 §304] [SIP Rule 348 §304]

- 5) **Spray Gun Cleaning:**
All Spray guns must be cleaned by one or more of the following methods:
- a) Enclosed spray gun cleaning system, provided that it is kept closed when not in use and leaks are repaired within 14 days from when the leak is first discovered. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.
 - b) Un-atomized discharge of solvent into a waste container that is kept closed when not in use.
 - c) Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or
 - d) Atomized spray into a waste container that is fitted with a device designed to capture atomized solvent emissions.

[County Rule 348 §306] [SIP Rule 348 §306]

- 6) **Coating Exemptions:**
The following coatings are exempted from the VOC limits set forth in Tables 25.1 and 25.2 of this Permit.
- a) Touchup coatings;
 - b) Hand-held aerosol can operations;
 - c) DOD "classified" coatings;
 - d) Coating of space vehicles; and
 - e) Low usage coatings used in separate formulations in volumes of less than 50 gallons per year with a maximum exemption of 200 gallons total for such formulations applied annually.

[County Rule 348 §308.1][SIP Rule 348 §308.1]

- 7) **Application Equipment Exemptions:**
The following operations are exempt from the application equipment requirements.
- a) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;
 - b) The application of specialty coatings
 - c) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods.

- d) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the Department has determined cannot be applied by any of the application methods;
- e) The use of airbrush application methods for stenciling, lettering, and other identification markings; and
- f) Touch up and repair operations.

[County Rule 348 §308.2][SIP Rule 348 §308.2]

B. Monitoring and Record Keeping:

- 1) The Permittee shall inspect each filter installed on a spray booth or enclosure, for gaps, sags or holes once per week
 - a) Should the Permittee observe any gaps, sags or holes in any of the filters, the Permittee shall immediately repair or replace the filter and record in a logbook, the name of the inspector, and the time and date that the filter was replaced
 - b) If no gaps, sags or holes are observed in any of the filters, the Permittee shall record in a logbook, the name of the inspector and the time and date that the filter was inspected.

[County Rule 210 §302.1c&d]

- 2) The Permittee shall inspect the facility for evidence of any spraying activity that occurred outside of the spray booth once per week and record in a log book, the name of the inspector, the time, date and observations in a log book.

[County Rule 210 §302.1d]

- 3) The Permittee shall maintain on file and make available to the Control Officer upon request, a copy of the manufacturer's specifications verifying that the average overspray removal efficiency for the filter is at least 92%.

[County Rule 210 §302.1d]

4) Coatings:

The Permittee using coatings listed in Table 25.1 and 25.2 shall maintain a current list of coatings in use, VOC content as applied, HAP content as applied and records of monthly usage of such materials in pounds per gallon or gram per liter.

[County Rule 348 §501.1] [SIP Rule 348 §501.1]

5) Enclosed Spray Gun Cleaners:

Any person using an enclosed spray gun cleaner shall visibly inspect the seals and all other potential sources of leaks at least once per month while the spray gun cleaner is in operation. Records of these inspections shall be kept and made available upon request by the Control Officer.

[County Rule 348 §501.3][SIP Rule 348 §501.1]

C. Reporting:

For the purposes of the semi-annual compliance certification, the Permittee shall provide the following information:

- 1) If the Permittee operates spray coating equipment outside of a building and inside an enclosure without fixed air exhaust, the Permittee shall provide a statement certifying the following:
 - a) That the enclosure has at least three sides that are a minimum of eight feet in

- height;
- b) That no spraying was conducted within three feet of any open end, or within two feet of any open top of the enclosure; and
 - c) That the spray is directed in a horizontal or downward pointing manner for three-sided enclosures, or away from any opening for complete enclosures and three-sided enclosures with roofs.

[County Rule 210 §302.1.e]

- 2) For all spray coating equipment with a filtering system on a spray booth or enclosure with forced air exhaust, the Permittee shall provide a statement certifying the following:
 - a) That each filter installed on a spray booth or enclosure was inspected for gaps, sags or holes once every week;
 - b) That all filters that were observed to have gaps, sags or holes were immediately replaced; and
 - c) Details of the make and manufacturer of each filter used as well as the overspray control efficiency.

[County Rule 210 §302.1.e]

- 3) The Permittee shall provide a statement certifying that no spraying occurred outside of the paint booths. If evidence of spraying outside of the booth was found, the Permittee shall instead submit a statement detailing any corrective action taken in order to ensure that future spraying occurs inside the spray booth.

[County Rule 210 §302.1.e]

- 4) The Permittee shall provide a summary of the following:
 - a) A summary of the listed spray coatings at the facility and state the VOC and HAP content of each in pounds per gallon of material or grams per liter of material.
 - b) The individual monthly usage totals for each spray coating in gallons or liters for the for the 6-month semiannual reporting period;
 - c) A list of all non-compliant coatings that were used, the date they were used, the amount used and the reason for their use. If all coatings were compliant, submit a statement to that fact.

[County Rule 210 §302.1.e]

26. HARD CHROMIUM ELECTROPLATING

A. Operational Limitations:

- 1) During tank operation and also apply during periods of startup and shutdown, the Permittee shall control chromium emissions discharged into the atmosphere by not allowing the concentration of total chromium in the exhaust gas stream discharged into the atmosphere to exceed 0.03 mg/dscm (1.3×10^{-5} gr./dscf).

[40CFR 63.342][County Rule 370 §302.10]
- 2) The Permittee shall demonstrate the size of the hard chromium electroplating facility to be designated small by limiting the cumulative rectifier capacity to less than 60 million amp hours per rolling 12-month period.

[40 CFR 63.342] [County Rule 370 §302.10]

B. Monitoring and Record Keeping:

- 1) The Permittee shall monitor and record the velocity pressure at the inlet to the packed bed scrubber and the pressure drop across the scrubber system once each day that any affected source is operating. To be in compliance with the standards, the scrubber system shall be operated within the allowable ranges of Table 26.1:

TABLE 26.1

Inlet Velocity Pressure	0.22” – 0.28 “ of water column
Differential Pressure across the system	0.3” – 2.3” of water column

[40 CFR §63.343(c)(2)(ii)] [County Rule 370 §302.10]

- 2) The Permittee shall maintain the following records:
 - a) Inspection records for the packed bed scrubber and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40CFR §63.342 and Table 1 of 40CFR §63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during inspection, and any actions taken to correct deficiencies found during the inspection.
 - b) Records of all maintenance performed on the affected source, the packed bed scrubber, and monitoring equipment.
 - c) Records of each occurrence, duration, and cause (if known) of each malfunction of process, packed bed scrubber, and monitoring equipment.
 - d) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
 - e) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40CFR§63.342(f)(3).
 - f) Test reports documenting results of all performance tests.
 - g) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance procedures of 40 CFR§63.344(e).
 - h) Records of monitoring data required by 40CFR§63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
 - i) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, wet scrubber, or monitoring equipment.
 - j) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring data.
 - k) The total process operating time of the affected source during the semi-annual reporting period.
 - l) Records of actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period.

- m) All documentation supporting the notifications and reports required by 40 CFR§ 63.9, §63.10
- n) All records shall be maintained for a period of 5 years in accordance with 40CFR§63.10(b)(1).

[40 CFR §63.346(b)] [County Rule 370 §302.10]

C. Reporting:

The semi-annual report shall also contain the following information at a minimum:

- 1) The Permittee shall file semiannual monitoring reports with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6-month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed by the end of the month following the reporting period. Each report shall cover all instances of deviations from these permit conditions during the reporting period, the cause of the deviations if any were present, and any applicable corrective actions taken.

[County Rule 210 §302.1 e (1)]

2) Ongoing compliance status reports.

- a) The Permittee shall submit a summary report to the Control Officer to document the ongoing compliance status of the affected source. The report shall contain the following information and shall be submitted semiannually:

- (1) The company name and address of the affected source;
- (2) An identification of the operating parameter that is monitored (actual cumulative rectifier capacity) for compliance determination, as required by CFR40§63.343(c);
- (3) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by the requirements of the 40 CFR §63.346(b);
- (4) The beginning and ending dates of the reporting period;
- (5) A description of the type of process performed in the affected source;
- (6) The total operating time of the affected source during the reporting period;
- (7) The actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis.
- (8) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to the process upsets, control equipment malfunctions, other known causes, and unknown causes.
- (9) A certification by a responsible official as defined in 40CFR§63.2, that the work practice standards in 40CFR§63.342(f) were followed in accordance with the operation and maintenance plan for the source.
- (10) If the operation and maintenance plan required by 40CFR§63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or

- parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 40CFR§63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;
- (11) A description of any changes in monitoring, processes, or controls since the last reporting period.
 - (12) The name, title and signature of the responsible official who is certifying the accuracy of the report; and
 - (13) The date of the report.
- b) Exceptions to the ongoing compliance reports specified in the “Ongoing compliance status reports”, required by this section of the Permit Condition are as follows:
- (1) The Control Officer or the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or
 - (2) The monitoring data collected by the Permittee in accordance with 40CFR§343(c) show that the emission limit has been exceeded, in which case quarterly reports shall be submitted. Once the Permittee reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency is approved.
- [40 CFR §63.347(g)] [County Rule 370 §302.10]

D. Work Practice Standards:

The Permittee is subject to work practice standards, which require completion of an operation and maintenance (O&M) plan that contains the minimum elements of 40 CFR§ 63.342(f)(3) and Table 26.2. The work practice standards of this section address operation and maintenance practices.

- 1) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain any affected source, including associated packed bed scrubber and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan.
- 2) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.
- 3) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable and independent of emissions limitations or other requirements in relevant standards.

[40 CFR §63.342(f)] [County Rule 370 §302.10]

TABLE 26.2: SUMMARY OF WORK PRACTICE STANDARDS

Packed-bed scrubber (PBS)

Work Practice Standards	Frequency
1. Visually inspect device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device	1. 1/quarter
2. Visually inspect ductwork from tank to the control device to ensure there are no leaks	2. 1/quarter
3. Add fresh makeup water to the packed bed	3. Whenever makeup is needed



[40 CFR §63.342(f)][County Rule 370 §302.10]

E. Testing Requirements:

- 1) The Permittee is required to conduct a performance test of the packed bed scrubber system that is used to control emissions from hard chromium electroplating tanks. This performance test must be completed no later than 180 days after the issuance of the Title V Permit. The Permittee shall conduct the following performance tests using the same test methods within a window of 24 - 30 months from the initial test date.

The Permittee shall use either EPA Method 306 or Method 306A, to determine the chromium concentration from the hard chromium electroplating tanks. The sampling time and sample volume for each run of Methods 306 and 306A, shall be at least 120 minutes and 1.70 dscm (60 dscf) respectively. Methods 306 and 306A shall allow the measurement of either total chromium or hexavalent chromium emissions. Sources using chromic acid baths can demonstrate compliance with the emission limits of 40 CFR Sec. 63.342 by measuring either total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

During the performance test, the Permittee complying with the emission limitations in 40CFR§63.342 through use of a packed bed scrubber system shall determine the outlet chromium concentration using the procedures in 40CFR§63.344(c), and shall establish as site specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to compliance with the applicable emission limitation using procedures in 40CFR§63.344(d) (4) & (5). The Permittee may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the Permittee may set as the compliant value the average pressure drop and inlet velocity pressure measured over three test runs of one performance test, and accept ± 1 inch of water column from the pressure drop value and ± 10 percent from the velocity pressure values as the compliant range.

[40 CFR §63.344)] [County Rule 370 §302.10]

- 2) Notification of Performance Test:
 - a) The Permittee shall notify the Department and the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the test is scheduled to begin to allow the Department to have an observer present during the test. Observation of the performance test by the county is optional.
 - b) In the event the Permittee is unable to conduct the performance test as scheduled, the provisions of 40CFR§63.7(b)(2) apply.

- c) After a Title V permit has been issued, the Permittee is required to submit to the Control Officer a notification of compliance status, signed by the responsible official (as defined in 40 CFR §63.2) who shall certify its accuracy, attesting to whether the affected source has complied with this subpart. The notification of compliance status shall be submitted to the Department. The notification shall list for each affected source
 - (1) The applicable emission limitation and methods that were used to determine compliance with this limitation.
 - (2) The test report documenting the results of the performance test, which contains the elements required by 40CFR§63.344(a), including measurements and calculations to support the special compliance provisions of 40 CFR §63.344(e).
 - (3) For each monitored parameter, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit.
 - (4) The methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements.
 - (5) The description of each air pollution control technique for each emission point.
 - (6) A statement that the Permittee has completed and has on file the operation and maintenance plan as required by the work practice standards in 40CFR§63.342(f).
 - (7) Records to support that the facility is small. Records from any 12-month period preceding the compliance date shall be used.
 - (8) A statement by the Permittee as to whether the source has complied with the provisions of this subpart.
 - d) The notification of compliance status shall be submitted to the Department no later than 90 calendar days following completion of the compliance demonstration required by 40 CFR §63.7 & §63.43(b).
[40 CFR 60 §63.347(d)] [County Rule 370 §302.10]
- 3) Testing Protocol:
- a) Performance tests shall be conducted under such conditions, as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.
[County Rule 270 §403]
 - b) The Permittee shall submit a test protocol to the Department for review and approval at least 30 days prior to the emissions test.
[County Rule 270 §301.1] [County Rule 280 §301.5]
 - c) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Department may schedule a representative to attend.
[County Rule 270 §404]

- d) The Permittee shall complete and submit a report to the Department within 30 days after completion of the emissions test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.
[County Rule 270 §§301.1 & 401]

F. Operation and Maintenance Plan:

- 1) The Permittee must have on file with the Department an approved O&M Plan for the packed bed scrubber to control Chromium emissions.
[40 CFR 60 §63.342(f)] [County Rule 370 §302.10]

27. VOC STORAGE TANKS

A. Operational Limitations:

- 1) The Permittee can not store any volatile organic liquid (VOL) that has a true vapor pressure greater or equal to 27.6 kPa (207 mmHg) in any storage vessel greater than 75 m³.
[40 CFR 60 §110b][County Rule 360 §301.17]
- 2) The Permittee shall not transport any VOL that has a true vapor pressure greater than 1.5 psia, (10.3 kPa), in a delivery vessel.
[County Rule 210 §302.1b]
- 3) The Permittee shall limit annual throughput of methanol in the Building 422 underground methanol tank to less than 88,301 gallons methanol per year. Usage calculations shall be made monthly and assessed on a rolling twelve month basis.
[County Rule 210 §302.1b]

B. Monitoring and Record Keeping:

- 1) The Permittee shall keep copies of records readily accessible showing the dimensions of the storage vessels and an analysis showing the capacity for each of the storage vessels. This record shall be kept for the life of the source.
[40 CFR 60.116b(b)][County Rule 360 §301.17]
- 2) The Permittee shall keep copies of records readily accessible showing the VOL contained in each storage vessel and that the maximum true vapor pressure of each VOL at 92°F or a temperature from available data of the storage temperature.
[40 CFR 60 §110b][County Rule 360 §301.17]
- 3) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
 - a) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b) The vapor pressure may be obtained by the following.
 - (1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum

true vapor pressure from the nomographs contained in API Bulletin 2517 (incorporated by reference-see 40 CFR §60.17), unless the Control Officer specifically requests that the liquid be sampled, the actual storage temperature determined, the Reid vapor pressure determined from the sample(s).

