



AIR QUALITY DEPARTMENT
1001 North Central Ave., Suite 125
Phoenix, Arizona 85004-1942
(602) 506-6010
(602) 506-6985 (FAX)

TITLE V AIR QUALITY OPERATING PERMIT

Permit Number: V97017
Renewal Number 2.0.0.0

Original Issue Date: September 2, 2004
Revision Date: TBD
Expiration Date: TBD

Permittee Name: United States Air Force – Luke AFB
Mailing Address: 13970 Gillespie Drive, 56 CES/CEA, Luke AFB, AZ 85309-1149
Business Name: Luke AFB, 56th Fighter Wing
Facility Address: 14002 W Marauder St, Glendale, AZ 85309

Equipment and Processes Covered: Luke Air Force Base (Luke AFB) is a military training installation, owned and operated by the United States Department of Defense, located within Maricopa County, Arizona approximately 9 miles west of downtown Glendale, Arizona on approximately 3,862 acres and employs approximately 8,200 military and non-military personnel. Luke AFB is the largest and only active duty F-16 pilots training base in the world and will soon train United States and Partner F-35A pilots. Operations at LAFB include support activities for housing and feeding personnel, and maintenance and support of military equipment and operations. Luke AFB is a major source for two criteria pollutants, NOx and VOC emissions, but not for Hazardous Air Pollutants (HAP). It is classified as Standard Industrial Code (SIC) 9711, National Security.

This Permit is issued in accordance with Maricopa County Air Pollution Control Regulations, Rule 200, §301, and Arizona Revised Statutes, §49-404c and §49-480. The attached Permit Conditions are incorporated into and form an integral part of this Permit. The Permit is issued to provide regulators, site operators or owners, and members of the public, a clear picture of what the Permit holder is required to do to meet applicable requirements. As the Permit holder, you are expected to review this Permit, become familiar with its provisions and conditions and to operate in conformance with them. This Permit is an enforceable document. Failure to conform to the emission limits and any other condition contained in the Permit is a violation of law and will form the basis of enforcement action by the department which may include civil or criminal sanctions.

If the MCAQD Control Officer determines that additional monitoring, sampling, modeling and/or control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and/or welfare, the MCAQD Control Officer will amend the provisions of this Permit. This Permit may be subject to suspension or revocation for cause including nonpayment of fees, noncompliance with Arizona State Statutes, Maricopa County Air Quality Regulations, or the attached Permit Conditions, or if the MCAQD Control Officer determines that significant misrepresentation exists in the application and supporting documentation filed to obtain or modify this Permit.

Philip A. McNeely, R.G.
Maricopa County Air Quality Control Officer

COMMON ABBREVIATIONS

Act	Federal Clean Air Act
AAAC.....	Acute Ambient Air Concentration
AAC.....	Arizona Administrative Code
ADEQ.....	Arizona Department of Environmental Quality
AIRS	Aerometric Information Retrieval System
ARS	Arizona Revised Statutes
AZMACT	Arizona Maximum Achievable Control Technology
ASTM.....	American Society of Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal unit
CAA.....	Clean Air Act
CAAC	Chronic Ambient Air Concentration
CAS	Chemical Abstract Service
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic feet
ECS.....	Emission Control System
EPA	US Environmental Protection Agency
HAP.....	Hazardous Air Pollutant
ID.....	Identification number
MACT	Maximum Achievable Control Technology
MCAQD	Maricopa County Air Quality Department
NA	Not applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMHC	Non-methane hydrocarbon
NO _x	Nitrogen oxides
NSPS	New Source Performance Standards
O ₂	Oxygen
O&M	Operation and maintenance
Pb.....	Lead
PM	Particulate matter
PM _{2.5}	Particulate matter less than 2.5 microns in size
PM ₁₀	Particulate matter less than 10 microns in size
ppm.....	Parts per million
psia.....	pounds per square inch, actual
RACT	Reasonably Available Control Technology
RVP	Reid Vapor Pressure
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
VE.....	Visible Emissions
VOC.....	Volatile Organic Compounds

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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 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. In the event the rules and regulations are amended during the term of this Permit, the amended rules and regulations shall apply to this Permit

GENERAL CONDITIONS

1. AIR POLLUTION PROHIBITED:

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 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).

[Rule 100 §301] [locally enforceable only]

2. CIRCUMVENTION:

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.

[Rule 100 §104] [40 CFR 70.6(a)(1)]

3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:

Any application form, report, or compliance certification submitted under County or Federal 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 County or Federal 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.

[Rule 100 §401] [Rule 210 §§301.7 & 305.1(e)] [40 CFR 70.5(d)]

4. COMPLIANCE:

a. COMPLIANCE REQUIRED:

- i. The Permittee shall 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 noncompliance 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.

[Rule 210 §§301.8(b)(4) & 302.1(h)(1)] [40 CFR 70.5(c)(6)(i)]

- ii. 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. [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.]

[Rule 210 §302.1(h)(2)]

- iii. 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 Rule 100.

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

- iv. 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 Rule 100 for PM₁₀.

[Rule 210 §302.1(h)(7)] [locally enforceable only]

b. **COMPLIANCE PLAN:**

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 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.

[Rule 210 §305.1(g)] [40 CFR 70.5(c)(8)]

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) that:

- a. Precisely identifies the information in the permit(s), records, or reports that 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 these requirements.

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.

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

[40 CFR 70.5(a)(3)][Rule 100 §402][Rule 200 §411][Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the Clean Air Act (CAA) which may or may not be present at the facility.

a. **ASBESTOS:**

The Permittee shall comply with the applicable requirements of 40 CFR 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and Rule 370 for all demolition and renovation projects.

[40 CFR Part 61 Subpart M] [Rule 370 §301.9]

b. **RISK MANAGEMENT PLAN (RMP):**

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 Section 68.10 and shall certify compliance with the requirements of 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.

[40 CFR Part 68]

c. **STRATOSPHERIC OZONE PROTECTION:**

If applicable, the Permittee shall follow the requirements of 40 CFR 82.100 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 for Class I and Class II Refrigerants and their substitutes:

- i. All Persons opening and disposing of appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- ii. 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.
- iii. Equipment testing organizations must comply with 40 CFR 82.160.

- iv. Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.
 - v. Certification requirements of 40 CFR 82.162 and 82.164, as applicable.
 - vi. Reporting and Recordkeeping requirements in 40 CFR 82.166.
- If applicable, the Permittee shall follow the requirements of 40 CFR Part 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

[40 CFR Part 82 Subparts E, F, and G]

7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION:

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.

[Rule 210 §301.6] [40 CFR 70.5(b)]

8. EMERGENCY EPISODES:

If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of Rule 600 §302.

[Rule 600 §302] [SIP Rule 600 §302]

9. EMERGENCY PROVISIONS:

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that requires immediate corrective action to restore normal operation, and that causes 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.

[Rule 130 §201]

10. EXCESS EMISSIONS:

There are reporting requirements associated with excess emissions. These requirements are contained in Permit Condition 16.f in a subparagraph called Excess Emissions Reporting. The definition of excess emissions can be found in Rule 100 §200.

[Rule 140 §500] [SIP Rule 140]

11. FEES:

The Permittee shall pay fees to the Control Officer pursuant to ARS §49-480(D) and Rule 280.

[Rule 200 §409] [Rule 210 §§302.1(i) and §401][40 CFR 70.9(a)]

12. MODELING:

The Permittee shall perform the modeling in a manner consistent with the 40 CFR 51, Appendix W, "Guideline on Air Quality Models." Except for minor New Source Review, the Permittee shall perform air quality impact modeling in a manner consistent with "MCAQD Minor New Source Review Air Dispersion Modeling Guideline". 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.

[40 CFR 51 App. W] [Rule 200 §407]

13. MONITORING AND TESTING:

a. **MONITORING REQUIRED:** 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 Rule 200 §310.

[Rule 200 §310] [40 CFR 70.6(a)(3)]

b. **TESTING REQUIRED:** 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 pursuant to the County or SIP Rules or these Permit Conditions in accordance with Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual

for Air Pollutant Emissions or other approved USEPA test methods.

[Rules 200 §408; 210 §302.1.(c); and Rule 270 §§300 and 400] [40 CFR 70.6(a)(3)]

- c. **TESTING FACILITIES:** The Permittee shall provide, or cause to be provided, performance testing facilities as follows:
- i. Sampling ports adequate for test methods applicable to such source.
 - ii. Safe sampling platform(s).
 - iii. Safe access to sampling platforms(s).
 - iv. Utilities for sampling and testing equipment.

[Rule 270 §405] [locally enforceable only]

14. **PERMITS:**

a. **BASIC:**

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.

[Rule 210 §302.1(h)(3)] [40 CFR 70.7(f)]

b. **PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:**

- i. The Permittee shall comply with the Administrative Requirements of Section 400 of Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under 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 Rule 200 §309 and Rule 210 §301.

[Rule 200 §§301 & 309] [Rule 210 §§301 & 400] [40 CFR 70.7(e)]

- ii. 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.

[Rule 210 §§303.1(a) & 303.2] [locally enforceable only]

- iii. While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response. If, while processing an application that has been determined or deemed to be complete, the Control Officer determines that additional information is necessary to evaluate or to take final action on that application, the Control Officer may request such information in writing and may set a reasonable deadline for a response.

[Rule 210 §301.4(f)] [40 CFR 70.5(a)(2)]

- iv. No permit revision shall be required pursuant to any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[Rule 210 §302.1(j)] [40 CFR 70.6(a)(8)]

c. **POSTING:**

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

[Rule 200 §312] [locally enforceable only]

- ii. Any approved Dust Control Plan or Dust Control Permit required by Rule 310 shall be posted in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise be kept available on site at all times.

[Rule 310 §409] [SIP Rule 310 §409]

d. **PROHIBITION ON PERMIT MODIFICATION:**

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

[Rule 200 §311] [locally enforceable only]

e. **RENEWAL:**

- i. The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. 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

§309 and Rule 210 §§301 & 302.3.

[Rule 200 §309] [Rule 210 §§301 and 302] [40 CFR 70.7(c)]

- ii. 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 in writing by the Control Officer, any additional information identified as being needed to process the application.

[Rule 200 §403.2] [Rule 210 §§301.4(f) and 301.9] [40 CFR 70.7(c)(1)(ii)]

f. REVISION / REOPENING / REVOCATION:

- i. 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 was promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

[Rule 210 §301.2(c)] [locally enforceable only]

- ii. 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 and the facility is a major source. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. 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.

[Rule 200 §402.1(a)(1)] [40 CFR 70.7(f)(1)(i)]

Any permit revision required pursuant to this Permit Condition, 14.f.ii, shall reopen the entire permit, shall comply with provisions in Rule 200 for permit renewal, and shall reset the five year permit term.

[Rule 200 §402.1(a)(1)] [Rule 210 §302.5] [locally enforceable only]

- iii. This permit shall be reopened and revised under any of the following circumstances:
 - 1) 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.
 - 2) 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.
 - 3) 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.f.iii, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the Permit for which cause to reopen exists.

[Rule 200 §402.1] [40 CFR 70.7(f)]

- iv. 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.

[Rule 210 §407.3] [locally enforceable only]

g. REQUIREMENTS FOR A PERMIT:

- i. Except as noted 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 Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in Rule 210 §301.4, for permit issuance 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.