- (2) The true vapor pressure may be obtained from standard reference texts, or
- (3) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference-see 40 CFR §60.17); or
- (4) Measured by an appropriate method approved by the Control Officer and the Administrator; or
- (5) Calculated by an appropriate method approved by the Control Officer and the Administrator.

[40 CFR 60 §116b(e)][County Rule 360 §301.17]

- 4) For each vessel storing a waste mixture of indeterminate or variable composition, the maximum true vapor pressure shall be recorded as the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored using the methods described in part 3) of this section.

[40 CFR 60 §116b][County Rule 360 §301.17]

- 5) The Permittee shall monitor for compliance with the methanol usage limits of these Permit Conditions by monthly calculating and recording the monthly and the rolling 12 month usage of methanol. The calculations shall be made no later than the end of the following month. The 12 month rolling emissions total shall be calculated by summing the usages for the most recent complete 12 calendar months. The monthly and rolling 12 month total usage of methanol from the facility shall be calculated based upon the usage records for each month.

[County Rule 210 §302.1b]

28. THERMAL SPRAY COATING:

A. Allowable Emissions:

- 1) The Permittee shall not discharge or cause or allow the discharge of particulate matter into the ambient air from the thermal spray coating operation in excess of the allowable hourly emission rate determined by the following equation:

$$E = 3.59 P^{0.62}$$

Where:

E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

[County Rule 311 §301.1][SIP Rule 311 §301.1]

The total process weight from all similar operations at a facility, plant or premises shall be used for determining the maximum allowable emissions of particulate matter.

[County Rule 311 §302][SIP Rule 311 §302]

- 2) In the event that the Permittee exceeds the applicable standard set forth in County Rule 311 §301.1 and above, the Permittee shall comply by installing and operating an

approved emission control system.

[County Rule 311 §304][SIP Rule 311 §304]

B. Operational Limitations:

- 1) The Permittee shall operate the ECS at a parametric range of 6.5 to 10.5 inches of water.

[County Rule 210§302.1][SIP Rule 3]

- 2) The ECSs shall be operated and maintained in accordance within operating parameters specified in Operation and Maintenance (O&M) Plan most recently approved in writing by the control officer.

[County Rule 210 §302.1b]

- 3) The Permittee shall not bypass the approved ECS.

[County Rule 210 §302.1b]

C. Monitoring and Record Keeping:

- 1) The Permittee shall observe for visible emissions weekly from each of the thermal spray coating exhaust streams during normal operation. If thermal spray operation was not performed during the entire week and because of this the observations of visible emissions could not be performed, a statement to that effect shall be documented.

- a) If visible emissions, other than uncombined water, are observed being discharged into the ambient air, the Permittee shall monitor for compliance with the opacity standards specified in this permit by having a certified visible emissions evaluator determine the opacity of the visible emissions being discharged into the ambient air using the techniques specified in EPA Reference Method 9.

The initial Method 9 opacity reading shall be taken within one day, (24 hours), from the time of observing visible emissions. If the emitting equipment is not operating on the day that the initial Method 9 opacity reading is required to be taken, then the initial Method 9 opacity reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 opacity reading is required to be performed, and there are no visible emissions (excluding uncombined water) observed from the previously emitting equipment while the equipment is in normal operation, the Permittee shall not be required to conduct the Method 9 opacity readings.

Follow-up Method 9 opacity readings shall be performed by a certified visible emissions evaluator while the emitting equipment in its standard mode of operation in accordance with the following schedule:

- (1) Daily:
 - (a) Except as provided in paragraph (3) of this Permit Condition, a Method 9 opacity reading shall be conducted each day that the emitting equipment is operating until a minimum of 14 daily Method 9 readings have occurred.
 - (b) If the Method 9 opacity readings required by this Permit Condition are less than 20% for 14 consecutive days, the frequency of Method 9

opacity readings may be decreased to weekly, in accordance with paragraph (2) of this Permit Condition.

- (2) Weekly:
 - (a) If the Permittee has obtained 14 consecutive daily Method 9 readings which do not exceed 20% opacity, the frequency of Method 9 readings may be decreased to once per week for any week in which the equipment is operated.
 - (b) If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 opacity readings shall revert to daily, in accordance with paragraph (1) of this Permit Condition.
 - (c) If the opacity measured during the required weekly Method 9 readings never exceeds 20%, the Permittee shall continue to obtain weekly opacity readings until the requirements of paragraph (3) of this Permit Condition are met.
- (3) Cease Follow-up Method 9 Opacity Monitoring:

Regardless of the applicable monitoring schedule, follow-up Method 9 opacity readings may cease if the emitting equipment, while in its standard mode of operation, has no visible emissions, other than uncombined water, during an observation taken during a Method 9 procedure.

[County Rule 210 §302.1c]

- 2) The Permittee shall log all visual observations including the following:
 - a) The date and time that the visual emissions or Method 9 reading was taken;
 - b) The name of the person who performed the reading;
 - c) Whether or not visible emissions were present;
 - d) The opacity of visual emissions determined by the Method 9 reading, if applicable;
 - e) A description of any corrective actions taken, including date, if applicable;
 - f) Any other related information, including all information required to be recorded pursuant to EPA Reference Method 9.

[County Rule 210 §302.1c][Locally enforceable only]

- 3) The Permittee shall record weekly pressure differential readings. The Permittee shall log all pressure differential readings, including the date when the reading was taken, identify each ECS, and the name or initials of the person who took the reading. The Permittee shall investigate the cause of any reading outside the range of the O&M plan to identify, correct or repair the problem and record in a log book the cause of the problem and the corrective action initiated to remedy the abnormal pressure differential reading. The Department may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 210 §302.1c]

- 4) These records shall be updated each day of operation and include at a minimum the following information: a record of the total weight of all process materials including raw materials, additives, fuels, etc., which are put into a process flow at the beginning of each batch process shall be kept on site. This shall include all materials which participate in the process and are changed in mass, form, state or in other characteristics by means of their interaction in the given process. The duration of each separate batch process shall also be recorded.

- (a) **Batch process records:** Maintain a record of the total weight of all process materials including raw materials, additives, and fuels which are put into a process flow at the beginning of each batch process shall be kept. This shall include all materials which participate in the process and are changed in mass, form, state or in other characteristics by means of their interaction in the given process. The duration of each separate batch process shall also be recorded.
- (b) **Continuous or semi-continuous process records:** Maintain a daily record of the weight of all process material entering into each process including raw materials, additives, fuels, the start time and the duration of each process run. In addition to the foregoing, records shall be kept for processes which run continuously for more than 24 hours. Such records shall include the total weight of any material entering into the process over the entire duration of the process run from start up to shut down and the total elapsed time of operation.

[County Rule 311 §502.2] [SIP 311§502.2]

D. Reporting:

Semi-Annual Monitoring Report

The Permittee shall submit a semi-annual monitoring report, which shall be certified as to its truth, accuracy and completeness by a responsible official in the manner required by County Rule 210 §§301.7 and 305.1(e), and which shall contain the following information, at a minimum:

a) Deviation Reporting

The Permittee shall identify all instances of deviations from permit requirements for thermal spray coating in the semi-annual monitoring report. The Permittee shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[County Rule 210 §302.1e(1)]

b) Visible Emissions

- (1) The dates of any week that the required visible emissions observations were not taken, an explanation for the deviation from that monitoring requirement, and a description of any action taken to ensure that the future observations are performed, if applicable.
- (2) Any date on which visible emissions were observed;
- (3) The approximate time of the observation;
- (4) Name of the observer;
- (5) A description of any corrective actions taken, if any, to reduce the visible emissions;
- (6) If a follow-up Method 9 reading was required, the opacity of the emissions determined by Method 9 and a copy of the visual determination of opacity record showing all information required by the Method 9.
- (7) Any other related information.

[County Rule 210 §302.1e]

E. Testing Requirements for Thermal Spray:

Note: All the test protocols, notifications and reports required by this permit condition should be addressed to the attention of the Air Quality Technical Services Unit Manager.

- 1) The Permittee shall conduct a performance test to determine total particulate emissions from the following rotoclones:
 - a) Maintenance number 92401299 located in Building 114
 - b) Maintenance number 92401615 located in Building 404
 - c) Maintenance number 92401219 located in Building 404
 - d) Maintenance number 92401344 located in Building 114

The testing shall be completed within 180 days after the issuance date of this permit. The testing shall be conducted in accordance with EPA Reference Method 5. Alternative testing methods may be approved by the Control Officer as provided by County Rule 270§ 301.4. The results shall be used to evaluate for compliance with County and SIP Rule 311 §301.1

[County Rules 200 §309 and 270][SIP Rule 270]

- 2) Performance tests shall be conducted under such conditions as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard. The Permittee shall monitor the pressure differential across the ECS during each test to confirm or modify the operational range in the O&M Plan. The pressure differential monitoring method shall be included in the test protocol.

[County Rule 270 §403]

- 3) The Permittee shall monitor and record the pressure differential across the ECS during each test to confirm or modify the operational range in the O&M Plan. The pressure differential monitoring method shall be included in the test protocol.

[County Rule 210 §302.1c][County Rule 270 §301.4]

- 4) The Permittee shall provide, or cause to be provided, source testing facilities as follows:
 - a) Test reports adequate for the applicable test methods
 - b) Safe sampling platform(s)
 - c) Safe access to sampling platform(s)
 - d) Utilities for testing and sampling equipment.

[County Rule 270 §405]

- 5) The Permittee shall submit separate approvable test protocols for each rotoclone to the Department for review and approval at least 30 days prior to the test.

[County Rule 270 §301.1]

- 6) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Department may have a representative to attend.

[County Rule 270 §404]

- 7) The Permittee shall complete and submit a separate report for each test to the Department within 30 days after completion of the emissions test. The report shall

summarize the results of the testing in sufficient detail to allow a compliance determination and demonstration to be made.

[County Rule 270 §§301.1 & 401]

29. PERMIT CONDITIONS FOR ARCHITECTURAL COATING

A. Operational Limitations:

The Permittee shall limit the volatile organic compound (VOC) content of architectural coatings as follows:

1) Bituminous Pavement Sealer

The Permittee shall not apply any architectural coating manufactured after July 13, 1988, which is recommended for use as a bituminous pavement sealer unless it is an emulsion type coating.

[County Rule 335 §301][SIP Rule 335 §301]

2) Non-Flat Architectural Coating

The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed in Table 29.1.

[County Rule 335 §303][SIP Rule 335 §303]

3) Flat Architectural Coating

The Permittee shall not apply any flat architectural coating manufactured after July 13, 1989, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed in Table 29.1.

[County Rule 335 §304][SIP Rule 335 §304]

4) Specialty Coatings

The Permittee shall not apply any architectural coating manufactured after July 13, 1991 that exceeds the limits listed in Table 29.1. The limits are expressed in pounds of VOC per gallon of coating as applied, excluding water and any colorant added to tint bases.

TABLE 29.1 VOC LIMITATIONS

<u>COATING</u>	<u>(lb/gal)</u>
Concrete Curing Compounds	2.9
Dry Fog Coating	
Flat	3.5
Non-flat	3.3
Enamel Undercoaters	2.9
General Primers, Sealers and Undercoaters	2.9
Industrial Maintenance Primers and Topcoats	
Alkyds	3.5
Catalyzed Epoxy	3.5

Bituminous Coating Materials	3.5
Inorganic Polymers	3.5
Vinyl Chloride Polymers	3.5
Chlorinated Rubbers	3.5
Acrylic Polymers	3.5
Urethane Polymers	3.5
Silicones	3.5
Unique Vehicles	3.5
Lacquers	5.7
Opaque Stains	2.9
Wood Preservatives	2.9
Quick Dry Enamels	3.3
Roof Coatings	2.5
Semi-transparent Stains	2.9
Semi-transparent and Clear Wood Preservatives	2.9
Opaque Wood Preservatives	2.9
Specialty Flat Products	3.3
Specialty Primers, Sealers & Undercoaters	2.9
Traffic Coatings	
Applied to Public Streets and Highways	2.1
Applied to other Surfaces	2.1
Black Traffic Coatings	2.1
Varnishes	2.9
Waterproof Mastic Coating	2.5
Waterproof Sealers	3.3

[County Rule 335 §305][SIP Rule 335 §305]

5) Exemptions:

The VOC content requirement of this Section shall not apply to the following:

- a) Architectural coatings supplied in containers having capacities of one quart or less.
- b) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - (1) Below ground wood preservative coatings.
 - (2) Bond breakers.
 - (3) Fire retardant coatings.
 - (4) Graphic arts coatings (sign paints)
 - (5) Mastic texture coatings.
 - (6) Metallic pigmented coatings.
 - (7) Multi-colored paints.
 - (8) Quick-dry primers, sealers and undercoaters.
 - (9) Shellacs.
 - (10) Swimming pool paints.
 - (11) Tile-like glaze coatings.

[County Rule 335 §§306and 307][SIP Rule 335 §§306and 307]

B. Monitoring and Record Keeping:

The Permittee shall keep a material list of all coatings used. The material list shall contain the name of each coating, a short description of the material, the pounds of VOCs per gallon of coating excluding water and colorant added to tint bases, and the amount of each coating used. If the coating is exempt from the volatile organic compounds content requirements, the justification for the determination shall be documented and kept on file.

[County Rule 210 §302.1c] [County Rule 210 §302.1e]

C. Reporting:

The Permittee shall submit a report if any non-compliant architectural coatings were used during the six-month reporting period in the semi-annual monitoring report. The report shall include the name, the VOC content per gallon and the amount of any non-compliant architectural coating used on site.

[County Rule 210 §302.1e][Locally enforceable only]

30. PLATING OPERATIONS OTHER THAN CHROME PLATING

A. Operational Limitations:

- 1) The Permittee shall vent the exhaust gases from the acid baths to the ECSs without bypass.
- 2) The Permittee shall operate and maintain the ECSs in accordance with Table 30.1 in these permit conditions and the most recently submitted Operation and Maintenance (O&M) Plan. The O&M Plan shall contain, at a minimum, key operating limits and maintenance procedures acceptable to the Control Officer.
- 3) If an ECS is found to be operating outside of the operating limits specified in Table 30.1, the Permittee shall investigate and take corrective action necessary to bring the ECS back into proper operation.
- 4) The batch wastewater treatment packed bed scrubber in Building 422 Maintenance Number 92415025 shall meet the operating limits specified in Table 30.1. The batch wastewater treatment packed bed scrubber is required to be in operation when treating cyanide bearing waste, metal-bearing waste, and lead anode waste..

[County Rule 210 §302.1b]

B. Monitoring and Record Keeping:

- 1) The Permittee shall record the differential pressure, recirculation water flow rate, blowdown flow rate, visible emission reading (and pH if noted in Table 30.1) for the ECSs once each week that the ECS is required to be in operation. The Permittee shall also note in the log the days when the ECS was not required to be in operation and therefore no readings were required. For the batch wastewater treatment scrubber in Building 422 (Maintenance Number 92415025), the Permittee shall record the start and end time of each batch treatment of cyanide bearing waste, metal-bearing waste, lead anode waste and/or any other wastewater that has the potential for chlorine or hydrogen sulfide emissions.
- 2) The Permittee shall maintain all records required by the O&M Plan.
- 3) If an ECS is found to be operating outside of the operating limits specified in Table 30.1, the Permittee shall record the following:
 - a) The date and time when the ECS was found to be operating outside of its operating limits and the date and time that it returned to operating within its limits.
 - b) The results of the investigation into the cause of the excursion outside of the operating limits.

- c) A description of any corrective actions taken to return the ECS to normal operation. If the ECS returned to normal operation without any actions by the Permittee, that fact shall also be recorded.

[County Rule 210 §302c&d]

C. Reporting:

Semi-Annual Monitoring Report

The Permittee shall submit a semi-annual monitoring report, which shall be certified as to its truth, accuracy and completeness by a responsible official in the manner required by County Rule 210 §§301.7 and 305.1(e), and which shall contain the following information, at a minimum:

1) Deviation Reporting

The Permittee shall identify all instances of deviations from the permit requirements of this section in the semi-annual monitoring report. The Permittee shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[County Rule 210 §302.1e(1)]

2) Visible Emissions

- a) The dates of any week that the required visible emissions observations were not taken, an explanation for the deviation from that monitoring requirement, and a description of any action taken to ensure that the future observations are performed, if applicable.
- b) Any date on which visible emissions were observed;
- c) The approximate time of the observation;
- d) Name of the observer;
- e) A description of any corrective actions taken, if any, to reduce the visible emissions;
- f) If a follow-up Method 9 reading was required, the opacity of the emissions determined by Method 9 and a copy of the visual determination of opacity record showing all information required by the Method 9.

[County Rule 210 §302.1e]

TABLE 30.1 ECS OPERATING PARAMETERS (PACKED BED SCRUBBERS)

Identification Number	Building	Parameter	Limits	Frequency
92415005	422	Inlet Pressure	3.6" – 4.4" wc	Daily
92415005	422	Differential Pressure	0.3" – 2.3" wc	Daily
92415005	422	Recirculation Flowrate	175 – 225 gpm (total)	Weekly
92415005	422	Blowdown flowrate	3 – 6 gpm	Weekly
92415005	422	Visible Emissions	no visible emissions	Weekly
92415006	422	Differential Pressure	0.8" – 2.3" wc	Weekly
92415006	422	Recirculation Flowrate	175 – 225 gpm (total)	Weekly
92415006	422	Blowdown flowrate	3.0 – 6.0 gpm	Weekly
92415006	422	Visible Emissions	no visible emissions	Weekly
92415007	422	Differential Pressure	0.8" – 3.0" wc	Weekly

92415007	422	Recirculation Flowrate	150 – 190 gpm (total)	Weekly
92415007	422	Blowdown flowrate	2.0 – 5.0 gpm	Weekly
92415007	422	Visible Emissions	no visible emissions	Weekly
92415013	422	Differential Pressure	0.5” – 2.0” wc	Weekly
92415013	422	Recirculation Flowrate	25 – 50 gpm (total)	Weekly
92415013	422	Blowdown flowrate	0.5 – 1.5 gpm	Weekly
92415013	422	Visible Emissions	no visible emissions	Weekly
92415014	422	Differential Pressure	0.5” – 2.0” wc	Weekly
92415014	422	Recirculation Flowrate	25 – 50 gpm (total)	Weekly
92415014	422	Blowdown flowrate	0.5 – 1.5 gpm	Weekly
92415014	422	Visible Emissions	no visible emissions	Weekly
92415019	422	Differential Pressure	0.8” – 2.8” wc	Weekly
92415019	422	Recirculation Flowrate	125 – 180 gpm (total)	Weekly
92415019	422	Blowdown flowrate	2.0 – 5.0 gpm	Weekly
92415019	422	Visible Emissions	no visible emissions	Weekly
92415020	422	Differential Pressure	0.8” – 2.8” wc	Weekly
92415020	422	Recirculation Flowrate	125 – 180 gpm (total)	Weekly
92415020	422	Blowdown flowrate	2.0 – 5.0 gpm	Weekly
92415020	422	Visible Emissions	no visible emissions	Weekly
92415021	102	Differential Pressure	2.0” – 4.5” wc	Weekly
92415021	102	Recirculation Flowrate	30 – 40 gpm (total)	Weekly
92415021	102	Blowdown flowrate	0.5 – 1.0 gpm	Weekly
92415021	102	Visible Emissions	no visible emissions	Weekly
92415022	429	Differential Pressure	0.9” – 3.0” wc	Weekly
92415022	429	Recirculation Flowrate	250 – 360 gpm (total)	Weekly
92415022	429	Blowdown flowrate	6.0 – 9.0 gpm	Weekly
92415022	429	Visible Emissions	no visible emissions	Weekly
92415025	422	Differential Pressure	1.0” – 2.5” wc	Weekly
92415025	422	Recirculation Flowrate	160-225 gpm (total)	Weekly
92415025	422	Blowdown flowrate	3.0 – 10.0 gpm	Weekly
92415025	422	Visible Emissions	no visible emissions	Weekly
92415025	422	pH	13.0 – 14.0	Weekly
92415026	422	Differential Pressure	1.0” – 2.6” wc	Weekly
92415026	422	Recirculation	35-50 gpm (total)	Weekly

		Flowrate		
92415026	422	Blowdown flowrate	0.5 – 1.5 gpm	Weekly
92415026	422	Visible Emissions	no visible emissions	Weekly
92415026	422	pH	1.0 – 3.0	Weekly
92415027	105	Differential Pressure	0.8” – 3.0” wc	Weekly
92415027	105	Recirculation Flowrate	300-550 gpm (total)	Weekly
92415027	105	Blowdown flowrate	4.0 – 15.0 gpm	Weekly
92415027	105	Visible Emissions	no visible emissions	Weekly
92415027	105	pH	9.0 – 14.0	Weekly
92415028	105	Differential Pressure	0.8” – 3.0” wc	Weekly
92415028	105	Recirculation Flowrate	300-550 gpm (total)	Weekly
92415028	105	Blowdown flowrate	4.0 – 15.0 gpm	Weekly
92415028	105	Visible Emissions	no visible emissions	Weekly

D. Performance Test Requirements:

1) Testing Requirements:

The Permittee shall conduct performance tests on the following equipment within 60 days after the permit issuance date or within 60 days after the new applicable equipment has achieved the capability to operate at its maximum production rate on a sustained basis, whichever occurs last. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days of the equipment startup date.

[County Rule 270 §401][SIP Rule 27 §A][40 CFR §60.8(a)]

a) Building 105 East Scrubber (92415028):

- (1) The Permittee shall measure the hydrogen fluoride (HF) or hydrogen chloride (HCl) concentrations (as directed by the Control Officer) in the scrubber inlet and exhaust streams to demonstrate a minimum HF or HCl removal efficiency of at least 90% by weight. Testing shall also demonstrate compliance with all applicable HF and HCl concentrations and/or emission limits of these permit conditions.
- (2) If during the initial or any following performance test at least 90% removal efficiency is demonstrated for HF or HCl, the performance test shall be repeated at five year intervals.
- (3) If during the initial or any following performance test, the inlet HF or HCl concentrations are less than 10 ppmv, in lieu of demonstrating at least 90% removal efficiency, an outlet concentration of 1 ppmv or less for a single constituent from the exhaust will be an acceptable demonstration of compliance. The performance test will be repeated annually for HF or HCl (i.e., for the constituent that had an inlet concentration of less than 10 ppmv and that did not demonstrate an outlet concentration of 1 ppm or less for a single constituent) until the inlet concentration of HF or HCl is 10 ppmv or greater and at least 90% removal efficiency is demonstrated.

- b) **Building 105 West Scrubber (92415027):**
- (1) The Permittee shall measure the HF concentrations in the scrubber inlet and exhaust streams to demonstrate a minimum HF removal efficiency of at least 90% by weight. Testing shall also demonstrate compliance with all applicable HF concentrations and/or emission limits of these permit conditions.
 - (2) If during the initial or any following performance test at least 90% removal efficiency is demonstrated for HF, the performance test shall be repeated at five year intervals.
 - (3) If during the initial or any following performance test the inlet HF concentration is less than 10 ppmv, in lieu of demonstrating at least 90% removal efficiency, an outlet concentration of 1 ppmv or less for HF from the exhaust will be an acceptable demonstration of compliance. The performance test will be repeated annually for HF until the inlet concentration of HF is 10 ppmv or greater and at least 90% removal efficiency is demonstrated.
- c) **Building 422 Ammonia Scrubber (92415026):**
- (1) The Permittee shall measure the ammonia (NH₃) concentrations in the scrubber inlet and exhaust streams to demonstrate a minimum NH₃ removal efficiency of 99% by weight. Testing shall also demonstrate compliance with all applicable NH₃ concentrations and/or emission limits of these permit conditions.
 - (2) If during the initial or any following performance test at least 90% removal efficiency is demonstrated for NH₃, the performance test shall be repeated at five year intervals.
 - (3) If during the initial or any following performance test, the inlet NH₃ concentration is less than 10 ppmv, in lieu of demonstrating at least 90% removal efficiency, an outlet concentration of 1 ppmv or less for NH₃ from the exhaust will be an acceptable demonstration of compliance. The performance test will be repeated annually for NH₃ until the inlet concentration of NH₃ is 10 ppmv or greater and at least 90% removal efficiency is demonstrated.
- d) **Building 422 Batch Wastewater Treatment Tank Scrubber (92415025):**
- (1) While treating cyanide-containing bearing wastes, the Permittee shall measure the chlorine (Cl₂) concentration in the scrubber inlet and exhaust streams to demonstrate a minimum Cl₂ removal efficiency of at least 87% by weight. Testing shall also demonstrate compliance with all applicable Cl₂ concentrations and/or emission limits of these permit conditions.
 - (2) If during the initial or any following performance test, at least 87% removal efficiency is demonstrated, the performance test shall be repeated at five year intervals.
 - (3) If during the initial or any following performance test, the inlet Cl₂ concentration is less than 10 ppmv, in lieu of demonstrating at least 87% removal efficiency, an outlet concentration of 1 ppmv or less for Cl₂ from the exhaust will be an acceptable demonstration of compliance. The performance test will be repeated annually until the inlet concentration of

Cl₂ is 10 ppmv or greater and at least 87% removal efficiency is demonstrated.

- (4) While treating metal-bearing and/or lead anode wastes, the Permittee shall measure the hydrogen sulfide (H₂S) concentration in the scrubber inlet and exhaust streams to demonstrate a minimum H₂S removal efficiency of 92% by weight. Testing shall also demonstrate compliance with all applicable H₂S concentrations and/or emission limits of these permit conditions.
- (5) If during the initial or any following performance test, at least 92% removal efficiency for H₂S is demonstrated, the performance test shall be repeated at five year intervals.
- (6) If during the initial or any following performance test, the inlet H₂S concentration is less than 10 ppmv, in lieu of demonstrating at least 92% removal efficiency, an outlet concentration of 1 ppmv or less for H₂S from the exhaust will be an acceptable demonstration of compliance. The performance test will be repeated annually until the inlet concentration of H₂S is 10 ppmv or greater and at least 92% removal efficiency is demonstrated.

2) Testing Criteria:

Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified unless the Control Officer and Administrator specifies or approves minor changes in methodology to a reference method, approves the use of an equivalent test method, approves the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waives the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard. For NSPS facilities, only EPA has the authority to waive initial testing requirements.

[County Rule 270 §402][SIP Rule 27 §B][40 CFR §60.8(b)]

3) Test Methods:

Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.

[County Rule 270 §301.1][SIP Rule 27 §B]

a) Building 105 East Scrubber (92415028):

- (1) HF and HCl testing shall be conducted in accordance with EPA Test Method 26 or 26A.

b) Building 105 West Scrubber (92415027):

- (1) HF testing shall be conducted in accordance with EPA Test Method 26 or 26A.

c) Building 422 Ammonia Scrubber (92415026):

- (1) NH₃ testing shall be conducted in accordance with EPA Test Method CTM-027 (USEPA Conditional Test Method) or superseding USEPA test method for NH₃.
- d) Building 422 Batch Wastewater Treatment Tank Scrubber (92415025):
 - (1) Cl₂ and H₂S testing shall be conducted in accordance with EPA Test Method 26A.
 - (2) H₂S testing shall be conducted in accordance with a test method to be determined by the Control Officer.
- 4) Operating Conditions:

Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently approved O&M Plan or according to its operations manual if no O&M Plan is required. The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or permit conditions.

[County Rule 270 §403][40 CFR §60.8(c)]

- 5) Monitoring Requirements:

The Permittee shall record all process and control equipment information that are necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.

[County Rule 270 §301.1][SIP Rule 27 §B]

- a) Building 105 East Scrubber (92415028):

The Permittee shall record the scrubber pressure drop, scrubber liquid recirculation rate and scrubber liquid pH level during the performance test. These and any additional operational parameters shall be identified in the test protocol and recorded during testing.
- b) Building 105 West Scrubber (92415027):

The Permittee shall record the scrubber pressure drop, scrubber liquid recirculation rate and scrubber liquid pH level during the performance test. These and any additional operational parameters shall be identified in the test protocol and recorded during testing.
- c) Building 422 Ammonia Scrubber (92415026):

The Permittee shall record the scrubber pressure drop, scrubber liquid recirculation rate and scrubber liquid pH level during the performance test. These and any additional operational parameters shall be identified in the test protocol and recorded during testing.