[Rule 210 §301.9] [40 CFR 70.7(b)]

- ii. If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction and revegetation, require a separate Dust Control Permit that must be obtained from the Control Officer before the activity may begin.
 - 1) The Permittee shall not commence any routine dust-generating operation that disturbs a surface area of 0.10 acre or greater without first submitting a Dust Control Plan to the Control Officer. [Rule 310 §§302.3 & 402.1] [SIP Rule 310 §302.1]
 - 2) The Permittee shall request a Dust Control Plan revision with a submittal in the manner and form prescribed by the Control Officer if:
 - a) The acreage of a project changes;
 - b) The permit holder changes;
 - c) The name(s), address(es), or phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation change; and
 - d) If the activities related to the purposes for which the Dust Control permit was obtained change. [Rule 310 §403.2] [SIP Rule 310]
- iii. A subcontractor who is engaged in dust-generating operations at a site that is subject to a Dust Control Permit shall register with the Control Officer and follow those registration requirements in Rule 200. [Rule 200 §§306 & 307] [SIP Rule 310 §302]
- iv. 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 Rule 314 §303. [Rule 314] [Rule 200 §308] [SIP Rule 314]
- h. **RIGHTS AND PRIVILEGES:**
This Permit does not convey any property rights nor exclusive privilege of any sort. [Rule 210 §302.1(h)(4)] [40 CFR 70.6(a)(6)(iv)]
- i. **SEVERABILITY:**
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. [Rule 210 §302.1(g)] [40 CFR 70.7(a)(5)]
- j. **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. [Rule 200 §309] [locally enforceable only]
Nothing in this permit shall alter or affect the following:
 - i. The provisions of Section 303 of the Act, including the authority of the Administrator pursuant to that section.
 - ii. The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
 - iii. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
 - iv. The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee pursuant to Section 114 of the Act, or any provision of State law.
 - v. The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [Rule 210 §407.2] [40 CFR 70.6(f)(3)]
- k. **TERM OF PERMIT:**
This Permit shall remain in effect for no more than 5 years from the date of issuance. [Rule 210 §§302.1(a) & 402] [40 CFR 70.6(a)(2)]
- l. **TRANSFER:**
Except as provided in ARS §49-429 and 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 Rule 200 and the administrative permit amendment procedures pursuant to Rule 210. [Rule 200 §404] [Rule 210 §404] [40 CFR 70.7(d)(1)(iv)]

15. RECORDKEEPING:

a. **RECORDS REQUIRED:**

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.

[Rule 100 §501] [40 CFR 70.6(a)(3)(ii)]

b. **RETENTION OF RECORDS:**

Unless a longer time frame is specified by the Rules or these Permit Conditions, the Permittee shall retain information and records required by either the Control Officer or these Permit Conditions as well as copies of summarizing reports recorded by the Permittee and submitted to the Control Officer for 5 years after the date on which the pertinent report is submitted.

[Rule 100 §504] [40 CFR 70.6(a)(3)(ii)(B)]

c. **MONITORING RECORDS:**

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 or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit. Records of any monitoring required by this Permit shall include the following:

- i. The date, place as defined in the permit, and time of sampling or measurements;
- ii. The date(s) analyses were performed;
- iii. The company or entity that performed the analyses;
- iv. The analytical techniques or methods used;
- v. The results of such analyses; and
- vi. The operating conditions as existing at the time of sampling or measurement.

[Rule 210 §§302.1(d) and 305.1(b)] [40 CFR 70.6(a)(3)(ii)(C)(ii)(A)]

d. **RIGHT OF INSPECTION OF RECORDS:**

When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of Rule 100 or any County Rule adopted under 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 Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

[Rule 100 §106] [40 CFR 70.6(c)]

16. REPORTING:

a. **ANNUAL EMISSION INVENTORY REPORT:**

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 forms 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.

[Rule 100 §505] [SIP Rule 100 §500]

b. **DATA REPORTING:**

When requested by the Control Officer, the Permittee shall furnish 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 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.

[Rule 100 §502] [SIP Rule 100 §500]

c. **DEVIATION REPORTING:**

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.

- i. For emissions in excess of permit requirements, the Permittee shall notify the Control Officer by email, telephone, or facsimile within 24 hours of knowledge of the deviation. A detailed written deviation report shall be submitted within 72 hours of the notification.
- ii. All other deviations that do not result in an exceedance of any applicable emission limitation or standard shall be documented in the same manner, promptly logged in the facility records within 2 working days and included in the next semiannual monitoring report.

The report and documentation in the log 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 any long-term corrective actions or preventive actions taken as the result of any deviations from permit requirements if applicable. All instances of deviations from the requirements of this Permit shall be clearly identified in the semiannual monitoring reports.

[Rule 210 §§302.1(e)] [Rule 140 §500] [SIP Rule 140]

d. **EMERGENCY REPORTING:**

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency and submit 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 actions taken.

[Rule 130 §402.4] [40 CFR 70.6(g)]

e. **EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:**

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an annual emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions. At a minimum the emission statement shall contain all information required by the Consolidated Emissions Reporting Rule in 40 CFR Part 51, Subpart A, Appendix A, Table 2A. The statement shall contain emissions for the time period specified by the Control Officer. The statement shall also contain a certification by a responsible official of the company that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

[Rule 100 §503] [SIP Rule 100 §500]

f. **EXCESS EMISSIONS REPORTING:**

i. The Permittee shall report to the Control Officer any emissions in excess of the limits established either by the County or SIP Rules or these Permit Conditions. The report shall be in two parts as specified below:

- 1) Notification by email, telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions. This notification shall include all available information listed in Permit Condition 16.f.ii.
- 2) A detailed written notification of an excess emissions report shall be submitted within 72 hours of the telephone notification in Permit Condition 16.f.i.1).

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

- 1) The identity of each stack or other emission point where the excess emissions occurred.
- 2) 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.
- 3) The time and duration or expected duration of the excess emissions.
- 4) The identity of the equipment from which the excess emissions emanated.
- 5) The nature and cause of such emissions.
- 6) 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 malfunction.
- 7) The steps that were or are being taken to limit the excess emissions.
- 8) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

iii. In the case of continuous or recurring excess emissions, the notification requirements of this section

shall be satisfied if the Permittee 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 that meets the criteria of this Permit Condition.

[Rule 140 §500] [SIP Rule 140]

g. **OTHER REPORTING:**

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 along with a claim of confidentiality pursuant to Permit Condition 5.

[Rule 210 §302.1(h)(5)] [40 CFR 70.6(a)(6)(v)]

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

- a. The Control Officer during reasonable hours, for the purpose of enforcing and administering County or SIP Rules or the Clean Air Act, or any provision of the Arizona Revised Statutes 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.
- b. 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:
 - i. 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 pursuant to the conditions of the permit;
 - ii. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;
 - iii. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
 - iv. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
 - v. Record any inspection by use of written, electronic, magnetic, and photographic media.

[Rule 100 §105] [Rule 210 §305.1(f)] [40 CFR 70.6(c)(2)]

SPECIFIC CONDITIONS

18. FACILITY WIDE REQUIREMENTS

a. **ALLOWABLE EMISSION AND OPACITY LIMITS**

Facility Wide Allowable Emissions and Opacity Limits shall include the requirements of Permit Conditions 19 through 32 of this permit and compliance with these Facility Wide Requirements for allowable emissions and opacity limits shall constitute compliance with Permit Conditions 19 through 32, as applicable.

- i. The Permittee shall not cause or allow emissions into the atmosphere in excess of any of the following:

	Pollutants/twelve-month rolling total						
Emissions	CO	NO_x	SO₂	VOC	PM₁₀	PM_{2.5}	HAP
tons	78.2	163.2	5.2	114.5	12.3	12.3	8.0

- ii. The twelve-month rolling total emissions shall be calculated by summing the emissions over the most recent 12 calendar months. This calculation shall be completed no later than the end of the following month and reported in the semi-annual monitoring report as part of the Facility Wide Monitoring and Reporting Requirements

[County Rule 210 §302.1.b] [Locally enforceable only]

- b. **OPERATIONAL LIMITATIONS, STANDARDS AND REQUIREMENTS**
Facility Wide Operational Limitations and Requirements shall include the requirements of Permit Conditions 19 through 32 of this permit and compliance with these Facility Wide Requirements for operational limitations and requirements shall constitute compliance with Permit Conditions 19 through 32, as applicable.
- c. **MONITORING AND RECORDKEEPING REQUIREMENTS**
Facility Wide Monitoring and Recordkeeping Requirements shall include the requirements of Permit Conditions 19 through 32 of this permit and compliance with these Facility Wide Requirements for monitoring and recordkeeping requirements shall constitute compliance with Permit Conditions 19 through 32, as applicable.
- d. **REPORTING REQUIREMENTS**
Facility Wide Reporting Requirements shall include the requirements of Permit Conditions 19 through 32 of this permit and compliance with these Facility Wide Requirements for reporting requirements shall constitute compliance with Permit Conditions 19 through 32, as applicable.

19. INTERNAL COMBUSTION SOURCES

- a. **EMERGENCY GENERATORS DIESEL FUELED**
 - i. Affected sources include, but are not limited to, those generators manufactured in 2006 or earlier, listed on the most current equipment list approved by the Control Officer. Generators manufactured later than 01/01/2007, listed on the most current equipment list approved by the Control Officer are subject to additional requirements as noted below.
 - ii. **Allowable Emission Limits**
The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
County Rule 320 §300][SIP Rule 32.A]
 - iii. **Opacity Limitations**
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% opacity.
Compliance with visible emissions shall be determined using the techniques specified in EPA Reference Method 9, 40 CFR Part 60, Appendix A.
[Rule 324 §§303, 503.8]
 - iv. **Operational Limitations:**
 - 1) The Permittee shall limit the operation of an emergency engine to no more than 100 hours each per calendar year for the purposes of maintenance checks and readiness testing.
[Rule 324 §§104.5, 205]
 - 2) The Permittee shall limit the total hours of operation of an emergency engine(s) to no more than 500 hours each per any twelve consecutive months including the 100 hours listed above. The daily trigger of Best Available Control Technology (BACT) has been exempted for the emergency generators.
[Rule324 §205]
 - 3) The emergency generators shall not be used for peak shaving. The emergency generators shall only be used for the following purposes:
 - a) For power when normal power service fails from the serving utility or if onsite electrical transmission or onsite power generation equipment fails;
 - b) Emergency pumping of water resulting from a flood, fire, lightning strikes, police action or for any other essential public services which affect the public health and safety;
 - c) Lighting airport runways;
 - d) Sewage overflow mitigation and/or prevention;
 - e) Reliability-related activities such as engine readiness, calibration, or maintenance or to

prevent the occurrence of an unsafe condition during electrical system maintenance as long as the total number of hours of the operation does not exceed 100 hours per calendar year per engine as evidenced by an installed non-resettable hour meter;

- f) As the prime engine when the prime engine has failed, but only for such time as is required to repair the prime engine but not to exceed the operational limitations in 1) and 2) above; or
- g) To operate standby emergency water pumps for fire control that activate when sensors detect low water pressure.

[Rule 324 §104; Rule 210 §302.1]

- 4) The Permittee may not use any fuel that contains more than 0.05% sulfur by weight, alone or in combination with other fuels.

[Rule 324 §301.1]

v. Other

The Permittee shall not operate the emergency generator(s) unless its cumulative run time meter is installed and working properly.

[Rule 210 §302.1]

vi. Low Sulfur Oil Verification:

If the Control Officer requests proof of the sulfur content of fuel burned in the engines, the Permittee shall submit fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the applicable sulfur limit shall be permitted if so desired by the owner or operator for evidence of compliance.

[Rule 210 §302.1, Rule 324 §501.4]

vii. New Source Performance Standards:

If the Permittee modifies or reconstructs a stationary compression ignition internal combustion engine after July 11, 2005, that engine shall comply with all applicable requirements of 40 CFR 60 Subpart III.

[40 CFR 60.4200(a)(3)]

viii. Monitoring and Recordkeeping:

The Permittee shall maintain the following records for a period of at least five years from the date of the records and make them available to the Control Officer upon request:

- 1) An initial one time entry listing the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.
- 2) Monthly rolling twelve month total of hours of operation, including hours of operation for testing, reliability and maintenance;
- 3) Fuel type and sulfur content of fuel; and
- 4) An explanation for the use of the engine.
- 5) 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[Rule 324 §502][County Rule 210 §302.1c(2)]

- 6) The Permittee shall conduct a weekly facility walk-through and observe visible emissions from any source capable of emitting any air contaminant, other than uncombined water, to the ambient air. The Permittee shall log the visual observations, including the date and approximate time when that reading, location of visible emissions or a statement that no visible emissions were observed, name of the person who took the observation and any other related information

- 7) The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:
 - a) The date and time the visible emissions observation or Method 9 opacity reading was taken;
 - b) The name of the observer;
 - c) Whether or not visible emissions were present;
 - d) 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;
 - e) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions;
 - f) If applicable, a description of any corrective action(s) taken, including the date of such action(s); and
 - g) Any other related information.
- 8) 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.

[County Rule 300] [County Rule 210 §302.1c(1)] [SIP Rule 30]

ix. Reporting

The Permittee shall file semiannual compliance monitoring reports with the Control Officer, Attn: Compliance Division. The initial reporting period shall begin on the initial 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 reports shall be filed by the end of the month following the reporting period. The Permittee shall include the following in each semi-annual Compliance Monitoring Report:

- 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; and
- 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.
- 8) The Permittee shall include the hours of operation for each of the emergency generators.
- 9) The Permittee shall include the results of any required monthly and rolling 12-month emissions for each month in the six-month reporting period.
- 10) The Permittee shall identify all instances of deviations from the permit requirements and shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
- 11) 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.

ADDITIONAL REQUIREMENTS THAT APPLY TO COMPRESSION IGNITION EMERGENCY ENGINES SUBJECT TO 40 CFR 60 NSPS IIII MANUFACTURED AFTER 01/01/2007, LISTED ON THE MOST CURRENT EQUIPMENT LIST APPROVED BY THE CONTROL OFFICER ARE SUBJECT TO THE FOLLOWING:

- x. The affected engines shall be certified by the manufacturer to meet the specified EPA emission standard and shall comply with all requirements of this Permit Condition [40 CFR §60.4205]
 - xi. Additional Opacity Standard:
For 2007 model year and later CI ICE rated 3,000 HP or less and 2011 model year and later CI ICE rated greater than 3,000 HP, the Permittee shall not allow exhaust opacity to exceed 15% during the lugging mode. This restriction does not apply to fire pump engines.
[40 CFR §§60.4205, 60.4202, 89.113(a)(2)]
 - xii. Crankcase Emissions:
For the engines specified in Subsection xi of this Permit Condition, the Permittee shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction or fire pump engines.
[40 CFR §§60.4205, 89.112(e)]
 - xiii. The Permittee shall operate and maintain each engine according to the manufacturer's written instructions, or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine.
[40 CFR §§60.4211(a), 60.4206]
 - xiv. The Permittee shall only change those engine settings that are permitted by the manufacturer.
[40 CFR §60.4211(a)]
 - xv. The Permittee shall meet the requirements of 40 CFR Part 89 as it applies.
[40 CFR §60.4211(a)]
- b. GENERAL PURPOSE GENERATORS DIESEL FUELED
- i. Affected sources include, but are not limited to, those general purpose generators listed in the most current equipment list as units 1034 and 1074, manufactured in 2002 and 2003, approved by the Control Officer.
 - ii. Allowable Emission Limits
The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
[County Rule 320 §300][SIP Rule 32.A]
 - iii. Opacity:
 - 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% opacity.
 - 2) Compliance with visible emissions shall be determined using the techniques specified in EPA Reference Method 9, 40 CFR Part 60, Appendix A.
[Rule 324 §§303, 503.8]
 - iv. New Source Performance Standards:
If the Permittee modifies or reconstructs a stationary compression ignition internal combustion engine after July 11, 2005, that engine shall comply with all applicable requirements of 40 CFR 60 Subpart IIII.
[40 CFR 60.4200(a)(3)]
 - v. Operational Limitations:
 - 1) The Permittee shall limit the operation of the general purpose generators to an aggregate of no more than 4,380 hours per any twelve consecutive month time period.

2) Fuel Sulfur Content:

The Permittee may not use any fuel that contains more than 0.05% sulfur by weight, alone or in combination with other fuels. Use of fuel containing more than 0.05% sulfur by weight shall be reported to the Control Officer along with the dates of such usage and supporting documents.

[Rule 324 §104, §301.1]

vi. Good Combustion Practices/Tuning Procedure:

The Permittee shall conduct preventative maintenance or tuning procedures recommended by the engine manufacturer to ensure good combustion practices to minimize NOx emissions. The tuning procedure shall include all of the following, if so equipped, and appropriate to the engine type:

- 1) Lubricating Oil and Filter: change once every three months or after no more than 300 hours of operation, whichever occurs last;
- 2) Inlet Air Filter: clean once every three months or after no more than 300 hours of operation and replace every 1,000 hours of operation or every year, whichever occurs last;
- 3) Fuel Filter: clean once every year or replace (if cartridge type) once every 1,000 hours of operation, whichever occurs last;
- 4) Check and adjust the following once every year or after no more than 1,000 hours of operation, whichever occurs last:
 - a) Intake and exhaust valves
 - b) Spark plugs (if so equipped)
 - c) Spark timing and dwell or fuel injection timing (if adjustable), and
 - d) Carburetor mixture (if adjustable).
- 5) Spark Plugs and Ignition Points: replace after 3,000 hours of operation or every year whichever occurs last;
- 6) Coolant: change after 3,000 hours of operation or every year whichever occurs last; and
- 7) Exhaust System: check for leaks and/or restrictions after 3,000 hours of operation or every year whichever occurs last.

[Rule 324 §302]

vii. Other:

The Permittee shall install a non-resettable hour meter prior to startup of the engine(s). The Permittee shall not operate the engine(s) unless the cumulative run time meter is installed and working properly.

[40 CFR §60.4209(a)][Rule 210 §302.1]

viii. Monitoring and Recordkeeping:

The Permittee shall maintain the following records for a period of at least five years from the date of the records and make them available to the Control Officer upon request:

- 1) An initial one time entry listing the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.

[Rule 324 §502.1] [Rule 210 §302.1]
- 2) The Permittee shall maintain a daily and 12-month rolling total record of hours of operation.

[Rule 324 §502.2] [Rule 210 §302.1]
- 3) An owner or operator of a prime engine shall maintain an annual record of good combustion practices according to Rule 324 section 302.

[Rule 324 §302] [Rule 210 §302.1]
- 4) If the Control Officer requests proof of the sulfur content of fuel burned in the engines, the Permittee shall submit fuel receipts, contract specifications, pipeline meter tickets, Material

Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the applicable sulfur limit shall be permitted as evidence of compliance.

[Rule 210 §302.1] [Rule 324 §501.4]

- 5) 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[Rule 324 §502][County Rule 210 §302.1c(2)]

- 6) The Permittee shall conduct a weekly facility walk-through and observe visible emissions from any source capable of emitting any air contaminant, other than uncombined water, to the ambient air. The Permittee shall log the visual observations, including the date and approximate time when that reading, location of visible emissions or a statement that no visible emissions were observed, name of the person who took the observation and any other related information
- 7) The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:
 - a) The date and time the visible emissions observation or Method 9 opacity reading was taken;
 - b) The name of the observer;
 - c) Whether or not visible emissions were present;
 - d) 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;
 - e) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions;
 - f) If applicable, a description of any corrective action(s) taken, including the date of such action(s); and
 - g) Any other related information.
- 8) 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.

[County Rule 300][County Rule 210 §302.1c(1)][SIP Rule 30]

ix. Reporting

The Permittee shall file semiannual compliance monitoring reports with the Control Officer, Attn: Compliance Division. The initial reporting period shall begin on the initial 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 reports shall be filed by the end of the month following the reporting period. The Permittee shall include the following in each semi-annual Compliance Report:

- 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; and
- 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.
- 8) The Permittee shall include the hours of operation for each of the general purpose generators.
- 9) The Permittee shall include the results of any required monthly and rolling 12-month emissions for each month in the six-month reporting period.
- 10) The Permittee shall identify all instances of deviations from the permit requirements and shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
- 11) 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 §302.1.e.(1)]

c. JET ENGINE TESTING

- i. Affected sources include, but are not limited to, those jet engines identified in the application as PW-220 and PW-229, listed in the most current equipment list approved by the Control Officer.

- ii. Allowable Emission Limits

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

- iii. Monitoring and Recordkeeping Requirements

- 1) The Permittee shall conduct a weekly facility walk-through and observe visible emissions from any source capable of emitting any air contaminant, other than uncombined water, to the ambient air. The Permittee shall log the visual observations, including the date and approximate time when that reading, location of visible emissions or a statement that no visible emissions were observed, name of the person who took the observation and any other related information
- 2) The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:
 - a) The date and time the visible emissions observation or Method 9 opacity reading was taken;
 - b) The name of the observer;
 - c) Whether or not visible emissions were present;
 - d) 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;
 - e) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions;
 - f) If applicable, a description of any corrective action(s) taken, including the date of such action(s); and
 - g) Any other related information.
- 3) 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.

[County Rule 300] [County Rule 210 §302.1c(1)] [SIP Rule 30]

- 4) 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

- 5) Permittee shall keep a record of the monthly fuel usage for jet engines tested.

[County Rule 210 §302.1c]

iv. 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 25 consecutive readings shall be required at 15-second intervals for the averaging time.

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

v. Reporting

The Permittee shall file semiannual compliance monitoring reports with the Control Officer, Attn: Compliance Division. The initial reporting period shall begin on the initial 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 reports shall be filed by the end of the month following the reporting period. The Permittee shall include the following in each semi-annual Compliance Report:

- 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; and
- 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.
- 8) The Permittee shall include the monthly fuel usage for jet engines tested.
- 9) The Permittee shall include the results of any required monthly and rolling 12-month emissions for each month in the six-month reporting period.
- 10) The Permittee shall identify all instances of deviations from the permit requirements and shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
- 11) 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 §302.1.e.(1)]

20. EXTERNAL COMBUSTION SOURCES

- a. Affected sources include, but are not limited to those Boilers, Heaters, Spray Booth Heaters and Bake-off Ovens listed in the most current equipment list approved by the Control Officer.
- b. Allowable Emission Limits
 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]
 The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
 [County Rule 320 §300][SIP Rule 32.A]
- c. Operational Limitations and Standards:
 The Permittee may only use natural gas, butane and propane as fuels for boilers and heaters.
 [Rule 210 §302.2]
- d. Monitoring and Recordkeeping Requirements
- i. The Permittee shall conduct a weekly facility walk-through and observe visible emissions from any source capable of emitting any air contaminant, other than uncombined water, to the ambient air. The Permittee shall log the visual observations, including the date and approximate time when that reading, location of visible emissions or a statement that no visible emissions were observed, name of the person who took the observation and any other related information.
 [County Rule 300] [County Rule 210 §302.1c(1)] [SIP Rule 30]
 - ii. 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]
 - iii. 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.
 - iv. 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]
 - v. 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 25 consecutive readings shall be required at 15-second intervals for the averaging time.

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

- vi. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.
- vii. Permittee shall keep a facility wide record of natural gas usage.

[County Rule 210 §302.1c]

e. Reporting

The Permittee shall file semiannual compliance monitoring reports with the Control Officer, Attn: Compliance Division. The initial reporting period shall begin on the initial 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 reports shall be filed by the end of the month following the reporting period. The Permittee shall include the following in each semi-annual Compliance Report:

- i. 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;
- ii. The source and location from which visible emissions were observed;
- iii. Any date which visible emissions were observed;
- iv. The approximate time of the observation;
- v. The name of the observer;
- vi. A description of any corrective actions taken, if any, to reduce the visible emissions; and
- vii. 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.
- viii. The Permittee shall include in each six-month reporting period the facility wide usage of natural gas.
- ix. The Permittee shall include the results of any required monthly and rolling 12-month emissions for each month in the six-month reporting period.
- x. The Permittee shall identify all instances of deviations from the permit requirements and shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
- xi. 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 §302.1.e.(1)]

21. FUEL STORAGE TANKS

a. Jet Fuel and Diesel Tanks

- i. Affected sources include, but are not limited to, tanks greater than 250 gallons located at bulk terminals and listed in the most current equipment list approved by the Control Officer.
- ii. Allowable Emission Limitations

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

iii. Operational Limitations:

The Permittee shall not store any volatile organic liquid (VOL) in these storage tanks that:

- 1) Have a true vapor pressure greater than or equal to 15.0 kPa for a tank with a capacity greater than or equal to 75 m³ (19,812 gallons) but less than 150 m³ (39625 gallons) or
- 2) Have a true vapor pressure greater than or equal to 3.5 kPa for a tank with a capacity greater than or equal to 151 m³

[40 CFR 60 §110b][County Rule 360 §301.7]

- 3) Have a true vapor pressure greater than 1.5 psia

[County Rule 350 §201][SIP Rule 202]

iv. Monitoring and Record Keeping:

- 1) The Permittee for each of the storage vessels shall keep copies of records readily accessible showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the source.