- d) Building 422 Batch Wastewater Treatment Tank Scrubber (92415025):
The Permittee shall record the scrubber pressure drop, scrubber liquid recirculation rate and scrubber liquid pH level during the performance test. These and any additional operational parameters shall be identified in the test protocol and recorded during testing.
- 6) Test Protocol Submittal:
The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test. The test protocol shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.
[County Rule 270 §301.1][SIP Rule 27 §B][40 CFR §60.8(d)]
- 7) Notice of Testing:
The Permittee shall notify the Department in writing at least two weeks in advance of the actual date and time of each performance test so that the Department may have a representative attend.
[County Rule 270 §404][40 CFR §60.8(d)]
- 8) Testing Facilities Required:
The Permittee shall install any and all sample ports or platforms necessary to conduct the performance tests, provide safe access to any platforms and provide the necessary utilities for testing equipment.
[County Rule 270 §405][SIP Rule 42][40 CFR §60.8(e)]
- 9) Minimum Testing Requirements:
Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be conducted for both the inlet and outlet measurements, if applicable, which must be conducted simultaneously. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.
[County Rule 270 §406][40 CFR §60.8(f)]
- 10) Test Report Submittal:
The Permittee shall complete and submit a separate test report for each performance test to the Department within 30 days after the completion of testing. The test report shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Report Submittal Form" shall accompany each test report.

[County Rule 270 §301.1][SIP Rule 27 §B]

- 11) **Compliance with Emission Limits:**
Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes, if applicable.
[County Rule 270 §407]
- 12) All test extension requests, test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1][SIP Rule 27 §B]

31. CUTBACK AND EMULSIFIED ASPHALT:

A. Operational Limitations:

- 1) The VOC content of asphalt materials shall be limited as follows:
 - a) The Permittee shall not use or apply the following materials for paving, construction, or maintenance of highways, streets, driveways, parking lots, roads, nor shall they be applied onto soil and earthworks:
 - (1) Rapid cure cutback asphalt.
 - (2) Any cutback asphalt material, road oils, or tar which contains more than 0.5 percent by volume VOCs which evaporate at 500⁰F (260⁰C) or less using ASTM Test Method D 402-76.
 - (3) Any emulsified asphalt or emulsified tar containing more than 3.0 percent by volume VOCs which evaporate at 500⁰F (260⁰C) or less as determined by ASTM Method D 244-89.
 - b) The Permittee shall not store for use any emulsified or cutback asphalt product which contains more than 0.5 percent by volume solvent-VOC unless such material lot includes a designation of solvent-VOC content on data sheet(s) expressed in percent solvent-VOC by volume.
- 2) The VOC content limitations of this Permit Condition do not apply to the following:
 - a) Asphalt that is used solely as a penetrating prime coat and which is not a rapid cure cutback asphalt. Penetrating prime coats do not include dust palliatives or tack coats.

[County Rule 340 §301] [SIP Rule 340 §301]

[County Rule 340 §303] [SIP Rule 340 §303]

[County 340 §302.1] [SIP Rule 340 §302.1]

- b) The Permittee may use up to 3.0 percent solvent-VOC by volume for batches of asphalt rubber which cannot meet paving specifications by adding heat alone only if request is made to the Control Officer, who shall evaluate such requests on a case-by-case basis. The Permittee shall keep complete records and full information is supplied including

savings realized by using discarded tires. The Permittee shall not exceed 1100 lbs (500 kg) usage of solvent-VOC in asphalt rubber in a calendar year unless the Permittee can demonstrate that in the previous 12 months no solvent-VOC has been added to at least 95 percent by weight of all the asphalt rubber binder made by the Permittee or caused to be made for the Permittee. This Permit Condition does not apply to batches which yield 0.5 percent or less solvent-VOC evaporated using the test in County Rule 340 § 502.1.

[County 340 §302.3] [SIP Rule 340 §302.3]

B. Monitoring and Record Keeping:

The Permittee shall keep daily records of the amount and type of asphaltic/bituminous material containing more than 0.5 percent by volume solvent-VOCs which is used at the facility. Records must show the solvent-VOC content of this material.

Material Safety Data Sheets (MSDS) or technical data sheets shall be kept available for any asphalt materials used at the facility. Records must be maintained in a readily accessible location and must be made available to the Control Officer upon request.

[County 340 §501] [SIP Rule 340 §501] [County Rule 210 §302.1.c.(2)]

C. Reporting:

The Permittee shall include the following information in the semiannual compliance report required by these Permit Conditions:

- 1) A statement as to whether the recordkeeping requirements of these Permit Conditions relating to asphalt usage were met.
- 2) A listing of any asphalt used that exceeded the VOC content limitations of Permit Condition A. 1) of this section and whether the exceedance was covered by an exemption covered by Permit Condition A. 2) of this section or whether it was a deviation from the requirements of this Permit Condition.

County Rule 210 §302.1.e.(1)]

32. TURBINE ENGINE TEST CELLS:

A. NSR/PSD Synthetic Minor Limitations

- 1) The Permittee shall not exceed the limits for each modification set forth in Table 32.1. The limits are a combined total for the modifications that included two test cells where specified.

[County Rules 210§§§ 201, 301.8b(4), 302.1b]

- 2) The Permittee shall use the emission factors set forth in Table 32.2 when calculating the emissions for all the test cells including the calculations for the NSR/PSD annual CO and NOx limits found in Table 32.1.

County Rule 210 § 302.1b]

Table 32.1

Pollutant	Emission Factor (lbs./MMBtu)
NOx	0.88
CO	0.7
VOC	0.4

Table 32.2

Modification	Date Modified	NOx (tons/year)	CO (tons/year)
Test Cell #C-917/817	1999	10.25	90
Test Cells #930 & #931 (combined)	1979	36	90
Test Cells #941 & 942 (combined)	1985	36	90
Test Cells #943 & 944 (combined)	1987	36	90

- 3) The Permittee shall use the emission factors set forth in AP-42, Table 3.1-4 and 3.1-5 when calculating the HAP emissions for all the test cells.

[County Rule 210 § 302.1b]

B. Monitoring and Record Keeping

The Permittee shall keep the following records for each test cell listed in Table 32.1

- 1) The date, duration, fuel usage and type of engine tested on a daily basis
- 2) The Permittee shall calculate the monthly emissions of NO_x and CO for all tests of the turbine engines for each of the following test cells
 - a) Test Cell #C-917/817
 - b) Test Cell #930
 - c) Test Cell #931
 - d) Test Cell #941
 - e) Test Cell #942
 - f) Test Cell #943
 - g) Test Cell #944

These calculations shall be made no later than the end of the following month.

[County Rule 210 § 302.1d] [County Rule 210§ 301.8b(4)]

- 3) The Permittee shall calculate the rolling twelve month total emissions for CO and NO_x for each of the following groups of test cells. These calculations shall be made no later than the last day of the following month
 - a) Test Cell #C-917/817
 - b) Test Cells #930 & #931
 - c) Test Cells #941 & 942
 - d) Test Cells #943 & 944

[County Rule 210 § 302.1d] [County Rule 210§ 301.8b(4)]

C. Reporting:

- 1) For the purposes of the semi-annual monitoring report, the Permittee shall provide the following information for the following test cells.

Rolling twelve month totals of CO and NO_x, including the calculations using the emission factors for each of the following groups of test cells

- a) The emissions from the Test Cell #C-917/817
- b) The combined emissions from Test Cell #930 & #931
- c) The combined emissions from Test Cells #941 & 942
- d) The combined emissions from Test Cells #943 & 944

[County Rule 210 §302.1e]

2) If at any time the rolling twelve month total for the following groups of test cells exceed the following emissions, the Permittee shall submit to the Department, new turbine engine specific emission factors or a testing protocol to determine turbine engine specific factors from the effected test cell(s) for approval. This document shall be submitted within 60 days from the day the exceeding rolling twelve month total was calculated.

Table 32.3

Modification	NOx (tons/year)	CO (tons/year)
Test Cell #C-917 / 817	7.7	68
Test Cells #930 & #931 (combined)	27	68
Test Cells #941 & 942 (combined)	27	68
Test Cells #943 & 944 (combined)	27	68

[County Rule 210 §302.1e]

33. FUEL BURNING EQUIPMENT:

The effected equipment include all air heaters and boilers listed in the equipment list

A. Allowable Emissions

1) For equipment having a heat input rating of 4,200 million BTU/hr or less, the maximum allowable emissions (E) shall be determined by the following equation:

$$E = 1.02 Q^{0.769}$$

Where:

E = maximum allowable particulate emission rate in pounds-mass per hour, and

Q = The heat output in million BTU per hour

[SIP Rule 311 §304.1

2) Opacity Requirements:

a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300 §302.

[County Rule 300 §301][Locally enforceable only]

b) The opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30 §A]

B. Operational Limitations:

The Permittee shall use only natural gas to fuel the boilers and air heaters at the facility.

[County Rule 210 §302.1b]

C. Monitoring and Reporting Requirements

The Permittee shall conduct a weekly facility walk-through and observe for visible emissions from the boilers and air heaters. This visible emission observation may be conducted with the

overall facility walkthrough required by Permit Condition in the Facility Wide Monitoring and Recordkeeping Requirements.

[County Rule 300] [County Rule 210 §302.1c]

D. Permit Conditions for the two (2) 36 MMBtu boilers in building 202

1) Operational Limitations:

The Permittee shall use only natural gas to fuel the affected boilers

[County Rule 323 §303.1][Locally Enforceable Only]

2) Emission Limitations

Nitrogen Oxides:

The Permittee shall comply either with Permit Condition 33D2) a) or b) below:

a) Establish initial optimal baseline concentrations for NOx and CO utilizing the initial design burner specifications or manufacturer's recommendations to ensure good combustion practices. Tune the unit annually in accordance with good combustion practices or a manufacturer's procedure, if applicable, that will include the following at a minimum:

- 1) Inspect the burner system and clean and replace any components of the burner as necessary to minimize emissions of NOx and CO, and
- 2) Inspect the burner chamber for areas of impingement and remove if necessary, and
- 3) Inspect the flame pattern and make adjustments as necessary to optimize the flame pattern, and
- 4) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly, and
- 5) Measure the NOx and the CO concentration of the effluent stream after each adjustment was made with a handheld portable monitor to ensure optimal baseline concentrations are maintained or

[County Rule 323 §304.1a][Locally Enforceable Only]

b) Limit nitrogen oxide emissions to no more than the following amounts:

- 1) 155 ppm heat input, calculated as nitrogen dioxide, when burning gaseous fuel. During steady state operations, this test result using EPA Reference Method(s) 7 shall be based upon the arithmetic mean of the results of three test runs. Each test run shall have a minimum sample run time of one hour.
- 2) 230 ppm heat input, calculated as nitrogen dioxide, when burning liquid fuel. During steady state operations, this test result using EPA Reference Method(s) 7 shall be based upon the arithmetic mean of the results of three test runs. Each test run shall have a minimum sample run time of one hour.

[County Rule 323 §304.1b][Locally Enforceable Only]

3) Monitoring and Recordkeeping Requirements

a) The Permittee shall record for each affected boiler the type of fuel used, amount of fuel used and the days and hours of operation.

[County Rule 323 §501.1][Locally Enforceable Only]

b) Good Combustion Practice – Measurements of the temperature differential across the burners of turbines per County Rule 323, subsection 301.2, results of

evaluation and corrective action taken to reduce the temperature differential or a finding that the temperature differential returned to the range listed in subsection 301.2 a or b without any action by the owner or operator.

[County Rule 323 §501.3][Locally Enforceable Only]

- c) The Permittee shall record the date that any tuning procedure was performed on the particular unit and at a minimum: stack gas temperature, flame conditions, nature of the adjustment and results of the nitrogen oxide and carbon monoxide concentrations obtained by using a handheld monitor after each adjustment.

[County Rule 323 §501.4][Locally Enforceable Only]

E. Previous Permit Conditions for Rite Boiler in Building 105
Maintenance Number 93010041

1) Operational Limitations:

- a) The Permittee shall limit natural gas consumption for the Rite Boiler to no more than 18 MMSCF for any rolling 12-month period.
- b) Natural gas is the only fuel source permitted.
- c) The Permittee shall install, operate and monitor a functioning, dedicated non-settable usage meter on the natural gas fuel supply line for the Rite boiler.

[County Rule 210§ 301.8b(4)]

2) Monitoring and Recordkeeping:

The Permittee shall keep monthly records of the natural gas usage for the Rite boiler. The numbers to be documented include the monthly total and a rolling 12-month total of natural gas used. The records shall be made to the Control Officer upon request:

[County Rule 210§ 301.8b(4)]

3) Reporting:

For the purposes of the semi-annual monitoring report, the Permittee shall provide the rolling twelve month emission totals of NO_x, including the calculations using AP-42 emission factors for the Rite boiler in building 105.

[County Rule 210§ 302.1(e)]

F. Previous Permit Conditions for Two (2) Superior Mohawk Boilers in Building 422
Maintenance Numbers and the Two (2) GasTech Air Heaters located immediately outside
Building 204

For the purposes of these Permit Conditions the rolling twelve month total allowable emissions shall be calculated monthly using the most recent twelve calendar months;

1) Emission Limitations:

- a) The Permittee shall not allow emissions of Oxides of Nitrogen (NO_x) from the two (2) Superior Mohawk Boilers in building 422 in excess of 1.1 tons during any rolling twelve month period
- b) The Permittee shall not allow emissions of Oxides of Nitrogen (NO_x) from the two (2) GasTech Air Heaters located immediately outside building 204 in excess of 3.2 tons during any rolling twelve month period.

[County Rule 210§ 301.8b(4)]

2) Operating Conditions:

- (a) The Permittee shall not use more than $22 \times 10^6 \text{ ft}^3$ of natural gas in the combination of the two (2) Superior Mohawk Boilers in building 422 during any rolling twelve month period
- (b) The two (2) Superior Mohawk Boilers in building 422 shall not be operated unless the natural gas supply line has a functioning, dedicated, non-resettable usage meter on it in good operating order.
- (c) The Permittee shall not use more than $45.5 \times 10^6 \text{ ft}^3$ of natural gas in the combination of the two (2) GasTech Air Heaters located immediately outside building 204 in excess of 3.2 tons during any rolling twelve month period.
- (d) The two (2) GasTech Air Heaters located immediately outside building 204 shall not be operated unless the natural gas supply line has a functioning, dedicated, non-resettable usage meter on it in good operating order.