[40 CFR 60 Subpart Kb §116(a)(b)][County Rule 360 §301.7]

- 2) At the request of the Control Officer, the Permittee shall test the true vapor pressure of the volatile organic liquid stored in the affected storage tanks. The Reid vapor pressure shall be determined using American Society for Testing and Materials (ASTM) Method D 323-90.

[County Rule 210 §302.1]

- 3) 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c]

v. Reporting:

The Permittee of each storage vessel shall notify the Department within 5 working days when the maximum true vapor pressure exceeds the limits specified in Permit Condition [21.a.iii)]. For purposes of the semiannual compliance monitoring report, 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 §302.1]

b. Gasoline Tanks (Above and Below Ground)

- i. Affected sources include, but are not limited to, the tanks listed in the most current equipment list approved by the Control Officer.

[40 CFR 63.11111(a)(b)(c)]

- ii. Allowable Emissions:

Vapor loss from the source at any point in time shall not exceed 10,000 ppm as methane as measured by an organic vapor analyzer or combustible gas detector.

[Rule 353 §§218, 301]

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

- iii. Allowable Throughput:

The Permittee shall limit the delivery of gasoline to all tanks which dispense gasoline into motor vehicles or other gasoline fueled engines at the facility to less than 100,000 gallons per month.

[40 CFR 63.11111(b)(c), 63.11116, 63.11117][Rule 220 §302, Rule 353 §305.2]

iv. Handling Requirements:

The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- 1) Minimize gasoline spills;
- 2) Clean up spills as expeditiously as practicable;
- 3) Cover all open gasoline containers and all gasoline storage tank fill pipes with gasketed seal when not in use;
- 4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR 63.11116(a)]

v. Operational Limitations and Standards

1) Fill Pipes

- a) Each fill pipe into the tank shall be equipped with a permanent submerged fill pipe, which by definition also includes a bottom fill pipe, that has a discharge opening which is completely submerged when the liquid level is 6 inches above the tank bottom. Threads, gaskets, and mating surfaces of the fill pipe assembly shall be designed and maintained tight. There shall be no liquid or vapor leakage at the joints of the assembly.

[40 CFR 63.11117][County Rule 353 §302.1(a)] [Locally enforceable]

- b) The Permittee shall prevent driver/deliverers from connecting the delivery hose coupling to a fill pipe coupling with so much twisting force that the fill pipe assembly is loosened. One method of complying is to have a California Air Resources Board (CARB)-certified swivel coupling as part of the fill pipe assembly. See County Rule 353 §503.4 for CARB related information.

[County Rule 353 §302.1b] [Locally enforceable only]

- c) Fill pipe caps shall have a securely attached, intact gasket. The cap and its gasket shall always function properly, latch completely so that it cannot then be easily twisted by hand, and have no structural defects. The cap of a gasoline fill pipe shall always be fastened securely on the fill pipe except immediately before, during, and immediately after:

- i) “Sticking” the tank to measure gasoline depth.
- ii) Delivering gasoline into the tank.
- iii) Conducting testing, maintenance or inspection on the gasoline/vapor system.

- iv) Pipe caps shall not be unfastened or removed unless every other fill pipe is either securely capped or connected to a delivery hose.

[County Rule 353 §302.2] [40 CFR 63.11116]

- d) Gasoline storage and receiving operations shall be leak free. Specifically, no liquid gasoline escape of more than 3 drops per minute is allowed. This includes leaks through the walls of piping, fittings, fill hose(s), and vapor hose(s). There shall be no excess gasoline drainage from the end of a fill hose or a vapor hose. Specifically, not more than 2 teaspoonfuls of gasoline shall be lost in the course of a connect or disconnect process. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[County Rule 353 §301.2] [SIP Rules 353 &301.3][40 CFR 63.11116]

- e) Spill containment systems such as recessed basins surrounding the tank fill neck, including gaskets shall be kept vapor-tight. The outer surface of the spill containment basin shall have no holes or cracks and shall not allow vapors to pass from the dispensing tank through it to the atmosphere. Spill containment receptacles shall be kept clean and free of foreign material at all times.

[County Rule 353 §301.3(a)] [Locally enforceable only]

2) Spill Containment

If the spill containment is equipped with a passageway to allow material trapped by the containment system to flow into the interior of the dispensing tank the passageway shall be kept vapor tight at all times unless in use. Any plunger/stopper assembly shall be checked to ensure that it is unimpeded and sealing correctly. The bottom of the receptacle shall be designed and kept such that no puddles of gasoline are left after draining through the passageway has ceased. The Permittee is responsible for assuring that before a delivery vessel leaves the premises after a delivery any gasoline in a dispensing tank's spill containment receptacle has been removed. Any gasoline that the Permittee has taken out of a spill receptacle as a free liquid or as absorbed into/onto other material removed from the receptacle shall be contained in such a way that VOC emission is prevented. Disposal in conformance with applicable hazardous waste rules is sufficient to meet this requirement.

[County Rule 353 §301.3(b)] [40 CFR 63.11116]

3) Requirements for Tank Vapor Loss Control Devices

a) All vapor loss control equipment shall be installed as required, operated as recommended by the manufacturer, and maintained leak free, vapor tight and in good working order. Both the Permittee and the driver/operator of a delivery vessel shall have responsibility to assure that vapor recovery equipment is properly connected and in use at all times while gasoline is actively being dropped/delivered. The Permittee shall refuse delivery of gasoline from a delivery vessel that does not bear a current pressure test certification decal issued by the County. This provision does not apply during times when the facility is unattended or there is only one person under control of the dispensing facility present. On coaxial systems, both spring-loaded and fixed coaxial fill tubes shall be maintained according to the standards of their manufacturer(s) and be operated so that there is no obstruction of vapor passage from the tank to the delivery vessel.

[County Rule 353 §304] [SIP Rule 33A]

b) Gasoline vapors displaced from a dispensing tank by gasoline being delivered shall be handled by a Stage Vapor Recovery System meeting the specification described in County Rule 353 §303.2

[County Rule 353 §§303 & 503.4] [SIP Rule 33A]

c) No vapor or liquid shall escape through the dispensing tank's outer surfaces or from any of the joints where the tank is connected to pipe(s), wires, or other systems. Gasoline delivery operations shall be vapor tight. "Vapor tight" is defined as a condition in which an organic vapor analyzer (OVA) or a combustible gas detector (CGD) at a potential VOC leak source shows either less than 10,000 ppm when calibrated with methane, or less than 20% of the lower explosive limit, when prepared according to the manufacturer and used according to County Rule 353 §504.3.

[County Rule 353 §§218 & 301.1(a)] [SIP Rule 33A]

d) In addition to delivery operations, tanks and their fittings shall be vapor tight as well except for the outlet of a pressure/vacuum relief valve on a dispensing tank's vent pipe. Specifically, this means that at a probe tip distance of 1 inch (2.5 cm) from a surface, no vapor escape shall exceed 20% of the lower explosive limit. This applies to tanks containing gasoline regardless of whether they are currently being filled, and to caps and other tank fittings.

[County Rule 353 §§218 & 301.1(b)] [SIP Rule 33A]

e) Overfill prevention equipment shall be vapor tight to the atmosphere. Any device mounted within the fill pipe shall be so designed and maintained that no vapor from the vapor space above the gasoline within the tank can penetrate into the fill pipe or through any of the fill pipe assembly into the atmosphere.

[County Rule 353 §302.5] [SIP Rule 33A]

4) Vapor Loss Control Measures Required:

The Permittee shall not transfer or permit the transfer of gasoline from any delivery vessel into a stationary dispensing tank located above or below ground with a capacity of more than 250 gallons unless the conditions in County Rule 353 §301 are met:

- a) Submerged Fill Pipe, which by definition also includes a bottom fill pipe:
Stationary dispensing tanks shall be equipped with a permanent submerged fill pipe including a bottom fill pipe.
[40 CFR 63.11117]
- b) Vapor Recovery System:
The displaced gasoline vapors or gases shall be handled by an Approved Stage I Vapor Recovery System.
- c) Leaking Limits:
Delivery operations shall be leak free and vapor tight. Disconnects of gasoline delivery hoses shall be done without excess organic liquid (gasoline) drainage.
[SIP Rule 353 §301]
- 5) Equipment Maintenance and Use Required:
All vapor loss control equipment shall be installed as required, operated as recommended by the manufacturer and maintained leak free, vapor tight and in good working order:
 - a) Both the owner/operator of the vessel delivering the gasoline to the fuel dispensing tank, equipped with a vapor recovery, and the Permittee (owner of the tank) shall have the responsibility to assure that proper vapor recovery equipment is connected during every such delivery.
 - b) The Permittee shall refuse delivery of gasoline from a delivery vessel which does not bear a current pressure test certification decal issued by the Control Officer.
 - c) Both spring loaded and fixed coaxial fill tubes shall be maintained and operated so that there is no obstruction of vapor passage from the tank to the delivery vessel.
[SIP Rule 353 §302]
- 6) Monitoring and Recordkeeping Requirements
 - a) The Permittee must inspect the following weekly:
 - i) External fittings of tank fill pipe assemblies and vapor valves to assure that cap, gasket, and piping are intact and are not loose.
[County Rule 353 §302.1b] [Locally enforceable only]
 - ii) Spill containment receptacles for fuel accumulation.
[County Rule 353 §301.3 a (3)] [Locally enforceable only]
 - b) The Permittee will keep weekly records of fill pipe, vapor valve, and spill containment inspections. The findings of such weekly inspections shall be permanently entered in a record or logbook by the end of Saturday of the following week. These records and any reports or supporting information required by this rule or by the County shall be retained for at least 5 years. Records of the past 12 months shall be in a readily accessible location and must be made available to the County without delay upon verbal or written request.
[County Rule 353 §502] [Locally enforceable only]
 - c) 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.
[County Rule 210 §302.1c]
 - d) Permittee must have records available within 24 hours of a request by the Control Officer to document gasoline throughput.
[40 CFR 63.11117(d)]
- 7) Reporting

- a) For purposes of the semiannual compliance monitoring report, 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 §302.1c]

- b) Permittee must submit the applicable notifications as required under 40 CFR 63.11124(a).
[40 CFR 63.11117(e)]

c. Bulk Plants and Terminals

- i. Affected Sources include bulk plant/terminals containing gasoline tanks listed on the most current equipment list approved by the Control Officer.

[40 CFR 63.11081(a)(4) and (c)][40 CFR 63.11100][40 CFR 63.11111 and 11116]

- ii. Allowable Emission Limitations

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

- iii. Operational Limitations and Standards

1) Fill Pipes

- a) The tanks must be fitted with submerged fill pipes, which by definition also include bottom fill pipes, and pressure/vacuum valves that are set within ten percent of the tanks' maximum, safe working-pressure.

[County Rule 350 §301] [SIP Rule 350 §301][40 CFR 11100][40 CFR 11132]

- b) Tanks and all required emission control equipment shall be properly installed, properly maintained and be properly operating.

[County Rule 350 §309.2] [SIP Rule 350]

- 2) The tank shall be equipped with a vapor recovery system that collects and returns displaced vapors to the delivery vessel using vapor tight fittings and lines.

[County Rule 350 §302] [SIP Rule 350 §302]

- 3) The tank and all required emission control equipment shall be properly installed, properly maintained and be properly operating.

[County Rule 350 §309.2] [SIP Rule 350 §309.2]

4) Fuel Transfers

- a) Transfer to Fuel Tank

The Permittee shall not transfer gasoline from a delivery vessel into a tank exceeding 250 gallons capacity unless the delivery vessel bears a current county pressure-test decal and uses a vapor balance system equipped with fittings which are vapor tight.

[County Rule 351 §301.2(a)] [SIP Rule 351 §301.2(a)]

- b) Transfer from Fuel Tank

The Permittee shall not transfer gasoline from a tank exceeding 250 gallons capacity into a delivery vessel into unless the loading rack and the delivery vessel use a vapor balance system equipped with fittings which are vapor tight;

[County Rule 351 §301.2(b)] [SIP Rule 351 §301.2(b)]

5) Requirements for Tank Vapor Loss Control Devices

- a) Loading shall be accomplished in a manner that prevents the gauge pressure from exceeding 18 inches of water (33.6 mm Hg) and vacuum from exceeding six inches of water (11.2 mm Hg) in the tank truck. The Permittee shall act to ensure that the vapor recovery system required by this permit condition is connected between the delivery vessel and the storage tank during all fuel transfers.

[County Rule 351 §302.1] [SIP Rule 351 §302.1]

- b) Loading shall be accomplished in a manner that prevents overfills, fugitive liquid leaks or excess organic liquid drainage. LAFB personnel shall observe all parts of the transfer and shall discontinue the transfer if any leaks are observed. Measures shall be taken to prevent liquid leaks from the loading device when it is not in use, and to complete drainage before the loading device is disconnected. During loading or unloading operations, potential leak sources shall be vapor tight as demonstrated by the test procedure described below.

[County Rule 351 §302.2] [SIP Rule 351 §302.2]

- c) Loading operations shall be accomplished in such a manner that the displaced vapor and air will be vented only to the vapor collection/processing system, which shall be operated gas-tight and in a manner such that the vapor processing capacity is not exceeded. Diaphragms used in vapor storage tanks shall be maintained gas-tight.

[County Rule 351 §302.3] [SIP Rules 351 §302.3]

- d) Vapor transfer lines shall be equipped with fittings that are vapor tight and that automatically and immediately close upon disconnection. Vapor balance systems shall be designed to prevent any vapors collected at one loading rack from passing to another loading rack.

[County Rule 351 §302.4] [SIP Rule 351§302.4]

6) Repair and Retesting Requirement

If a vapor recovery equipment failure results in emissions that exceed the standards of this permit, the Permittee shall notify the County and observe the following time schedule in correcting the failure:

- a) Concentrations at or above the lower explosive limit must be brought into compliance within 24 hours of detection.
- b) Leak concentrations exceeding 10,000 ppm but less than 50,000 ppm, as methane for vapor collection/processing equipment subject to gas-tight standard shall be brought into compliance within 5 days of detection.
- c) Leaks must be tested after presumed leak-correction within 15 minutes of recommencing use; if leak standards are exceeded in this test, the use of the faulty equipment shall be discontinued within 15 minutes until correction is verified by retesting.

[County Rule 351 §303] [SIP Rule 351 §303]

7) Equipment Maintenance and Operating Practices

All equipment associated with delivery and loading operations shall be maintained to be leak free, vapor tight and in good working order. Gasoline shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere. Purging of vapors is prohibited.

[County Rule 351 §304] [SIP Rule 351§304]

iv. Handling Requirements

The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- 1) Minimize gasoline spills;
- 2) Clean up spills as expeditiously as practicable;
- 3) Cover all open gasoline containers and all gasoline storage tank fill pipes with gasketed seal when not in use;
- 4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR 63.11116(a)]

v. Monitoring and Recordkeeping Requirements

The total amount of gasoline received each month shall be recorded by the end of the following month. The Permittee shall keep accurate records of liquids stored in such tanks including either the true or the Reid vapor pressure ranges of each such liquid. The temperature of the contents of each affected tank located at bulk terminals shall be recorded at least weekly and the true vapor pressure of each shall be recorded at least once each month. These records shall be kept a minimum of five years.

[County Rule 350 §501] [SIP Rules 350 §501]

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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c]

vi. Reporting

For purposes of the semiannual compliance monitoring report, 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 §302.1 e]

vii. Administrative Requirements

1) The Permittee shall make the primary seal envelope available for inspection by the Control Officer. However, if prior thereto the secondary seal is removed or if the tank is drained and cleaned by the Permittee for any reason, it shall be made available for such inspection at that time. The Permittee shall provide notification to the Control Officer no less than 7 working days prior to removal of the secondary seal. The Permittee shall perform a complete inspection of the primary seal and the floating roof, including measurement of the gap area and maximum gap, whenever the tank is emptied for non-operational reasons or at least every five years, whichever is more frequent.

[County Rule 350 §401] [SIP Rule 350 §403]

2) The Permittee shall perform monthly inspections, while vapor is being transferred, for liquid and vapor leaks and for faulty equipment. In these monthly inspections detection methods incorporating sight, sound, smell and/or touch may be used.

[County Rule 351 §401.1] [SIP Rule 351 §400]

3) A log book shall be signed by the owner or operator at the completion of each monthly inspection for equipment leaks. A section of the log shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.

[County Rule 351 §401.2] [SIP Rule 351 §401]

viii. Exemptions

When VOC vapors from organic liquids are present within a non-exempt delivery vessel, the Permittee and its contractors may open vapor containment equipment while performing operations required by County rules or by other statutory entities, but shall be restricted as follows unless approved in advance by the County:

- 1) Wait at least 3 minutes after on-loading is complete or delivery vessel has stopped before opening hatch or other vapor seal.
- 2) Close hatch or other sealing device within 3 minutes of opening.
- 3) Limit wind speed at opened hatch or other opened sealing device to not more than 3 mph (1.34 m/sec).

[County Rule 351 §305.2] [SIP Rule 351 &305.2]

ix. Testing Requirements

Leak detection tests shall be conducted annually according to procedures in MCAPCR Rule 351 §501, except that EPA Method 21 shall be used to test for leaks from a vapor collection/ processing unit and its associated piping outside the loading area. Equipment shall conform to the

specifications of those test methods cited in MCAPCR Rule 351 §504.2. Prior to testing, the owner shall notify the Department of the date, time and location of the testing. The County or its representatives shall, at their discretion, observe the tests.

[County Rule 351 §401.1] [SIP Rule 351 §401.3]

22. GASOLINE DELIVERY VESSEL TESTING AND USE

- a. Affected sources include, but are not limited to, vessels listed in the most current equipment list approved by the Control Officer.
- b. Allowable Emission Limitations
The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
[County Rule 320 §300][SIP Rule 32.A]
- c. Leak and Spill Prevention
 - i. The Permittee shall not store or transport gasoline in or otherwise use or operate any gasoline delivery vessel unless such vessel is designed and maintained to be vapor tight and leak free.
[County Rule 352 §301.1][locally enforceable only]
 - ii. The driver/operator of a gasoline delivery vessel shall:
 - 1) Thoroughly drain a fill hose and a vapor recovery hose into the dispensing tank before disconnecting it from the tank's fittings;
 - 2) Connect and disconnect fill hoses and vapor recovery hoses in such a way as to prevent excess gasoline drainage (more than 2 teaspoonfuls) from escaping from the hose in one connect/disconnect cycle; and
 - 3) Spills and any gasoline that is deposited in or on an area other than within the dispensing tank shall be collected and contained. This can include, but is not limited to, the correct use of buckets and/or absorbent material designed for the purpose, and the correct disposal of the collected gasoline.
[County Rule 352 §301.3][locally enforceable only]
 - iii. For gasoline dispensing tanks that are equipped with a Stage 1 vapor recovery system (VR System):
 - 1) During delivery, the vessel operator shall not remove the lid of a fill tube unless every other fill tube either has a lid fastened in place or a delivery hose connecting it to the delivery vessel.
 - 2) Connect a vapor recovery hose before connecting any gasoline delivery hose.
 - 3) Disconnect a delivery hose from a tank before disconnecting the vapor recovery hose.
 - 4) Restriction on Multiple Connections:
 - 5) A delivery vessel shall not simultaneously have more than one gasoline delivery hose connected, unless each delivery hose is connected to a dispensing tank's 2-point system that already has a vapor hose connecting it to the vessel.
[County Rule 352 §301.5] [locally enforceable only]
 - iv. If a delivery vessel's vapor hose is connected to a vapor return line that is not part of a 2-point system, then there shall not be more than one gasoline delivery hose connected to the vessel, and no other hoses connected to a fill tube; viz., no more than one compartment of the delivery vessel shall be emptied at a time.
[County Rule 352 §301.6] [locally enforceable only]
 - v. Gasoline Delivery Vessel Leak Test Required:
A gasoline delivery vessel shall first pass the Maricopa County Pressure Test before delivering or on loading gasoline within Maricopa County, and to continue, must pass the Maricopa County Pressure Test each year thereafter. This does not apply to loads that originate solely in another state, nor to loads originating in Maricopa County that are not delivered in Maricopa County.

- 1) The Maricopa County Pressure Test shall be performed according to Rule 352 §302.2.
 - a) Scheduling and notification of an initial test or annual retest shall be done in accordance with Rule 352 Sections 401.1 and 401.3.
 - b) A tester shall record the results of a Pressure Test according to the format in Rule 352 §501.2.
 - c) A valid MCAQD decal shall be affixed to the vessel consequent to passing the MC Pressure Test before the vessel may deliver or onload gasoline.
 - d) An owner or operator of a delivery vessel shall comply with Rule 352 §401.2 registration requirements to obtain a valid MCAQD decal after a successful MC Pressure Test.
[County Rule 352 §302.1] [locally enforceable only]
- 2) A vessel that is being Maricopa County Pressure Tested shall pass all 3 of the following pressure subtests, in the following order, and use the same vapor hose during the test as will be used for deliveries by that same unit:
 - a) Lose no more than 1.0 inch (25.4 mm) of water column in 5.0 minutes, when pressurized to a gauge pressure of 18 inches (45.7 cm) of water in 2 consecutive runs according to procedures in subsections 5.1.1 through 5.2.7 of EPA Method 27, as incorporated by reference in §504 of Rule 352; and
 - b) Lose no more than 5.0 inches (127 mm) of water column in 5.0 minutes, measured in the vapor system after the vessel compartments are first collectively pressurized to a gauge pressure of 18 inches (45.7 cm) of water and then the vapor valves are closed, per §503.2 of Rule 352; and
 - c) Gain no more than 1.0 inch (25.4 mm) of water column in 5.0 minutes, when initially evacuated to a gauge pressure of 6 inches (15.2 cm) of water, in 2 consecutive runs, per subsections 5.3.1 through 5.3.7 of EPA Method 27, as incorporated by reference in §504 of Rule 352.
 - d) A subtest is invalidated if during either of the pressure subtests, more than 0.5 inch water pressure is gained, or if during the vacuum test the vacuum is increased by more than minus 0.5 inch.
[County Rule 352 §301.2.2] [locally enforceable only]
- 3) A vessel shall be repaired, retested, and pass all 3 subtests in the same testing period within 15 days of testing if it does not pass all 3 subtests of §302.2 of Rule 352.
[County Rule 352 §302] [locally enforceable only]
- 4) Each gasoline delivery vessel shall clearly display a valid MCAQD air quality decal that is permanently mounted near the front on the right (passenger) side of the vessel.
[County Rule 352 §303] [locally enforceable only]

vi. Purging Prohibited:

- 1) The Permittee shall not purge gasoline vapors into the atmosphere from a delivery vessel unless the following conditions are met:
 - a) VOC emissions shall be reduced at least 90% by weight, including capture and processing, by a control device having a Maricopa County Air Pollution Permit; and
 - b) Such purging shall be done only after all delivery valves are opened and any liquid gasoline outflow is captured in a container having an attached lid which is kept closed when not receiving or pouring gasoline.
- 2) An operator of a delivery vessel shall not purge gasoline vapors from such vessel as a passive result of switch loading, except for vessels exempted by Rule 352 §305.1.
[County Rule 352 §304] [locally enforceable only]
- 3) Purging is done in accordance with EPA Method 27

- 4) Purging is done only after all delivery valves are opened and any VOC-liquid flow is captured in a container which is kept closed when not in use.

[County Rule 352 §304.1 b.][SIP Rule 352 §303]

vii. Opening Hatches on Nonexempt Vehicles:

- 1) Owners/operators, their contractors, and authorized government agents may open vapor containment equipment on a nonexempt gasoline delivery vessel while performing operations required by governmental agencies, but shall be restricted as follows, unless approved in advance by the Control Officer:
 - a) Wait at least 3 minutes after on loading is complete and after a delivery vessel has stopped before opening its hatch or other vapor seal;
 - b) Reclose hatch or other sealing device within 3 minutes of completing the required procedures; and
 - c) Limit wind speed at opened hatch or other opened sealing device to not more than 3 mph (1.34 m/sec), using a barrier if necessary.
- 2) Hatches of a delivery vessel may be open for monitoring to prevent overflow during the period that the vessel is receiving gasoline from a tank or other source, if so required by a local fire code or other ordinance.
- 3) Connecting Coaxial Fittings: Requirements for first connecting a vapor hose before a gasoline delivery hose do not apply to coaxial VR connection fittings.