[County Rule 210§ 301.8b(4)]

3) Monitoring and Recordkeeping

- (a) The Permittee shall monitor for compliance with the Emissions Limitations of these Permit Conditions by taking a monthly reading of the dedicated fuel meter on the Superior Mohawk Boilers in building 422. The readings shall be taken during the first three days of each calendar month for the previous month of operation. Reading data and date shall be recorded simultaneously with the monitoring. The Permittee shall then calculate and record the rolling twelve month total usage of fuel using the data from the most recent twelve calendar months.
- (b) The Permittee shall monitor for compliance with the Emissions Limitations of these Permit Conditions by taking a monthly reading of the dedicated fuel meter on the GasTech Air Heaters located immediately outside building 204. The readings shall be taken during the first three days of each calendar month for the previous month of operation. Reading data and date shall be recorded contemporaneously with the monitoring. The Permittee shall then calculate and record the rolling twelve month total usage of fuel using the data from the most recent twelve calendar months.

[County Rule 210§ 301.8b(4)]

4) Reporting:

For the purposes of the semi-annual monitoring report, the Permittee shall provide the rolling twelve month emission totals of NO_x, including the calculations using AP-42 emission factors for the following;

- (a) The rolling twelve month combined emission totals of NO_x for the two (2) Superior Mohawk Boilers in building 422. The report shall include all calculations and use AP-42 emission factors.
- (b) The rolling twelve month combined emission totals of NO_x for the two (2) GasTech Air Heaters located immediately outside building 202. The report shall include all calculations and use AP-42 emission factors.

[County Rule 210§ 302.1(e)]

Honeywell - Engines, Systems & Services
111 South 34th Street
Permit Number V97-008 Issued January 26, 2006
Significant Revision S06-010, dated November 28, 2006

APPENDIX A EQUIPMENT LISTS

Permitted Equipment List

Honeywell Engines - 111 S 34th St Phoenix Permit #V97-008 (reformatted 8/23/06 by R.Roberts, Permit Engr.)

LEGEND:Honeywell 10/30/06 update

Requirements: Type, Name, Make, Model, Serial #, Size/Capacity, Manuf.date, Install Date, Location

Sect.22: Abrasive Blasting

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Inside Volume</u>
Blastwork Shot Peen	Unknown	02/15/1996	105	94008028	275
Peenamatic Shot Peening machine	Unknown	02/01/1962	105	94008002	76
Guysan Blast System	Unknown	04/01/1990	105	94008016	30
Peenamatic Shot Peening machine	Unknown	09/01/1966	105	94008004	40
Pauli & Griffen Pram System	Unknown	02/01/1989	110	94008013	32
Ruemelin Blaster	Unknown	03/01/1980	110	92403003	30
Empire glass bead blaster	Unknown	02/01/1990	117	94008015	47
Pauli & Griffen Pram System	Unknown	10/01/1985	117	92414017	60
DFH Sand Blaster	Unknown	11/01/1979	202	92403012	64
DFH Glass bead Blaster	Unknown	02/01/1979	202	92403001	28
DFH Sand Blaster	Unknown	08/01/1983	202	92403018	23
Keleo Sand Blaster	Unknown	05/01/1977	404	92403013	75
Uniblast Blaster	Unknown	01/01/2001	404	94008038	42
ICM Glass bead blaster	Unknown	Unknown	422	92403056	48
ICM Bead blaster	Unknown	Unknown	422	92403055	48
ICM sand blaster	Unknown	Unknown	422	92403054	48
Panghorn Sand Blaster	Unknown	Unknown	422	92403011	38
Panghorn Sand Blaster	Unknown	08/01/1981	422	92403033	38
Panghorn Sand Blaster	Unknown	Unknown	429	94203038	40
ICM Superhone	Unknown	10/01/1970	429	92403027	48
Zero Blaster	Unknown	Unknown	429	92403075	42
EMPIRE GRIT BLAST	Unknown	Unknown	114	92403052	23
PANGBORN GRIT BLAST	Unknown	04/01/1985	114	92403045	38
Wet Sand Blast	Unknown	Unknown	422	92403084	24

Abrasive Blasting--Rotoclones,Cyclones, Dust Collectors

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Gas Air Flow (cfm)</u>
Blastworks Dust Collector	Unknown	Unknown	105	92401649	376

Permitted Equipment List

Hammond Dust Collector	Unknown	Unknown	105	92401066	1703
Tenkay Dust Collector	Unknown	Unknown	202	92401472	1514
Hammond Dust Collector	Unknown	Unknown	404	92401352	1124
Pauli & Griffin Dust Collector	Unknown	Unknown	110	92401360	500
ICM Dust Collector	Unknown	Unknown	422	92401428	1460
Pramblast Dust Collector	Unknown	10/01/1985	117	92414017	600
Empire Dust Collector	Unknown	Unknown	117	92401398	2600
Ruemelin Dust Collector	Unknown	Unknown	110	92401448	2886
Pangborn Dust Collector	Unknown	Unknown	429	92401357	1679
Hammond Dust Collector	Unknown	07/01/1997	405	92401499	1400
Pangborn Dust Collector	Unknown	Unknown	422	92401436	3120
Pangborn Dust Collector	Unknown	Unknown	422	92401435	2700
Hammond Cyclone	Unknown	Unknown	105	92401066	Out of Service
MAC Dust Collector	Unknown	08/14/2005	105	92401739	3500
AAF Rotoclone	Unknown	09/01/1970	404	92401180	1100
AAF Rotoclone	Unknown	04/01/1982	111	92401300	13000
AAF Rotoclone	Unknown	05/01/1985	102	92401301	13000

Sect.23: Solvent (Dip) Cleaning

Degreasing Operations/Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Tank Size (L*W*D)</u>
STODDARD SOLVENT TANK	Unknown	Unknown	102	94701108	
JUSTRITE STODDARD TANK # 136	Unknown	Unknown	102	94701278	
JUSTRITE STODDARD TANK	Unknown	Unknown	102	94701412	
JUSTRITE STODDARD TANK # 129	Unknown	Unknown	102	94701274	
JUSTRITE STODDARD TANK # 122	Unknown	Unknown	102	94701270	
JUSTRITE STODDARD TANK # 125	Unknown	Unknown	102	94701272	
JUSTRITE STODDARD TANK # 186	Unknown	Unknown	102	94701288	
DIP TANK STODDARD TANK # 55	Unknown	Unknown	103	94701337	
DIP TANK STODDARD TANK # 56	Unknown	Unknown	103	94701338	
DIP TANK STODDARD TANK # 196	Unknown	Unknown	103	94701348	
PROTECTOSEAL STODDARD TANK # 45	Unknown	Unknown	103	94701392	
JUSTRITE STODDARD TANK # 34	Unknown	Unknown	103	94701363	
PROTECTOSEAL STODDARD TANK # 35	Unknown	Unknown	103	94701387	
PROTECTOSEAL STODDARD TANK # 155	Unknown	Unknown	103	94701405	
JUSTRITE STODDARD TANK # 144	Unknown	Unknown	112	94701284	

Permitted Equipment List

JUSTRITE STODDARD TANK	Unknown	Unknown	403	94701378
JUSTRITE STODDARD TANK # 80	Unknown	Unknown	403	94701373
JUSTRITE STODDARD TANK	Unknown	Unknown	403	94701379
DIP TANK STODDARD TANK	Unknown	Unknown	403	94701350
JUSTRITE STODDARD TANK # 16	Unknown	Unknown	422	94701357
DIP TANK STODDARD TANK # 60	Unknown	Unknown	422	94701339

Sect.24: Solvent Use Other Than Dip Cleaning

Cold Stoddard Solvent Flush Booths

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Capacity (gal)</u>
Cold	Unknown	Unknown	110		110
JUSTRITE STODDARD TANK # 144	Unknown	Unknown	112	94701284	55
ACTREL SOLVENT TANK	Unknown	Unknown	117	94701107	55
BINKS SPRAY BOOTH	Unknown	Unknown	129	92414016	30
Safety Kleen Model #81 Tag #164	Unknown	Unknown	202	B0000377	74
Safety Kleen Model #81 Tag #163 w/Agit	Unknown	Unknown	202	B0000435	74
Safety Kleen Model #81 w/Agitation	Unknown	Unknown	206	Unknown	74
DEVILBISS SPRAY BOOTH	Unknown	05/01/1988	301	93501023	30
DEVILBISS SPRAY BOOTH	Unknown	05/01/1988	301	93501024	30
STODDARD SOLVENT TANK	Unknown	Unknown	301	94701419	30
ZEP PARTS WASHER	Unknown	Unknown	301	92406066	30
ZEP PARTS WASHER	Unknown	Unknown	301	92406065	30
ZEP PARTS WASHER	Unknown	Unknown	301	92406067	30
PARTS WASHING SYSTEM	Unknown	Unknown	301	92406071	36
STODDARD SOLVENT TANK	Unknown	Unknown	301	94701418	30
BINKS SPRAY BOOTH	Unknown	10/01/1970	422	92414007	30
SOLVENT BOOTH	Unknown	Unknown	110	92414036	110

Sect.25: Spray Coating (non-thermal)

Paint Booths

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Max (gal/hr)</u>
Model XCF-407	Unknown	05/01/1986	110	93501017	1.41

Sect.26: Hard Chrome Electroplating

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Amp-hr/hr / cfm</u>
Chrome Tank	Unknown	Unknown	422	94903197	60

Permitted Equipment List

Scrubber #HPV773D	Unknown	09/01/1984	422	92415005	25000 cfm
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Sect.27: VOL Storage Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Ground</u>	<u>Maintenance #</u>	<u>Capacity (gal)</u>
Tank 201N (JP-4)	Unknown	04/01/1986	below	N/A	20,000
Tank 202N (Jet-A)	Unknown	04/01/1986	below	N/A	20,000
Tank 203N (JP-4)	Unknown	04/01/1986	below	N/A	20,000
Tank 204N (Jet-A)	Unknown	04/01/1986	below	N/A	20,000
Tank 205N (JP-8)	Unknown	04/01/1986	below	N/A	20,000
Tank 206N (Jet-A)	Unknown	04/01/1986	below	N/A	20,000
Tank 207N (Jet-A)	Unknown	04/01/1986	below	N/A	20,000
Tank 208N (JP-8)	Unknown	04/01/1986	below	N/A	20,000
Tank 209N (Jet-A)	Unknown	04/01/1986	below	N/A	20,000
Tank 210N (JP-5)	Unknown	04/01/1986	below	N/A	20,000
Tank 211N (DF-2)	Unknown	04/01/1986	below	N/A	20,000
Tank 212N (mixed fuel)	Unknown	04/01/1986	below	N/A	20,000
Methanol Tank	Unknown	May, 2002	above	N/A	6,000
Ammonia Tank	Unknown	Unknown	above	Vendor Equipment	1,000

Sect.28: Thermal Spray Coating

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Inside Volume</u>
Thermal Spray-Robot	Unknown	09/01/1997	404	92915065	1341 cu ft
Metal Spray -Robot	Unknown	Unknown	114	92915079	1148 cu ft
Thermal Spray Robot	Unknown	09/01/1997	404	92915067	1227 cu ft
Thermal Spray-Robot	Unknown	04/15/1994	114	92915046	1233 cu ft
Thermal Spray Manual Gun	Unknown	Unknown	404	92915086	783 cu ft
Thermal Spray-Robot	Unknown	Unknown	404	92915066	501 cu ft
Thermal Spray Manual Gun	Unknown	Unknown	114	92915034	1207 cu ft
Thermal Spray-High Vel	Unknown	11/01/1981	114	92915059	1318 cu ft <u>Gas Air Flow(cfm)</u>
AAF Rotoclone	Unknown	Unknown	404	92401615	13000
AAF Rotoclone	Unknown	01/01/2003	114	92401299	13000
AAF Rotoclone	Unknown	Unknown	114	92401344	20000
AAF Rotoclone	Unknown	Unknown	404	92401219	13000

Sect.30: Plating Operations Other Than Chrome plating

Permitted Equipment List

Process Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Tank Size (L*W*D)</u>
<i>Chromic Sulfuric Acid Copper Strip</i>	Unknown	Unknown	422	94903133	3x3x3
<i>Hot DI Rinse</i>	Unknown	Unknown	422	94903190	3x3x3
<i>Caustic Cleaner</i>	Unknown	Unknown	422	94903191	3x3x3
<i>Sulfuric Acid Pickle</i>	Unknown	Unknown	422	94903193	3x3x3
<i>Chrome Etch NOT IN SERVICE</i>	Unknown	Unknown	422	94903195	4x4x4
<i>Chromium Plate NOT IN SERVICE</i>	Unknown	Unknown	422	94903196	6x4x4
<i>Chromium Plate</i>	Unknown	Unknown	422	94903197	6x4x4
<i>Silver Plate</i>	Unknown	Unknown	422	94903165	3X3X3
<i>Silver Plate</i>	Unknown	Unknown	422	94903164	3X3X3
<i>Silver Plate</i>	Unknown	Unknown	422	94903166	3x3x3
<i>Silver Strike</i>	Unknown	Unknown	422	94903167	4x3x3
<i>Copper Strike</i>	Unknown	Unknown	422	94903176	5x3x3
<i>Copper Plate</i>	Unknown	Unknown	422	94903178	6x3x3
<i>Cyanide Copper Plate Hi-Efficiency</i>	Unknown	Unknown	422	94903179	6x3x3
<i>Hot DI Rinse</i>	Unknown	Unknown	422	94903417	3x3x3
<i>Sodium Cyanide</i>	Unknown	Unknown	422	94903183	2x3x3
<i>Copper Strike (Copper Filters)</i>	Unknown	Unknown	422	94903184	5x3x3
<i>Copper Plate</i>	Unknown	Unknown	422	94903186	6x3x3
<i>Copper Plate</i>	Unknown	Unknown	422	94903187	6x3x3
<i>Nitric Acid</i>	Unknown	Unknown	422	94903414	3x3x3
<i>Electroless Nickel Plate</i>	Unknown	Unknown	422	94903149	3x3x3
<i>Lead Anode Cleaner</i>	Unknown	Unknown	422	94903202	3x3x3
<i>Oakite Ruststripper</i>	Unknown	Unknown	422	94903204	3x3x3
<i>Black Oxide</i>	Unknown	Unknown	422	94903206	3x3x3
<i>Hot Water Rinse</i>	Unknown	Unknown	422	94903207	3x3x3
<i>Hot Acidified Rinse</i>	Unknown	Unknown	422	94903203	3x3x3
<i>CHROMIC ACID PICKLE</i>	Unknown	Unknown	105	94903262	4x4x4
<i>HF ACID ETCH</i>	Unknown	03/01/1990	105	94903260	4x4x4
<i>H.A.E. ANODIZE KMNO4</i>	Unknown	Unknown	105	94903253	8x8x6
<i>MAGNESIUM IMMERSION Treatment</i>	Unknown	Unknown	105	94903255	4x4x4
<i>CHROME MANGANESE</i>	Unknown	Unknown	105	94903256	4x4x4
<i>HCL ETCH</i>	Unknown	Unknown	105	94903272	3x3x3
<i>HCL ETCH</i>	Unknown	Unknown	105	94903471	3x3x3
<i>C-5041 NITRIC ACID</i>	Unknown	Unknown	105	94903274	3x3x3