[County Rule 352 §305.3] [locally enforceable only]

viii. Vapor Recovery Required:

The Permittee shall not store or transport gasoline in or otherwise use or operate any delivery vessel unless such vessel is designated and maintained to be vapor tight and leak free.

[SIP Rule 352 §301]

d. Monitoring and Recordkeeping Requirements

- i. The Permittee shall maintain records of all certification, testing, and repairs where such records must be maintained in a legible, readily available condition for at least 5 years after the date the testing and repair is completed. The records of the certification testing required by Rule 352 §302 must be recorded in both of the following documents: the “Application for Air Pollution Vapor Recovery Certification” and the “Tank Truck Leak Certification Check List”. Pressure and vacuum shall be recorded to no less than the nearest quarter inch or half-centimeter of water column. The minimum requirements for each of these 2 documents follow:

- 1) For the “Application for Air Pollution Vapor Recovery Certification”:
 - a) Permittee's name and address;
 - b) Tank ID number, the location of the test, the time of the test, and the date of the test;
 - c) For the pressure subtest, 2 readings: the change in pressure (in inches H₂O) for Run 1 and the change in pressure for Run 2;
 - d) For the vapor-valve subtest (§302.2b), 1 reading: the total change in pressure during the test; and
 - e) For the vacuum test, 2 readings: the total change in vacuum during Run 1 and the same for Run 2.
- 2) The “Tank Truck Leak Certification Check List” (or its successor document) shall contain at least the following information:
 - a) Permittee's name and address;
 - b) Tank ID number, the location of the test, the time of the test, and the date of the test;
 - c) The time the subtest began, the initial pressure of the subtest, the finish time, the final pressure of the subtest, and the pressure change between the start and end of the subtest;

the vessel's unit number, manufacturer's serial number, the tank capacity, whether the tank was purged of gasoline vapors, and the date of the next leakage test if the set of 3 subtests are not all passed.

- d) If the initial pressure test was not passed, one set of readings in the row "Initial Test", also giving the elapsed time if the pressure reached zero before 5 minutes. For example, the row marked "Initial Test" will normally contain the results of the initial failed subtest if any repairs were made subsequent to any pressurization or evacuation of the tank.

[County Rule 352 §501]

- ii. The Control Officer may at any time monitor a delivery vessel, including the vapor collection system, for vapor and liquid leaks to ascertain if it is vapor tight and leak free. Leakage of vapor exceeding 20% of the lower explosive limit, or 10,000 ppm as methane, when performed according to Rule 352 §504.4, shall be an exceedance of the vapor-tight standard of Rule 352 §301.1.

[County Rule 352 §502][SIP Rule 352 §502]

- iii. When more than one test method is permitted for a determination, an exceedance of the limits established in the rule determined by any of the applicable test methods constitutes a violation of Rule 352.

- 1) Pressure and Vacuum Tests: The subtests to determine compliance with Rule 352 §§302.2a & 302.2c shall be performed according to EPA Method 27, except that the definition of gasoline shall be according to Rule 352.

- 2) Test of Internal Vapor Valves: The test to determine compliance with Rule 352 §302.2b shall be performed immediately after successfully passing the pressure subtest (pursuant to §302.2a), without performing any intervening maintenance or repair on the vapor valves.

- 3) Confirmation of a vapor leak detected on a vessel during on loading shall be determined by properly deploying a pressure tap adapter that conforms to Method 27 provisions, and demonstrating the leak according to the following tightness test method (Rule 352 §504.4), while the pressure is less than 20 inches of water column:

- a) Calibration:
Within 4 hours prior to monitoring, the combustible gas detector or organic vapor analyzer shall be suitably calibrated for a 20 percent LEL response, or to 10,000 ppm with methane.

- b) Probe Distance:
The probe inlet shall be 1 inch (2.5 cm) or less from the potential leak source when searching for leaks. The probe inlet shall be 1 inch (2.5 cm) from the leak source when the highest detector reading is being determined for a discovered leak. When the probe is obstructed from moving within 1 inch (2.5 cm) of an actual or potential leak source, the closest practicable probe distance shall be used.

- c) Probe Movement:
The probe shall be moved slowly, not faster than 1.6 inches per second (4 centimeters per second). If there is any meter deflection at a potential or actual leak source, the probe shall be positioned to locate the point of highest meter response.

- d) Probe Position:
The probe inlet shall be positioned in the path of the vapor flow from a leak such that the central axis of the probe-tube inlet shall be positioned coaxially with the path of the most concentrated vapors.

- e) Data Recording:
The highest detector reading and location for each incidence of detected leakage shall be recorded, along with the date and time. If no gasoline vapor is detected, that fact shall be entered into the record.

[County Rule 352 §503] [SIP Rule 352 §503]

- 4) Pursuant to Rule 352 §203, Reid vapor pressure shall be determined using American Society

for Testing and Materials (ASTM) Method D 323-90.

[County Rule 352 §503.4][SIP Rule 353 §504.3]

- iv. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

County Rule 210 §302.1c]

e. Reporting

For purposes of the semiannual compliance monitoring report, 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 §302.1 e]

f. Testing Requirements:

Tests required by the SIP Rules 352 §302.2a,b, and c, shall be conducted by the owner or operator of the delivery vessel, or by a consultant, at the expense of the owner or operator:

Notification: Prior to testing, the Permittee or tester shall notify the Control Officer of the date, time and location of the testing and the Control Officer may at any time observe the tests.

[SIP Rule 352 §401.1]

23. ABRASIVE BLASTING

- a. Affected Sources include all abrasive blasting units at the facility vented to ambient air listed in the most current equipment list approved by the Control Officer.

b. Exemptions:

The abrasive blasting permit conditions in this section do not apply to the following operations:

- i. Self-contained, enclosed abrasive blasting equipment that is vented inside a building with the exhaust directed away from any opening to the building exterior, or

- ii. Hydroblasting

[County Rule 312 §103][Locally enforceable only]

c. Allowable Emissions:

- i. 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]

- ii. 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]

d. Operational Requirements:

All abrasive blasting operations shall use confined blasting to control air emissions with exception of the unit in building 907 that is vented to the atmosphere through an Emission Control System (ECS).

[SIP Rule 312 §302]

e. Monitoring and Recordkeeping Requirements:

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:

- i. The date the blasting occurs
- ii. The blasting equipment that is operating

- iii. A description of the type of blasting
 - iv. A description of the ECS associated with the blasting operation
 - v. The type and amount of solid abrasive material consumed on a monthly basis. Include name of certified abrasive used, as applicable; and
 - vi. A copy of the most recent CARB certification list, if applicable
[County Rule 312 §501][Locally enforceable only]
 - vii. The Permittee shall maintain records of the key system operating parameters for the ECS required by the O&M Plan.
 - viii. 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; and
 - 6) Any other related information.
[County Rule 210 §302.1]
 - ix. 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.
- f. Opacity Readings
- i. 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]
 - ii. 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 25 consecutive readings shall be required at 15-second intervals for the averaging time.
[County Rule 300 §502][Locally enforceable only]
- g. Specific Conditions for Confined Abrasive Blasting with a Forced Air Exhaust:
- i. Operational Requirements:
 - 1) Dry abrasive blasting in a confined enclosure with a forced exhaust shall be conducted by venting to an Emissions Control System (ECS) with a submitted and approved Operation and Maintenance (O&M) Plan on file with the Department.
[County Rule 312 §§303 &304] [Locally enforceable only]
 - 2) The ECS shall be operated and maintained in accordance within operating parameters specified in the O&M Plan most recently approved in writing by the control officer. The O&M Plan shall contain at a minimum, the operating parameters and maintenance procedures acceptable to the Control Officer.
[County Rule 210 §302]
 - 3) Work Practices:
At the end of the work shift, the Permittee shall clean up spillage, carryout, and/or track out of any spent abrasive material with a potential to be transported during a wind event.
[County Rule 312 §308.2][Locally enforceable only]
 - ii. ECS Monitoring and Recordkeeping Requirements

The Permittee shall make weekly observations for visible emissions to the ambient air during a time period that the abrasive blasting equipment is being operated. The Permittee shall keep a log of the visual observations. This log shall contain a description of the abrasive blasting operation and ECS associated with it, the name of the person who made the observation, the date and approximate time of the reading, a statement whether or not any visible emissions were observed and any other related information. If abrasive blasting was not performed during the entire week and because of this the observations of visible emissions could not be performed, a statement to that fact shall be documented. If there are visible emissions detected, the Permittee must follow all the opacity requirements contained within this Permit.

iii. Reporting:

The semi-annual compliance monitoring report shall contain a summary of the visible emission readings, a list of dates that the ECS operated outside the operating parameters specified in the O&M Plan and the CARB abrasive used to comply with this rule, if applicable.

[County Rule 210 §302.1e]

h. Testing Requirements

If there is a reason to suspect that the surface that is to be abraded is covered in lead paint and the Permittee intends to use CARB certified abrasive blasting media as the control device, the Permittee shall conduct testing to determine if the lead content of the paint is less than 0.1 percent.

[County Rule 210 §302.1c(2)] [Locally enforceable only]

24. AEROSPACE MANUFACTURING AND REWORK

a. Affected Sources include, but are not limited to, Aerospace paint booths listed on the most current equipment list approved by the Control Officer.

b. Allowable Emission Limitations

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

c. Operational Limitations and Standards

i. The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

1) Should the Permittee operate spray coating equipment outside of a building, 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.

2) 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.

3) 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]

ii. The Permittee shall install and operate a filtering system on any spray booth or enclosure with forced air exhaust. 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. 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]

iii. The Permittee shall be exempt from Paragraph c.i. above if the spray coating operation is one of the following:

1) Spray coating of buildings or dwellings, including appurtenances and any other ornamental

objects that are not normally removed prior to coating;

- 2) 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;
- 3) Spray coating of objects that cannot fit inside of an enclosure with internal dimensions of 10 feet wide by 25 feet long by 8 feet high;
- 4) 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
- 5) Coating operations utilizing only hand-held aerosol cans.

[County Rule 315 §302] [Locally enforceable only]

- iv. 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 County Rule 348, Tables 1a and 1b unless:

For building 922, the VOC emissions are vented to the Department approved fabric filter and activated carbon absorption system and the system achieves a capture and control efficiency of at least 81%. The control system shall be operated according to the most recently approved O&M Plan.

[County Rule 348 §§301 & 302] [SIP Rule 348 §§301 & 302]

- v. 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 other coating application methods that can demonstrate and be approved by the Control Officer as having at least a 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]

- vi. 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°C.

For cleaning solvents used in the flush cleaning of parts, assemblies, and coating unit components, the used cleaning solvent (except for 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 handling requirements below.

Dip cleaning using solvents is subject to the requirements of County Rule 331.

[County Rule 348 §305] [SIP Rule 348 §305]

- vii. All spray guns must be cleaned by one or more of the following methods:
 - 1) 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;
 - 2) Non-atomized discharge of solvent into a waste container that is kept closed when not in use;
 - 3) Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or
 - 4) 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]

- viii. 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 Rule 348 §307]

d. Exemptions

i. General Exemptions

Cotton-tipped swabs used for very small cleaning operations and aqueous cleaning solvents are exempt from the requirements of this permit condition.

ii. Coatings

The following coatings types are exempted from the VOC limits set forth in Tables 24-1 and 24-2, of this permit condition:

- 1) Touch-up coatings;
- 2) Hand-held aerosol can operations;
- 3) DOD "classified" coatings;
- 4) Coating of space vehicles; and
- 5) 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.

iii. Application Equipment

The following are exempt from the application equipment requirements:

- 1) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;
- 2) The application of specialty coatings;
- 3) 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;
- 4) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods;
- 5) The use of airbrush application methods for stenciling, lettering, and other identification markings; and
- 6) Touch-up and repair operations.

iv. Solvent Cleaning Operations

The following are exempt from the solvent cleaning requirements of this section of the permit:

- 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 electronics 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 fluid 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,
- 9) Curtains, carpet, and other textile materials used on the interior of the aircraft;
- 10) Cleaning of metallic and nonmetallic materials used in 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;

- 11) Cleaning of aircraft transparencies, polycarbonate, or glass substrates;
- 12) Cleaning and solvent usage associated with research and development, quality control, or laboratory testing;
- 13) 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
- 14) 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 Montreal Protocol Committee [sections 604(d)(1) and (g)(2) of the Act].

[County Rule 348 §308] [SIP Rule 348 §308]

e. Monitoring and Recordkeeping Requirements

- i. The Permittee shall inspect each filter installed on a spray booth or enclosure, for gaps, sags or holes once per week. Should the Permittee observe any gaps, sags or holes in any of the filters, it shall immediately repair or replace the filter and record the name of the inspector, the location of filtering system containing the filter (if more than one spray booth), and the time and date that the filter was replaced. If no gaps, sags or holes are observed in any of the filters, the Permittee shall record the name of the inspector, the location of the filtering system containing the filter (if more than one spray booth), and the time and date that the filter was inspected. The Permittee shall inspect the facility for evidence of any spraying activity that occurred outside of the spray booth once per week.

[County Rule 210 §302]

- ii. The Permittee shall maintain on file and make available to the County 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]

- iii. The Permittee shall maintain a current list of aerospace coatings in use, VOC content as applied and records of the monthly usage of such materials in pounds per gallon or grams per liter. In addition, the Permittee shall:

- 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.
- 4) If the Permittee uses an enclosed spray gun cleaner it shall visually 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 County.

[County Rule 348 §501] [SIP Rule 348 §501]

- 5) The Permittee shall provide and maintain (an) O&M Plan(s) for any ECS, any other emission processing equipment, and any ECS monitoring devices that are used pursuant to County Rule 348 or to an air pollution control permit. The Permittee shall submit the O&M Plan to the County for approval for each ECS and each ECS monitoring device that is used pursuant to this section of the permit. The Permittee must fully comply with all O&M Plans that it has submitted for approval, but which have not yet been approved, unless notified otherwise by the County in writing. Each ECS is identified as follows: Buildings 922E and 922W, 2-JBI Paint Spray Booths with filters and carbon absorption units, controls and blowers.

[County Rule 348 §303] [SIP Rule 348 §303]

- 6) The Permittee shall maintain records of the monthly tests of the activated carbon panels located in building 922 for a period no less than five years. The report shall state the available surface area of the activated carbon derived from each test. If a test result shows the available surface area of the activated carbon to be below 10 percent, the Permittee shall cease spray painting activities in the affected spray booth at building 922 until the carbon in the panels is replaced with new or regenerated activated carbon.

[County Rule 210 §302.1 d]

- iv. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c]

f. Reporting Requirements

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

- i. A summary of the monthly test required by the O&M Plan for the spray paint booths located in building 922. The summary shall include the following;
- 1) The date the analysis was performed
 - 2) The name of the company that performed the analysis
 - 3) The analytical techniques or methods used
 - 4) The results of such analysis
- ii. 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 §302.1 e]

Table 24-1

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 24-2

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
Type of Specialty Coating	
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
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

25. VEHICLE REFINISHING

- a. Affected sources include, but are not limited to, vehicle refinishing operations listed in the most current equipment list approved by the Control Officer.
- b. Allowable Emissions Limitations
 - i. The Permittee shall not apply a coating on a previously finished automobile/light-duty vehicle in Maricopa County unless the coating's VOC content complies with the applicable limits in Table 25-

1, herein. Vehicle-body appurtenances such as mirrors, trim strips, license-plate frames, etc., used to replace or supplement existing appurtenances on an automobile/light-duty vehicle bodies may be coated with coatings that meet the applicable VOC limits in Table 25-1, even if the item has never been coated or used.

The recoating of a section of a light-duty vehicle that is not part of its body/chassis, its body's appurtenances, or its wheels, shall comply with the VOC limits of Table 25-3, herein. This includes drive-train, steering gear, suspension, etc.

[County Rule 345 §301][Locally enforceable only]

- ii. The Permittee shall not apply refinish coating to any section or appurtenance of the body or chassis of a heavy truck unless that coating complies with the VOC limits in Table 25-1.

At the time of (re)placement, the Permittee may coat heavy truck body appurtenances such as mirrors, trim strips, license-plate frames, wheel covers, etc., with coatings that meet the applicable VOC limits in Table 25-2, herein, or the requirements of item 1) below, if the item is about to be used to replace or supplement existing appurtenances, even if the item has never previously been coated or used.

The Permittee may coat a heavy truck panel, a juncture of panels, or a body appurtenance using a coating with a VOC content that does not exceed 546 g VOC/L (4.55 lb VOC/gal), provided that the coatings as applied meet the following requirements:

- 1) The coating shall be applied from a reservoir having a gross volume not exceeding 1.2 liters (5 cups) and containing no more than 1 liter (1.1 qt.) of coating.
- 2) The complete topcoat of a single stage finish shall not use more than 1 liter.
- 3) The complete topcoat of a multi-stage finish shall not exceed 2 liters.
- 4) The total of all non-topcoat coatings, including wash and primers shall not exceed 1 liter.
- 5) Wash Primers may have up to 780 g/L (6.5 lb/gal).

[County Rule 345 §302] [Locally enforceable only]

- iii. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

c. Operational Limitations and Standards

- i. The Permittee shall install and operate a filtering system on any spray booth or enclosure with forced air exhaust. 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. 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]

- ii. The recoating of a section of mobile equipment or a heavy-duty vehicle, including a heavy truck, that is not part of its body/chassis, its wheels, or appurtenances, shall comply with the VOC limits of County Rule 345, Table 1. This includes drive-train, steering gear, suspension, etc.

The Permittee shall not refinish mobile equipment or any heavy-duty vehicle that is not a heavy truck unless the coating as applied conforms to the VOC limits in County Rule 345, Table 3, except that pre-treatment acid etchant wash shall conform to the VOC limits of row 1 in Table 25-2, herein.

[County Rule 345 §303] [Locally enforceable only]

- iii. The Permittee, in adding VOC-containing thinner, reducer, or other diluents to any refinish coating regulated by either Table 25-1 or Table 25-2 shall not add such diluents in proportions higher than those specified or recommended by the instructions provided by the supplier of the coating.

[County Rule 345 §304] [Locally enforceable only]

- iv. When the Permittee is cleaning or preparing a surface of a vehicle or mobile equipment for coating using a wipe method or other non-dip method, it shall use a material with a VOC content as applied of no more than 1.4 pounds of VOC per gallon as determined by methods set forth in County Rule 345 §502.1d or 502.3. Neither surface-cleaning nor surface-preparation material that contains VOC

shall be applied by means of motor-compressed air if applied in a mist or (finely atomized) spray. County Rule 331 will control dip cleaning of vehicle or mobile equipment surfaces.

[County Rule 345 §305] [Locally enforceable only]

- v. The Permittee shall operate and maintain in proper working order all production and cleaning equipment in which VOC-containing materials are used or stored.

[County Rule 345 §306] [Locally enforceable only]

- vi. The Permittee shall not apply any coating with a VOC content exceeding 3.0 lb VOC/gal (360 g/l) using a spray gun, unless such spraying employs one of the following devices or systems:

- 1) A low pressure spray gun or system (such as HVLP), or
- 2) An electrostatic system, or
- 3) A system that atomizes principally by hydraulic pressure, including “airless” and “air-assisted airless.”

[County Rule 345 §307.1] [Locally enforceable only]

- vii. The Permittee may use a spray gun other than one conforming to the above requirements if:

- 1) Applying materials that have a VOC content not exceeding 3.0 lb VOC/gal (360 g/l) as applied, less water and non-precursor compounds;
- 2) Such guns are designed and used solely for detailing and/or touch-up, and have a maximum reservoir capacity of 250 cc (8.8 fluid ounces); or
- 3) Such guns are used to apply adhesives.

[County Rule 345 §307] [Locally enforceable only]

- viii. The Permittee shall provide, properly install and maintain in calibration, in good working order and in operation, the spray booth and overspray filter described in the facilities O&M Plan.

[County Rule 345 §504] [Locally enforceable only]

- ix. Manual and Automatic Spray Gun Cleaning:

- 1) Affected Sources include paint gun cleaners located at vehicle refinishing facilities listed in the most current equipment list approved by the Control Officer. Spray guns may also be cleaned in accordance with Permit Condition 24.c.vii.

- 2) Operational Limitations and Standards:

- a) All solvent used to manually clean spray guns shall be collected into a container which shall be immediately closed after all the solvent has been collected. All solvent used for line cleaning shall be pumped or drained into a container kept closed when not in use. Tanks used for stripping off coating or for cleaning objects shall be covered when not in use. Solvent-dragout shall be minimized by tilting or rotating the object to drain off any pools of solvent before removing the object from above the tank.

[County Rule 345 §309] [Locally enforceable only]

- b) Manual cleaning outside of the cleaning machine is allowed if the cleaning machine is used immediately after manual cleaning, and if done without spraying cleaning solvent with the gun. A cleaning machine is not required to clean a paint gun if the gun is cleaned with water or a cleaning mixture that is more than 1/2 water by weight or volume.

[County Rule 345 §310] [Locally enforceable only]

- x. Storage of Vehicle Refinishing Related VOC and VOC-Containing Material

The Permittee shall store all VOC-containing materials, including but not limited to waste coatings, waste solvents and their residues, and rags in closed containers. A container must have a legible label identifying the container’s contents and shall be kept closed except when contents are added or removed. Disposal of waste or surplus VOC-containing materials shall be done in a manner that inhibits VOC evaporation, such as having these materials hauled off site in sealed containers.

[County Rule 345 §311] [Locally enforceable only]

- d. Exemptions

Maricopa County Air Pollution Rules and Regulations Rules 330 and 336 do not apply to any vehicle or mobile equipment coating or refinishing operation to which this Rule 345 is applicable.

[County Rule 345 §312] [Locally enforceable only]

e. Monitoring and Recordkeeping Requirements

i. If the Permittee, in a calendar year meets or exceeds any of the following quantities must notify the County of this fact in writing by February 28 (within two months) after the end of that calendar year:

- 1) Used a total of 1000 gallons (3785 l) of coating (with reducer and hardener).
- 2) Received a total of 1300 gallons (4920 l) of cleaning solvent, lacquer thinner and wash-thinner.
- 3) Disposed of more than 1000 gallons or 6000 pounds (2722 kg) to hazardous waste collection.
- 4) Submitted a total exceeding 9000 pounds (4082 kg) of VOC in the facility's most recently completed Maricopa County annual air-emission inventory form.

The County may require in writing a report of annual emissions from a facility which has given notification as required by the preceding paragraph, or from any other facility which in the County's determination can have annually emitted 5 tons (4536 kg) or more of VOC.

[County Rule 345 §402] [Locally enforceable only]

ii. The Permittee shall keep the records described below, [Permit Condition 33.e.iii], in a consistent and complete manner and shall make them available to the County without delay during normal business hours.

[County Rule 345 §501] [Locally enforceable only]

iii. The Permittee shall maintain written records in the facility that give the name or code number of each VOC-containing product and its VOC content as received and if requested by the Control Officer its VOC content as applied. VOC content shall be expressed in pounds of VOC per gallon (or grams/liter), less water and non-precursors, excepting waterborne cleaners that shall include the water. Any one of the following may be used to meet these requirements as long as all VOC-containing refinishing products are accounted for:

- 1) An up-to-date hardcopy (in writing) list prepared for that facility.
- 2) Current material safety data sheets (MSDS) or product data sheets showing the VOC content.
- 3) Purchase documentation that gives VOC content, such as invoices and/or receipts showing VOC content.
- 4) Current, dated manufacturer's publications such as charts or lists which show VOC content, with the products used in the facility highlighted or otherwise clearly marked.

Purchase records showing the volume of each VOC-containing refinishing-related product purchased shall be kept available for the current and the previous year. Actual invoices and receipts showing the volume of the material purchased will suffice in place of ledger-style records. Records required by this section of the permit shall be retained for five years.

[County Rule 345 §501] [County Rule 210 §302.1] [Locally enforceable only]

iv. The Spray Booth shall be operated and maintained in accordance with the operating parameters specified in the O&M Plan most recently approved in writing by the Control Officer. The O&M Plan shall contain at a minimum the operating parameters and maintenance procedures acceptable to the Control Officer.