Permitted Equipment List

<i>C-5041 NITRIC ACID</i>	Unknown	Unknown	105	94903473	3x3x3
<i>HF - HNO3</i> <i>ETCH</i>	Unknown	<i>03/01/1990</i>	105	94903275	3x3x3
<i>HF - HNO3</i> <i>ETCH</i>	Unknown	Unknown	105	94903478	3x3x3
<i>FERRIC CHLORIDE</i>	Unknown	Unknown	105	94903292	3x3x3
<i>FERRIC CHLORIDE</i>	Unknown	Unknown	105	94903476	3x3x3
<i>FERRIC CHLORIDE</i>	Unknown	Unknown	105	94903270	3x3x3
<i>FERRIC CHLORIDE</i>	Unknown	Unknown	105	94903475	3x3x3
<i>Back Bleach Etch</i>	Unknown	Unknown	105	94903285	3x3x3
<i>Back Bleach Etch</i>	Unknown	Unknown	105	94903462	3x3x3
<i>Titanium Activator</i>	Unknown	Unknown	105	94903288	3x3x3
<i>Titanium Activator</i>	Unknown	Unknown	105	94903468	3x3x3
<i>DOUBLE CASCADE RINSE</i>	Unknown	Unknown	105	94903465	4x3x3
<i>Nitric Acid Desmut</i>	Unknown	Unknown	105	94903466	3x3x3
<i>ISOPREP 188</i>	Unknown	Unknown	105	94903213	2.5x4x3
<i>ALUMIUM ETCH, HF - NITRIC ACID</i>	Unknown	Unknown	105	94903218	2.5x4x3
<i>ALUMIUM ETCH, HF - NITRIC ACID</i>	Unknown	Unknown	105	94903455	2.5x4x3
<i>Ti-ETCH</i> <i>HNO3-HF</i>	Unknown	Unknown	105	94903231	2x3x3
<i>AL. SPRAY METAL STRIP (EMPTY)</i>	Unknown	Unknown	105	94903228	3x3x3
<i>NITRIC ACID</i>	Unknown	Unknown	105	94903226	3x3x3
<i>SULFURIC ANODIZE TYPE II</i>	Unknown	<i>01/01/2002</i>	105	94903236	4x6x5
<i>SULFURIC ANODIZE TYPE II</i>	Unknown	<i>07/01/2001</i>	105	94903239	4x6x5
<i>CHROMATE SEAL</i>	Unknown	<i>08/01/1999</i>	105	94903241	4x6x5
<i>SANFORD HARD ANODIZE</i>	Unknown	<i>11/01/1985</i>	105	94903251	10x4x4
<i>POTASSIUM DICHROMATE SEAL</i>	Unknown	Unknown	105	94903351	2.5x4x3
<i>BLUE DYE</i>	Unknown	Unknown	105	94903350	2.5x4x3
<i>BLACK DYE</i>	Unknown	Unknown	105	94903244	2.5x4x3
<i>NICKEL ACETATE SEAL</i>	Unknown	Unknown	105	94903242	2.5x4x3
<i>Manganese</i>	Unknown	Unknown	105	94903287	
<i>Hydrofluoric Acid</i>	Unknown	Unknown	105	94903280	
<i>Hydrofluoric Acid</i>	Unknown	Unknown	105	94903275	
<i>Chromium</i>	Unknown	Unknown	105	94903238	
<i>Nitric Acid</i>	Unknown	Unknown	422	94701172	2x2x2
<i>HCl-Methanol</i>	Unknown	Unknown	422	94701174	2x2x2
<i>Hydrochloric Acid</i>	Unknown	Unknown	422	94903145	3x3x3
<i>Muriatic Acid Pickle</i>	Unknown	Unknown	422	94903172	4x3x3
<i>Alkaline Copper Strip</i>	Unknown	Unknown	422	94903135	3x3x3

Permitted Equipment List

<i>Alkaline Copper Strip</i>	Unknown	Unknown	422	94903139	3x3x3
<i>Nitric Acid Strip</i>	Unknown	Unknown	422	94903141	3x3x3
<i>Hydrochloric Acid</i>	Unknown	Unknown	422	94903138	3x3x3
<i>Nickel Chloride Strike (NICI2)</i>	Unknown	Unknown	422	94903174	4x3x3
<i>Batch Treatment Tank</i>	Unknown	Unknown	422	94709049	
<i>Muriatic Acid Pickle</i>	Unknown	11/01/1999	102	94701226	36x42x30
<i>Nitric Acid</i>	Unknown	Unknown	429	94903375	4x4x4
<i>Nitric Acid / Hydrofluoric Acid</i>	Unknown	Unknown	429	94903390	4x4x4
<i>Muriatic Acid</i>	Unknown	Unknown	429	94903380	4x4x4
<i>Alkaline Cleaner for Al/Ti</i>	Unknown	Unknown	429	94903383	4x4x4
<i>HF-HNO3 for Titanium Etch</i>	Unknown	Unknown	429	94903385	4x4x4
<i>Nitric Acid Strip</i>	Unknown	Unknown	429	94903396	4x4x4
<i>Electropolish Power Kleen 500</i>	Unknown	Unknown	429	94903403	4x4x4

Secondary Process Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Tank Size (L*W*D)</u>
<i>Actrel 4493 Tank # 91</i>	Unknown	Unknown	422	94903431	4x4x4
<i>Brulin 815 GD Tank # 13</i>	Unknown	Unknown	422	92406038	4x4x3
<i>Actrel 4493 Tank # 92</i>	Unknown	Unknown	422	94903421	3.5x5x4
<i>Brulin 815GD Tank # 93</i>	Unknown	Unknown	422	92406039	3x5x3.5
<i>Brulin 815GD Tank # 94</i>	Unknown	Unknown	422	92406040	3x5x3.5

Packed Bed Scrubbers

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Gas Air Flow(cfm)</u>
HPV-77-2D	Unknown	09/01/1984	422	92415006	20000
HPV673D	Unknown	09/01/1984	422	92415007	175000
ECH 89	Unknown	Unknown	105	92415008	34000
ECH 910	Unknown	Unknown	105	92415009	42000
ECH 33	Unknown	Unknown	422	92415013	4000
ECH 33	Unknown	Unknown	102	92415014	4000
ECH56.5-5LB	Unknown	Unknown	422	92415019	16000
ECH 5 6.5-5LB	Unknown	Unknown	422	92415020	16000
ECH2 351B	Unknown	11/01/1999	102	92415021	2500
ECH 889-LB	Unknown	01/01/2003	429	92415022	34500
HARRINGTON BATCH SCRUBBER	Unknown	09/01/2005	422	92415025	11000

Permitted Equipment List

Fuel Nozzle Test Stand	Unknown	March, 1983	211	92602376	0.05 gal/hr
Fuel Nozzle Test Stand	Unknown	Unknown	211	92602258	0.05 gal/hr
Laser Sheeting Test Stand #622	Unknown	Unknown	211		

Boilers

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Max Cap'y (MM Btu/hr)</u>
Natural Gas-fired	Unknown	03/15/1995	429	93010029	8.24
Natural Gas-fired	Unknown	06/15/1994	104	93010028	4.10
Natural Gas-fired	Unknown	Unknown	503	93010027	0.35
Natural Gas-fired	Unknown	Unknown	212	93010020	0.71
Natural Gas-fired	Unknown	Unknown	403	93020001	0.50
Natural Gas-fired	Unknown	10/01/1982	102	93010001	4.10
Natural Gas-fired	Unknown	09/01/1962	202	93010007	35.69
Natural Gas-fired	Unknown	09/01/1962	202	93010006	35.69
Natural Gas-fired	Unknown	03/26/2001	102	93010040	4.18
Natural Gas-fired	Unknown	01/01/2004	404	93020113	4.10
Natural Gas-fired	Unknown	01/01/2004	404	93020114	4.10
Natural Gas-fired	Unknown	08/01/1981	302	93010015	3.28
Natural Gas-fired	Unknown	01/01/2001	422	93010039	4.11
Natural Gas-fired	Unknown	10/01/1999	422	93010038	4.11
Natural Gas	Unknown	Unknown	444	93010024	0.71
Natural Gas-fired	Unknown	03/01/2003	422	93010041	4.11
Natural Gas-fired	Unknown	06/01/1994	503	93010026	0.35

Test Cells

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Max Thruput (gal/hr)</u>
#666 C-100	Unknown	1956	203	224
#667 C-113	Unknown	1956	203	0.02 (MMBtu)
#668 C-114	Unknown	1956	203	0.028 (MMBtu)
#669 C-116 Turbine Cell	Unknown	1956	203	224
#671 Compressor Cell	Unknown	1956	226	224.3
#691 LACC I	Unknown	1964	202	76.9
#692 LACC II	Unknown	1955	202	76.9
#694 CA 2	Unknown	1955	202	36.5
#801(D-101) APU Cell	Unknown	1956	204	76.9

Permitted Equipment List

#802 (S-102) APU Cell	Unknown	1956	204	76.9
#803 (D-103) APU Cell	Unknown	1956	204	76.9
#804 APU Test Cell	Unknown	Unknown	204	76.9
#805 (D-105) APU Cell	Unknown	1956	204	76.9
#806 (D-106) APU Cell	Unknown	1956	204	76.9
#807 (D-107) APU Cell	Unknown	1956	204	76.9
#808 (D-107E) APU Cell	Unknown	1956	204	76.9
#809 (D-109) APU Cell	Unknown	1956	204	76.9
#810 (D-110) APU Cell	Unknown	1956	204	76.9
#811 (D-111) APU Cell	Unknown	1956	204	76.9
#812 (D-112) APU Cell	Unknown	1956	204	76.9
#813 (D-113) APU Cell	Unknown	1956	204	76.9
#814 (D-114) APU Cell	Unknown	1956	204	76.9
#815 (D-115) APU Cell	Unknown	1956	204	76.9
#819 (124) APU Cell	Unknown	Unknown	124	108.3
#821 (71) APU Cell	Unknown	1952	115	108.3
#822 (72) APU Cell	Unknown	1952	115	108.3
#823 (73) APU Cell	Unknown	1952	115	108.3
#824 (74) APU Cell	Unknown	1952	115	76.9
#825 (75) APU Cell	Unknown	1952	115	76.9
#826 (76 A) APU Cell	Unknown	1952	115	76.9
#827 (76B) APU Cell	Unknown	1952	115	108.3
#828 Gearbox Cell	Unknown	08/01/1982	228	36.5
#831 (C-101) APU Cell	Unknown	1956	203	36.5
#832 (C-102) APU Cell	Unknown	1956	203	36.5
#837 (C-107) APU Cell	Unknown	1956	203	76.9
#837 (C-109) APU Cell	Unknown	1956	203	76.9
C-903 TPE Dyno Cell	Unknown	1956	203	77
C-904 TPE Dyno Cell	Unknown	1956	203	76.9
C-905 TPE Dyno Cell	Unknown	1956	203	76.9
C-917 T800 Dyno Cell	Unknown	June, 1987	234	108.3
#918 (118E) APU Cell	Unknown	1959	118	76.9
#920 TPE Prop Cell	Unknown	1965	214	224
#921 TPE Prop Cell	Unknown	1965	214	224
#930 TPE Dyno Cell	Unknown	Nov. 1980	225	108
#931 TPE Dyno Cell	Unknown	Nov. 1980	225	117

Permitted Equipment List

#941 Turbohaft Engines	Unknown	Sept. 1985	230		116.5
#942 Turbohaft Engines	Unknown	Sept. 1985	230		116.5
#943 Lycomine Engines	Unknown	July, 1987	230		117
#944 Lycomine Engines	Unknown	July, 1987	230		117
#953 Turbofan Testing	Unknown	1964	223		224
#954 Turbofan Testing	Unknown	1964	223		224
#955 Turbofan Testing	Unknown	1964	222		224
#956 Turbofan Testing	Unknown	1964	222		224
HOT CORROSION TEST STAND	Unknown	<i>09/15/1996</i>	116	94510005	0.56

Test Rigs

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>		<u>Heat Input (MM Btu/hr)</u>
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
NASA Test Rigs	Unknown		116	N/A	0.44
Ceramic Test Rig	Unknown	Unknown	116	N/A	3.82
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
Corrosion Test Rigs	Unknown	Unknown	116	N/A	0.56
NASA Test Rigs	Unknown	Unknown	116	N/A	0.44
NASA Test Rigs	Unknown	Unknown	116	N/A	0.44
NASA Test Rigs	Unknown	Unknown	116	N/A	0.44

Heat Treating Furnaces

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	
Automatic Carburizing Furnace C-3	Unknown	01/01/1991	422	93007045	Unknown
Carburizing furnace	Unknown	before 1984	422	93007051	Unknown
Holcroft Rotary Furnace H-4	Unknown	04/15/1994	422	93007050	Unknown
FLAME SPRAY BOOTH	Unknown	Unknown	202	92915013	
POWDER SPRAY BOOTH	Unknown	Unknown	202	92915014	
STRESS COAT BOOTH	Unknown	Unknown	202	93501043	
METHANOL BRINE TANK	Unknown	Unknown	208	94713005	

Honeywell - Engines, Systems & Services
111 South 34th Street
Permit Number V97-008 Issued January 26, 2006
Significant Revision S06-010, dated November 28, 2006

Permitted Equipment List

<i>METHANOL BRINE TANK</i>	Unknown	Unknown	208	94713006
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Insignificant Equipment List

Honeywell Engines - 111 S 34th St Phoenix Permit #V97-008 (reformatted 8/23/06 by R.Roberts, Permit Engr.)

LEGEND:Honeywell 10/30/06 update

Requirements: Type, Name, Make, Model, Serial #, Size/Capacity, Manuf.date, Install Date, Location

Sect.22: Abrasive Blasting

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Insig Source</u>	<u>Inside Volume</u>
TRINCO DRY BLAST	Unknown	Unknown	202	92403085	X	4
COMCO SAND BLAST	Unknown	Unknown	202	92403047	X	2

Sect.23: Solvent (Dip) Cleaning

Degreasing Operations/Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>	<u>Tank Size (L*W*D)</u>
STODDARD SOLVENT PARTS WASHER #200	Unknown	Unknown	103	92414047	X 17x26x16
STODDARD SOLVENT TANK	Unknown	Unknown	402	94701049	X 20x40x17
STODDARD SOLVENT TANK	Unknown	Unknown	402	94701050	X 24x74x24
JUSTRITE STODDARD TANK # 132	Unknown	Unknown	102	94701276	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 128	Unknown	Unknown	102	94701273	X 15 x 15.5 x 15
JUSTRITE STODDARD TANK # 131	Unknown	Unknown	102	94701275	X 15 x 15.5 x 15
DIP TANK STODDARD TANK # 113	Unknown	Unknown	102	94701298	X 30 x 42 x 25
DIP TANK STODDARD TANK # 116	Unknown	Unknown	102	94701300	X 30 x 42 x 25
JUSTRITE STODDARD TANK # 203	Unknown	Unknown	102	94701295	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 195	Unknown	Unknown	102	94701291	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 139	Unknown	Unknown	102	94701281	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 140	Unknown	Unknown	102	94701282	X 16.5 x 35 x 12
DIP TANK STODDARD TANK # 115	Unknown	Unknown	102	94701299	X 30 x 42 x 25
JUSTRITE STODDARD TANK # 133	Unknown	Unknown	102	94701277	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 194	Unknown	Unknown	102	94701290	X 15 x 15.5 x 15
JUSTRITE STODDARD TANK # 201	Unknown	Unknown	102	94701294	X 15 x 15.5 x 15
JUSTRITE STODDARD TANK # 189	Unknown	Unknown	102	94701289	X 16.5 x 35 x 12
DIP TANK STODDARD TANK # 117	Unknown	Unknown	102	94701301	X 30 x 42 x 25
JUSTRITE STODDARD TANK # 137	Unknown	Unknown	102	94701279	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 144	Unknown	Unknown	102	94701283	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 146	Unknown	Unknown	102	94701285	X 16.5 x 35 x 12
JUSTRITE STODDARD TANK # 138	Unknown	Unknown	102	94701280	X 15 x 15.5 x 15
JUSTRITE STODDARD TANK # 198	Unknown	Unknown	102	94701292	X 16.5 x 35 x 12

Insignificant Equipment List

DIP TANK STODDARD TANK # 118	Unknown	Unknown	102	94701302	X	<i>30 x 42 x 25</i>
JUSTRITE STODDARD TANK # 123	Unknown	Unknown	102	94701271	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 185	Unknown	Unknown	102	94701287	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 121	Unknown	Unknown	102	94701269	X	<i>24 x 16 x 9</i>
JUSTRITE STODDARD TANK # 215	Unknown	Unknown	102	94701297	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 114	Unknown	Unknown	102	94701268	X	<i>16x24x9</i>
JUSTRITE STODDARD TANK # 214	Unknown	Unknown	102	94701296	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 53	Unknown	Unknown	103	94701396	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 23	Unknown	Unknown	103	94701358	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK	Unknown	Unknown	103	94701380	X	<i>15.5 x 16.5 x 8.5</i>
PROTECTOSEAL STODDARD TANK # 58	Unknown	Unknown	103	94701399	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 191	Unknown	Unknown	103	94701376	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 148	Unknown	Unknown	103	94701404	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 34	Unknown	Unknown	103	94701363		
PROTECTOSEAL STODDARD TANK # 52	Unknown	Unknown	103	94701395	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 159	Unknown	Unknown	103	94701407	X	<i>16.5 x 24 x 8.5</i>
DIP TANK STODDARD TANK # 47	Unknown	Unknown	103	94701336	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 4	Unknown	Unknown	103	94701352	X	<i>16.5 x 24 x 8.5</i>
PROTECTOSEAL STODDARD TANK # 75	Unknown	Unknown	103	94701403	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 78	Unknown	Unknown	103	94701371	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 8	Unknown	Unknown	103	94701354	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 35	Unknown	Unknown	103	94701387		
PROTECTOSEAL STODDARD TANK # 157	Unknown	Unknown	103	94701406	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 20	Unknown	Unknown	103	94701385	X	<i>16.5 x 24 x 8.5</i>
PROTECTOSEAL STODDARD TANK # 43	Unknown	Unknown	103	94701391	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 67	Unknown	Unknown	103	94701402	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 40	Unknown	Unknown	103	94701364	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 12	Unknown	Unknown	103	94701355	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 36	Unknown	Unknown	103	94701388	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 39	Unknown	Unknown	103	94701389	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 44	Unknown	Unknown	103	94701335	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 28	Unknown	Unknown	103	94701360	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 54	Unknown	Unknown	103	94701397	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 9	Unknown	Unknown	103	94701382	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 62	Unknown	Unknown	103	94701367	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 41	Unknown	Unknown	103	94701390	X	<i>16.5 x 35 x 12</i>

Insignificant Equipment List

PROTECTOSEAL STODDARD TANK	Unknown	Unknown	103	94701409	X	<i>15" round x 12" deep</i>
JUSTRITE STODDARD TANK # 15	Unknown	Unknown	103	94701356	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 37	Unknown	Unknown	103	94701334	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 5	Unknown	Unknown	103	94701353	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 49	Unknown	Unknown	103	94701393	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 59	Unknown	Unknown	103	94701400	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 152	Unknown	Unknown	103	94701346	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 65	Unknown	Unknown	103	94701401	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 151	Unknown	Unknown	103	94701374	X	<i>13 x 25 x 9</i>
PROTECTOSEAL STODDARD TANK # 27	Unknown	Unknown	103	94701386	X	<i>16x36x12</i>
JUSTRITE STODDARD TANK # 194	Unknown	Unknown	103	94701377	X	<i>16.5 x 24 x 16.5</i>
DIP TANK STODDARD TANK # 69	Unknown	Unknown	103	94701340	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 10	Unknown	Unknown	103	94701383	X	<i>16.5 x 24 x 8.5</i>
DIP TANK STODDARD TANK # 198	Unknown	Unknown	103	94701349	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 2	Unknown	Unknown	103	94701351	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 158	Unknown	Unknown	103	94701375	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 197	Unknown	Unknown	103	94701408	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 70	Unknown	Unknown	103	94701341	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 153	Unknown	Unknown	103	94701347	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 33	Unknown	Unknown	103	94701333	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 19	Unknown	Unknown	103	94701384	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 51	Unknown	Unknown	103	94701394	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 77	Unknown	Unknown	103	94701344	X	<i>16.5 x 35 x 12</i>
PROTECTOSEAL STODDARD TANK # 57	Unknown	Unknown	103	94701398	X	<i>15 x 15.5 x 15</i>
PROTECTOSEAL STODDARD TANK # 6	Unknown	Unknown	103	94701381	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 71	Unknown	Unknown	103	94701370	X	<i>16.5 x 24 x 8.5</i>
DIP TANK STODDARD TANK # 26	Unknown	Unknown	103	94701332	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 13	Unknown	Unknown	103	94701328	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 24	Unknown	Unknown	103	94701359	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 7	Unknown	Unknown	103	94701326	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 74	Unknown	Unknown	103	94701343	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 14	Unknown	Unknown	103	94701329	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 17	Unknown	Unknown	103	94701330	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 68	Unknown	Unknown	103	94701369	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 82	Unknown	Unknown	103	94701345	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 61	Unknown	Unknown	103	94701366	X	<i>16.5 x 24 x 8.5</i>

Insignificant Equipment List

JUSTRITE STODDARD TANK # 29	Unknown	Unknown	103	94701361	X	<i>15 x 15.5 x 15</i>
ZEP PARTS WASHER STODDARD #220	Unknown	Unknown	301	92406073	X	<i>16.5 x 35 x 12</i>
STODDARD SOLVENT TANK	Unknown	Unknown	301	94701035	X	
STODDARD SOLVENT TANK	Unknown	Unknown	301	94701418	X	<i>16.5 x 35 x 12</i>
STODDARD SOLVENT TANK	Unknown	Unknown	301	94701419	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 168	Unknown	Unknown	301	94701286	X	<i>16.5 x 35 x 12</i>
GREYMILLS STODDARD TANK # 167	Unknown	Unknown	301	94701304	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 72	Unknown	Unknown	403	94701342	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 32	Unknown	Unknown	403	94701362	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 64	Unknown	Unknown	403	94701368	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 79	Unknown	Unknown	403	94701372	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 18	Unknown	Unknown	403	94701331	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 42	Unknown	Unknown	403	94701365	X	<i>16.5 x 24 x 8.5</i>
DIP TANK STODDARD TANK # 86	Unknown	Unknown	404	94701306	X	<i>30 x 42 x 25</i>
JUSTRITE STODDARD TANK # 173	Unknown	Unknown	404	94701322	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 110	Unknown	Unknown	404	94701320	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 174	Unknown	Unknown	404	94701323	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 100	Unknown	Unknown	404	94701310	X	<i>18 x 38 x 17</i>
JUSTRITE STODDARD TANK # 179	Unknown	Unknown	404	94701325	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 111	Unknown	Unknown	404	94701313	X	<i>30 x 42 x 25</i>
JUSTRITE STODDARD TANK # 178	Unknown	Unknown	404	94701324	X	<i>16.5 x 35 x 12</i>
BUILD ALL BAC STODDARD TANK # 94	Unknown	Unknown	404	94701410	X	<i>22x32x17</i>
DIP TANK STODDARD TANK # 108	Unknown	Unknown	404	94701312	X	<i>30 x 42 x 25</i>
JUSTRITE STODDARD TANK # 82	Unknown	Unknown	404	94701315	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 81	Unknown	Unknown	404	94701314	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 106	Unknown	Unknown	404	94701319	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 92	Unknown	Unknown	404	94701307	X	<i>24.5 x 30 x 23</i>
JUSTRITE STODDARD TANK # 103	Unknown	Unknown	404	94701317	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 96	Unknown	Unknown	404	94701316	X	<i>16.5 x 24 x 8.5</i>
DIP TANK STODDARD TANK # 104	Unknown	Unknown	404	94701311	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 93	Unknown	Unknown	404	94701308	X	<i>15 x 15.5 x 15</i>
JUSTRITE STODDARD TANK # 105	Unknown	Unknown	404	94701318	X	<i>16.5 x 35 x 12</i>
JUSTRITE STODDARD TANK # 134	Unknown	Unknown	429	94701321	X	<i>16.5 x 35 x 12</i>
DIP TANK STODDARD TANK # 85	Unknown	Unknown	429	94701305	X	<i>15 x 15.5 x 15</i>
DIP TANK STODDARD TANK # 98	Unknown	Unknown	429	94701309	X	<i>15 x 15.5 x 15</i>

Insignificant Equipment List

Sect.25: Spray Coating (non-thermal)

Paint Booths

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>		<u>Max (gal/hr)</u>
BINKS PAINT BOOTH	Unknown	08/01/1988	103	93501028	X	
PAINT SPRAY BOOTH	Unknown	Unknown	110	93501039	X	1.41

Sect.30: Plating Operations Other Than Chrome plating

Process Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>		<u>Tank Size (L*W*D)</u>
<i>Chemical Film Iridite</i>	Unknown	Unknown	105	94903215	X	2.5x4x3
<i>Chemical Film Iridite</i>	Unknown	Unknown	105	94903216	X	2.5x4x3
ALKALINE CLEANER	Unknown	Unknown	105	94903264	X	4x4x4
HOT D.I. WATER RINSE	Unknown	Unknown	105	94903258	X	3x4x4
HOT DI WATER RINSE	Unknown	Unknown	105	94903277	X	3x3x3
HOT DI WATER RINSE	Unknown	Unknown	105	94903469	X	3x3x3
ALKALINE CLEANER	Unknown	Unknown	105	94903278	X	2.5x3x3
ALKALINE CLEANER	Unknown	Unknown	105	94903480	X	2.5x3x3
Alkaline Cleaner 61B	Unknown	03/01/1990	105	94903280	X	2.5x3x3
Alkaline Cleaner 61B	Unknown	Unknown	105	94903458	X	2.5x3x3
Degrease	Unknown	Unknown	105	94903282	X	3x3x3
Degrease	Unknown	Unknown	105	94903456	X	3x3x3
OAKITE RUSTRIPPER	Unknown	Unknown	105	94903290	X	4x3x3
OAKITE RUSTRIPPER	Unknown	Unknown	105	94903482	X	4x3x3
HOT RINSE	Unknown	Unknown	105	94903283	X	3x3x3
HOT RINSE	Unknown	Unknown	105	94903460	X	3x3x3
Blue Etch Anodize	Unknown	Unknown	105	94903295	X	3x3x3
Blue Etch Anodize	Unknown	Unknown	105	94903464	X	3x3x3
TALLY TANK (EAST SIDE)	Unknown	01/15/1996	105	92406021	X	60"x50"x62"
TALLY TANK (WEST SIDE)	Unknown	Unknown	105	92406032	X	60"x50"x62"
HOT DI WATER RINSE(West Side)	Unknown	Unknown	105	94903447	X	3x4x4
HOT OIL TANK	Unknown	Unknown	105	94701213	X	4x3x3
DEWAX TANK	Unknown	Unknown	105	94903209	X	4x3x3
ALKALINE CLEANER	Unknown	Unknown	105	94903211	X	2.5x4x3
HOT DI WATER RINSE	Unknown	Unknown	105	94903220	X	2.5x4x3
Titanium Anodize (Empty)	Unknown	Unknown	105	94903222	X	2.5x4x3

Insignificant Equipment List

<i>ALUMINUM OXIDE STRIP</i>	Unknown	Unknown	105	94903224	X	<i>2.5x4x3</i>
<i>ALKALINE CLEANER</i>	Unknown	Unknown	105	94903233	X	<i>3x3x3</i>
<i>DI HOT WATER RINSE</i>	Unknown	Unknown	105	94903229	X	<i>3x3x3</i>
<i>HOT DI WATER SEAL</i>	Unknown	Unknown	105	94903238	X	<i>4x6x5</i>
<i>DI HOT WATER RINSE</i>	Unknown	Unknown	105	94903234	X	<i>6x4x5</i>
<i>WATER RINSE</i>	Unknown	Unknown	105	94903245	X	<i>2.5x4x3</i>
<i>Soda Ash</i>	Unknown	Unknown	422	94701176	X	<i>2x2x2</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	422	94701177	X	<i>2x2x2</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	422	94903419	X	<i>3x3x3</i>
<i>Electro-Alkaline Cleaner</i>	Unknown	Unknown	422	94903142	X	<i>3x3x3</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	422	94903420	X	<i>3x3x3</i>
<i>Electroless Nickel Plate</i>	Unknown	Unknown	422	94903424	X	<i>4x3x3</i>
<i>Alkaline Cleaner</i>	Unknown	Unknown	422	94903169	X	<i>4x3x3</i>
<i>Oakite Rustripper</i>	Unknown	Unknown	422	94903170	X	<i>4x3x3</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	422	94903416	X	<i>3x2.5x3</i>
<i>Dewax Tank</i>	Unknown	Unknown	422	94903168	X	<i>4x3x3</i>
<i>Alkaline Cleaner</i>	Unknown	Unknown	429	94903373	X	<i>4x4x4</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	429	94903382	X	<i>4x4x4</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	429	94903387	X	<i>4x4x4</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	429	94903389	X	<i>4x4x4</i>
<i>Alkaline Cleaner</i>	Unknown	Unknown	429	94903399	X	<i>4x4x4</i>
<i>Alkaline Cleaner</i>	Unknown	Unknown	429	94903398	X	<i>4x4x4</i>
<i>Alkaline Cleaner</i>	Unknown	Unknown	429	94903394	X	<i>4x4x4</i>
<i>Hot DI Rinse</i>	Unknown	Unknown	429	94903401	X	<i>4x4x4</i>

Secondary Process Tanks

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>		<u>Tank Size (L*W*D)</u>
<i>Double Cascade Tank # 8</i>	Unknown	Unknown	422	94701171	X	<i>6x3x2</i>
<i>D.I. Water - Triple cascade Rinse Tank # 6</i>	Unknown	Unknown	422	94903148	X	<i>9x3x2</i>
<i>Triple Cascade Rinse Tank # 10</i>	Unknown	Unknown	422	94903140	X	<i>9x3x2</i>
<i>Cold Water Rinse - Room Temp Tank # 87</i>	Unknown	Unknown	422	94701175	X	<i>2x2x2</i>
<i>Cold Water Rinse - Room Temp Tank # 85</i>	Unknown	Unknown	422	94701173	X	<i>2x2x2</i>
<i>Double Rinse Tank # 25</i>	Unknown	Unknown	422	94903155	X	<i>3*4.5*3</i>
<i>Triple Cascade Rinse Tank # 14</i>	Unknown	Unknown	422	94903144	X	<i>3.5x6.5x3</i>
<i>Triple Cascade Rinse Tank</i>	Unknown	Unknown	422	94903146	X	<i>3.5x6.5x3</i>
<i>Industrial Water Spray Tank # 95</i>	Unknown	Unknown	422	94903425	X	<i>3.5x3.5x3.5</i>

Insignificant Equipment List

<i>Cold Industrial Water Rinse Tank # 96</i>	Unknown	Unknown	422	94903426	X	6.5x3.5x3.5
<i>D.I. Water Tank # 97</i>	Unknown	Unknown	422	94903422	X	3.5x3.5x3.5
<i>Single cascade Rinse Tank # 30</i>	Unknown	Unknown	422	94903160	X	3x2.5x3
<i>Single cascade Rinse Tank # 23</i>	Unknown	Unknown	422	94903153	X	3x2.5x3
<i>Drag Out Rinse Tank # 20</i>	Unknown	Unknown	422	94903150	X	3x2.5x3
<i>Double Rinse Tank # 31</i>	Unknown	Unknown	422	94903161	X	3x4.5x3
<i>NOT IN USE - Tank # 17</i>	Unknown	Unknown	422	94903147	X	3.5x3.5x3
<i>NOT IN USE - Tank # 33</i>	Unknown	Unknown	422	94903162	X	3x3x3
<i>Single cascade Rinse Tank # 34</i>	Unknown	Unknown	422	94903163	X	3x4x3
<i>Triple Cascade Rinse Tank # 45</i>	Unknown	Unknown	422	94903175	X	6.5x3.5x3
<i>Triple Cascade Rinse Tank # 43</i>	Unknown	Unknown	422	94903173	X	6.5x3.5x3
<i>Triple Cascade Rinse Tank # 41</i>	Unknown	Unknown	422	94903171	X	6.5x3.5x3
<i>Cold Water Rinse Tank # 79</i>	Unknown	Unknown	422	94903208	X	3x3x3
<i>Cold Water Rinse Tank # 76</i>	Unknown	Unknown	422	94903205	X	3x3x3
<i>Double Rinse Tank # 72</i>	Unknown	Unknown	422	94903430	X	3x4.5x3
<i>Triple Cascade Rinse Tank # 70</i>	Unknown	Unknown	422	94903199	X	3x4.5x3
<i>Drag Out Tank # 69</i>	Unknown	Unknown	422	94903198	X	3x2.5x3
<i>Triple Rinse Tank # 65</i>	Unknown	Unknown	422	94903194	X	3x6.5x3
<i>Triple Cascade Rinse Tank # 63</i>	Unknown	Unknown	422	94903192	X	3x6.5x3
<i>Triple Rinse Tank # 60</i>	Unknown	Unknown	422	94903189	X	3x6.5x3
<i>Rinse Tank # 59A</i>	Unknown	Unknown	422	94903428	X	3x2.5x3
<i>Drag Out Tank # 59</i>	Unknown	Unknown	422	94903188	X	3x2.5x3
<i>Single Cascade Rinse Tank # 56</i>	Unknown	Unknown	422	94903429	X	3x2.5x3
<i>Single Cascade Rinse Tank # 47</i>	Unknown	Unknown	422	94903427	X	3x2.5x3
<i>Drag Out Tank # 50</i>	Unknown	Unknown	422	94903180	X	3x2.5x3
<i>Triple Cascade Rinse Tank # 181</i>	Unknown	Unknown	105	94903457	X	3.5x6.5x3
<i>Double Cascade Rinse Tank # 168</i>	Unknown	Unknown	105	94903459	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 186</i>	Unknown	Unknown	105	94903461	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 188</i>	Unknown	Unknown	105	94903463	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 190</i>	Unknown	Unknown	105	94903467	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 166</i>	Unknown	Unknown	105	94903470	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 163</i>	Unknown	Unknown	105	94903472	X	3.5x4.5x3
<i>Triple Cascade Rinse Tank # 184</i>	Unknown	Unknown	105	94903474	X	3.5x6.5x3
<i>Double Cascade Rinse Tank # 160</i>	Unknown	Unknown	105	94903477	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 158</i>	Unknown	Unknown	105	94903479	X	3.5x4.5x3
<i>Double Cascade Rinse Tank # 192</i>	Unknown	Unknown	105	94903481	X	3.5x4.5x3

Insignificant Equipment List

<i>Industrial Water Spray Tank</i>	Unknown	Unknown	105	NO M#	X	<i>4.5x3.5x4</i>
<i>Cold Water Rinse Tank</i>	Unknown	Unknown	105	94903443	X	<i>4.5x6.5x3</i>
<i>Hot D.I. Water Tank</i>	Unknown	Unknown	105	94903444	X	<i>3.5x4.5x3</i>
<i>Double Cascade Rinse Tank # 146</i>	Unknown	Unknown	105	94903263	X	<i>4.5x6.5x3</i>
<i>Double Cascade Rinse Tank # 148</i>	Unknown	Unknown	105	94903261	X	<i>4.5x6.5x3</i>
<i>Double Cascade Rinse Tank # 150</i>	Unknown	Unknown	105	94903259	X	<i>4.5x6.5x3</i>
<i>Triple Cascade Rinse Tank # 152</i>	Unknown	Unknown	105	94903254	X	<i>4.5x9x3</i>
<i>Triple Cascade Rinse Tank # 155</i>	Unknown	Unknown	105	94903257	X	<i>4.5x9x3</i>
<i>Triple Cascade Rinse Tank # 119</i>	Unknown	Unknown	105	94903232	X	<i>6.5x3.5x3</i>
<i>Triple Cascade Rinse Tank</i>	Unknown	Unknown	105	94903230	X	<i>6.5x3.5x3</i>
<i>Double Cascade Rinse Tank # 124</i>	Unknown	Unknown	105	94903227	X	<i>4.5x3.5x3</i>
<i>Double Cascade Rinse Tank # 126</i>	Unknown	Unknown	105	94903225	X	<i>4.5x3.5x3</i>
<i>Double Cascade Rinse Tank # 143</i>	Unknown	Unknown	105	NO M#	X	<i>4.5x3.5x3</i>
<i>Cold Water Rinse Tank # 138</i>	Unknown	Unknown	105	94903248	X	<i>4.5x3x3</i>
<i>Double Cascade Rinse Tank # 136</i>	Unknown	Unknown	105	94903250	X	<i>4.5x5.5x3</i>
<i>Triple Cascade Rinse Tank # 115</i>	Unknown	Unknown	105	94903223	X	<i>4.5x5.5x3</i>
<i>Double Cascade Rinse Tank # 113</i>	Unknown	Unknown	105	94903221	X	<i>4.5x4.5x3</i>
<i>Double Cascade Rinse Tank # 111</i>	Unknown	Unknown	105	94903219	X	<i>4.5x4.5x3</i>
<i>Triple Cascade Rinse Tank # 109</i>	Unknown	Unknown	105	94903217	X	<i>4.5x5.5x3</i>
<i>Triple Cascade Rinse Tank # 106</i>	Unknown	Unknown	105	94903214	X	<i>4.5x5.5x3</i>
<i>Double Cascade Rinse Tank # 104</i>	Unknown	Unknown	105	94903212	X	<i>4.5x4.5x3</i>
<i>Industrial Water Spray Tank - Line 2</i>	Unknown	Unknown	105	94903445	X	<i>4.5x4.5x3.5</i>
<i>Cold Water Rinse Tank - Line 2</i>	Unknown	Unknown	105	94903446	X	<i>4.5x6x3.5</i>
<i>Double Cascade Rinse Tank # 128</i>	Unknown	Unknown	105	94903235	X	<i>6x8.5x3.5</i>
<i>Triple Cascade Rinse Tank # 131</i>	Unknown	Unknown	105	94903240	X	<i>6x10x3.5</i>
<i>Double Cascade Rinse Tank # 133</i>	Unknown	Unknown	105	94903237	X	<i>6x8.5x3.5</i>
<i>Cold Water Rinse/Industrial Water Tank # 17</i>	Unknown	Unknown	429	94903391	X	<i>4x4x4</i>
<i>Cold Water Rinse Tank # 15</i>	Unknown	Unknown	429	94903388	X	<i>4x4x4</i>
<i>Chemical CleanTank # 4</i>	Unknown	Unknown	429	94903376	X	<i>4x4x4</i>
<i>Chemical CleanTank # 2</i>	Unknown	Unknown	429	94903374	X	<i>4x4x8</i>
<i>Cold Water Rinse Tank # 8</i>	Unknown	Unknown	429	94903381	X	<i>4x4x4</i>
<i>Chemical CleanTank # 6</i>	Unknown	Unknown	429	94903379	X	<i>4x4x4</i>
<i>Chemical CleanTank # 11</i>	Unknown	Unknown	429	94903384	X	<i>4x4x8</i>
<i>Chemical CleanTank # 22</i>	Unknown	Unknown	429	94903397	X	<i>4x4x4</i>
<i>Chemical CleanTank # 20</i>	Unknown	Unknown	429	94903395	X	<i>4x4x8</i>
<i>Chemical CleanTank # 13</i>	Unknown	Unknown	429	94903386	X	<i>4x4x4</i>

Insignificant Equipment List

Chemical Clean/Cold Water RinseTank # 26 Unknown Unknown 429 94903402 X **4x4x8**

Electric Heat Treating Furnaces

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>		
Quench Oil Tank	Unknown	Unknown	422	93024000	X	Unknown
Abar Vacuum Furnace V-2	Unknown	Unknown	422	93003010	X	Unknown
Ipsen Vacuum Furnace	Unknown	Unknown	422	93003029	X	Unknown
Lindberg Electric Furnace T-5	Unknown	Unknown	422	93007019	X	Unknown
Lindberg Furnace H-3	Unknown	Unknown	422	93007003	X	Unknown
Lindberg Electric Furnace T-8	Unknown	Unknown	422	93007013	X	Unknown
Leeds&Northrup Furnace T-1	Unknown	Unknown	422	93013001	X	Unknown
Leeds&Northrup Furnace T-3	Unknown	Unknown	422	93013006	X	Unknown
Lindberg Heavy-Duty Furnace H-2	Unknown	Unknown	422	93007012	X	Unknown
Upton Tempering Furnace T-2	Unknown	Unknown	422	93007042	X	Unknown
Upton Tempering Furnace	Unknown	Unknown	422	93007043	X	Unknown

Test Cells

<u>Name, Make, Model, Serial #</u>	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>		<u>Max Thruput (gal/hr)</u>	
HOT CORROSION TEST STAND	Unknown	09/15/1996	116	94510002	X	0.56
Test cell C-106/806	Unknown	1956	203		X	Do Not Use Fuel
Test cell C-110	Unknown	Unknown	203		X	Do Not Use Fuel
Test cell C-111	Unknown	Unknown	203		X	Do Not Use Fuel
Test cell C-112	Unknown	Unknown	203		X	Do Not Use Fuel
Test cell D-116	Unknown	Unknown	204		X	Do Not Use Fuel
Test cell #830	Unknown	Unknown	217		X	Do Not Use Fuel

Honeywell - Engines, Systems & Services
 111 South 34th Street
 Permit Number V97-008 Issued January 26, 2006
 Significant Revision S06-010, dated November 28, 2006

Other Equipment

Honeywell Engines - 111 S 34th St Phoenix Permit #V97-008 (reformatted 8/23/06 by R.Roberts, Permit Engr.)

LEGEND:Honeywell 10/30/06 update

Requirements: Type, Name, Make, Model, Serial #, Size/Capacity, Manuf.date, Install Date, Location

Emergency Generators						Horsepower
	<u>Manuf. Date</u>	<u>Date Installed</u>	<u>Building</u>	<u>Maintenance #</u>		
ONAN ELECTRIC GENERATOR SET S/N F760138091	Unknown	03/04/1994	0503-1 F20	93202053		56
GENERAC DIESEL GENERATOR S/N 697372	Unknown	03/04/1994	0102-1 DD25	93202017		134
KOHLER GENERATOR SET S/N 137512A5-29-51-53	Unknown	03/04/1994	0301-1 TT30	93202059		201
GENERAC GENERATOR S/N 2037195	Unknown	12/01/1997	0404-1 A178	93202077		107
GENERAC GENERATOR S/N 2061439	Unknown	03/04/1994	0103-1 AA92	93202082		107
GENERAC GENERATOR S/N 2056666	Unknown	10/18/2000	0302-1 BB38	93202081		80
CUMMINS GENERATOR S/N J020432126	Unknown	12/16/2002	0422-1 DD116	93202083		201
CUMMINS GENERATOR S/N A030459905	Unknown	02/20/2003	0109-1 Q36	93202084		134
Fire Pumps						Horsepower
Harrison Fire Pump	Unknown	Unknown	119	93801034		400
Harrison Fire Pump	Unknown	Unknown	233	93801052		550
Other Equipment						
SVE Unit	Unknown	Unknown	108 Parking Lot	N/A		