[County Rule 210 §302]

v. The Permittee shall maintain on file and make available to the County 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]

vi. On each day that an ECS is used the Permittee shall record the amount and VOC content of the

material for which the ECS was used. On each day an ECS is used, make a permanent record of the operating parameters of the key systems as required by the O&M Plan described below. For each day or period in which the O&M Plan requires that maintenance be performed, a permanent record shall be made of the maintenance actions taken within 24 hours of maintenance completion.

[County Rule 345 §504] [Locally enforceable only]

- vii. The Permittee shall provide and maintain (an) O&M Plan(s) for the ECS and any ECS monitoring device. The Permittee shall submit to the County for approval the O&M Plans of each ECS and each ECS monitoring device. The Permittee shall comply with all the identified actions and schedules provided in each O&M Plan.

[County Rule 345 §504] [Locally enforceable only]

- viii. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c]

f. Reporting

For purposes of the semiannual compliance monitoring report, 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.

Table 25-1

REFINISHES APPLIED TO BODIES OF AUTOMOBILE/LIGHT-DUTY VEHICLES OR MOTORCYCLES
VOC LIMITS FOR REFINISH COATINGS AS APPLIED, MINUS EXEMPT COMPOUNDS

Coating category	Grams VOC per liter	Pounds VOC per gal
Pretreatment wash primers	780	6.5
Primers/primer surfacers	580	4.8
Primer sealers	550	4.6
Single/two-stage topcoats	600	5.0
Topcoats of more than two stages	630	5.2
Multi-colored topcoats	680	5.7
Specialty coatings	840	7.0
Strippable booth coatings	420	3.5

Table 25-2

VOC LIMITS FOR REFINISH COATING AS APPLIED TO HEAVY TRUCK BODIES

As applied, minus exempt compounds

VOC LIMIT and Effective Date	Current	November 1, 1999	November 1, 2000	November 1, 2001		
TYPE OF COATING						ROW
Pretreatment wash primer	780 g/L 6.5 lb/gal					1

Primers/primer surfacers	580 g/L 4.8 lb/gal	same	same	420 g/L 3.5 lb/gal		2
Primer sealers	550 g/L 4.6 lb/gal	same	same	420 g/L 3.5 lb/gal		3
Single stage, solid color	600 g/L 5.0 lb/gal	same	same	420 g/L 3.5 lb/gal		4
Single stage, metallic/iridescent	550 g/L 4.6 lb/gal	same	same	420 g/L 3.5 lb/gal		5
2-Stage topcoat basecoat & clearcoat	600 g/L 5.0 lb/gal per formula**	same	same	480 g/L 4.0 lb/gal per formula**		6
Topcoats of more than two stages	630 g/L 5.2 lb/gal per formula**	same	same	480 g/L 4.0 lb/gal for trailers**		7
Spot coats, 1 liter limit each stage	600 g/L 5.0 lb/gal				546g/L (11/2/02)	8
Specialty Coatings as defined by §231	840 g/L 7.0 lb/gal					9
Strippable booth coatings	2.0 lb/gal					

**Formula for computing the VOC content of multi-stage coating is in Rule 345 §503.1

Table 25-3
VOC LIMITS FOR COATING AS APPLIED TO UNCOATED VEHICLE SURFACES

COATING ON METAL SURFACES		
The following includes Coating, Adhesive, & Adhesive Primer	Pounds VOC per gallon	Grams VOC per liter
Air-Dried Coating	3.5	420
Baked Coating [above 200°F (93°C)]	3.0	360
COATING ON VINYL SURFACES	3.8	450
COATING ON FABRIC SURFACES	2.9	350
COATING PLASTIC SURFACES not defined as flexible	3.5	420
COATING FLEXIBLE PLASTIC SURFACES (not Vinyl)		
- Primer	4.1	490
- Color Topcoat	3.8	450
- Basecoat/Clear Coat (Combined System)	4.5	540

26. SURFACE AND SPRAY COATING OPERATIONS

- a. Affected Sources include, but are not limited to, surface and spray coating (paint booth) operations listed on the most current equipment list approved by the Control Officer.
- b. Allowable Emission Limits
The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
[County Rule 320 §300][SIP Rule 32.A]
- c. Operational Limitations and Standards
 - i. The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:
 - 1) Should the Permittee operate spray coating equipment outside of a building, 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.
 - 2) 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.

- 3) 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] [SIP Rule 34]

- ii. The Permittee shall operate a filtering system on any spray booth or enclosure with forced air exhaust. 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. 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]

- iii. The Permittee shall be exempt from Paragraph b. i. above if the spray coating operation is one of the following:

- 1) Spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating;
- 2) Spray coating of facility equipment or structures that 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;
- 3) Spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10 feet wide by 25 feet long by 8 feet high;
- 4) 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
- 5) Coating operations utilizing only hand-held aerosol cans.

[County Rule 315 §302]

- iv. The Permittee shall comply with the limits specified in Table 26-1 for all applications of surface coatings that do not qualify for one of the exemptions listed:

[County Rule 336 §301] [SIP Rule 336 §301]

v. Exemptions

- 1) Categorical Exemptions: This rule does not apply to the following operations:
 - a) Aerospace coating operations (Rule 348).
 - b) Architectural coating, including buildings and erected structures (Rule 335).
 - c) Cleaning: VOC loss from cleaning or stripping a surface for coating or other purpose is regulated by Rule 331.336.13
 - d) Marine vessel exterior refinishing.
 - e) Polyester coatings applied to polyester composites.
 - f) Printing and graphic arts coating (Rule 337).
 - g) Semiconductor manufacturing (Rule 338).
 - h) Coating a highway vehicle or mobile equipment (Rule 345).
 - i) Wood: Coating Wood Furniture (Rule 342); Coating Wood Millwork (Rule 346).
- 2) Exemptions For Qualified Materials: Rule 336 does not apply to the following materials that meet the specific qualification(s) and limitation(s) set forth herein:
 - a) Leak-Preventing Materials: Sealants, adhesives, caulking, and similar materials used on the following substrates for the primary purpose of leak prevention are exempt from this

rule:

- i) Non-metallic substrates; and
 - ii) Used substrates, post manufacture, such as, but not limited to, old joints and seals on pipe and valve assemblies.
- b) Adhesive Use:
- i) Adhesive and adhesive primer applications are exempt from this rule, except for the 2 categories that appear in Table 26-1, namely adhesive materials applied to other metal parts and products (as defined in Rule 336 §231), and adhesives used in paper coating (as defined in Rule 336 §233).
 - ii) Any adhesive exempted by this Rule 336 and to which no other rule in Regulation III specifically applies shall comply with the provisions of Rule 330 (Volatile Organic Compounds) of these Rules & Regulations.
- c) Certain Joint Fillers: Caulking and beaded sealants used to fill gaps or to fill joints between surfaces are exempt from this rule, except those used in manufacturing other metal parts and products as defined in Rule 336 §231 of this rule, or in the manufacturing of cans.
- d) Extreme Performance Coatings: Extreme performance coatings are exempt from the VOC limits of Table 26-1 when used under the following conditions:
- i) Used on internal combustion engine components that are normally above 250°F (121°C) during use; or 336.14
 - ii) Used at temperatures above 250°F (121°C) on items that are both included under SIC (Standard Industrial Classification, 1987) codes 3661, 3663, 3669, 3677, 3678, 3679, or 3769 and are electronic products in space vehicles and/or are communications equipment. The US Government Printing Office “Standard Industrial Classification Manual, 1987” (and no future editions) is incorporated by reference and is on file at Maricopa County Environmental Services Department, 1001 N. Central Avenue, Suite 201, Phoenix, Arizona 85004-1942.
- 3) ECS Use In Lieu Of Equipment/Practice: In lieu of meeting equipment or work practice standard within Rule 336 §§302, 303, or 304, an owner or operator is allowed to instead use an ECS that has capture efficiency not less than 90% and meets all ECS requirements in Rule 336 §306.
- 4) Spray-Gun and VOC-Limit Exemptions: The following are exempt from Rule 336 subsection 301.1, subsection 301.2, and section 302 of this rule:
- a) Coating with an aerosol can.
 - b) Touch up or repair-coating operations as defined in Rule 336 §§ 250 and 240.
 - c) Low usage coatings which in aggregate of all formulations do not exceed 55 gallons (208 liters) per year facility-wide if the operator updates usage records of these coatings on each day of their use, pursuant to Rule 336 subsection 501.2.
 - d) A small surface-coating source (SSCS) as defined in Rule 336 Section 243. However, once a small surface-coating source exceeds either the 15 lb per day or the 2 tons per year limits that are required to maintain SSCS status that facility is permanently subject to the limits of Rule 336 subsection 301.1, subsection 301.2, and Section 302, with the following exception:
 - i) For such a facility that does not have either a 15 lb/day or a 2 ton/year VOC-emission limit in an Air Pollution Permit for processes regulated by this rule, an owner or operator may retain the exemption if s/he agrees in writing to enforceable permit conditions that establish these or stricter limits.
 - ii) However, a facility that violates its permit limit of either 15 lbs VOC/day or 2 tons

VOC/yr. for coating process regulated by this Rule 336 is permanently subject to the limits of Rule 336 subsections 301.1 and 301.2, and Section 302.

- e) A Quality Class Q protective coating that is used on equipment, structures, and/or components within a containment facility of a nuclear power plant and is approved in accordance with either ANSI standards N101.2 and N101.4 or with ASTM Standards D3911 and D3843. 336.15
 - f) A tactical military-equipment coating that is approved in an MCESD Air Pollution Permit subsequent to a sufficient demonstration by the user that no compliant substitute exists.
- 5) Special Facilities/Operations:
- a) Silicone Release Coatings: Silicone release coating operations controlled by an ECS pursuant to Rule 336 subsection 301.2 are exempt from the 85 percent overall control efficiency requirement if the ECS demonstrates at least 70 percent overall control and the coating is applied with a liquid seal air spray system.
 - b) Bonding Impact Resistant Rubber Lining To Metal: An adhesive and an adhesive-primer are exempt from Table 1 limits, but shall not have a VOC content of material exceeding 850 grams of VOC per liter (7.1 lb/gal), if such adhesive is used to bond sheets/strips of rubber to metal equipment so that such rubber sheathing directly contacts material received by the metal and so protects the metal. This exception does not apply to any other situations where adhesives are used to bond rubber to metal.
 - 6) Exemption of Coating Applicator Cleanup: A person is allowed to use solvent that has at 20° C (68° F) a total VOC vapor pressure above 35 mm Hg for cleaning coating-application equipment, but only if such application equipment does not use spray devices and the same principal solvent is used for cleaning as is used in the coating.
 - 7) Low-Usage Allowance For Restricted Guns: A person may employ spray guns otherwise prohibited by Section 302 for use with coatings over 2 lb VOC /gal under the following limited conditions:
 - a) If VOC emissions from the finishing application station, are captured and directed to an ECS complying with the provisions of Rule 336 Section 306.
 - b) To coat the inside of pipes and tubes with a wand-style applicator.
 - c) Using an airbrush or other small gun that has a reservoir capacity not exceeding 250 cc (8.8 fluid ounces) and is used solely for detailing, lettering, touchup, and/or repair.
[County Rule 336 §305.1 through 305.7] [SIP Rule 336 §305]
- vi. Application Methods for Surface Coatings:
The Permittee shall employ one of the following for all applications of surface coatings containing more than two pounds of VOC per gallon (240 g/L) minus exempt compounds:
- 1) A low pressure spray gun; or
 - 2) An electrostatic system, or
 - 3) A system that atomizes principally by hydraulic pressure, including "airless" and "air assisted airless", or
 - 4) Non atomizing or non-spraying application methods, such as but not limited to dipping, rolling, or brushing; or
 - 5) Any method which is approved by the Administrator of the Federal EPA and the Control Officer as having a transfer efficiency of 65% or greater.
[County Rule 336 §302] [SIP Rule 336 §302]
- vii. Cleanup of Application Equipment:
The Permittee shall comply with the following when using VOC containing material to clean application equipment:

- 1) Disassemble any spray gun and other applicable equipment and clean it in:
 - a) A container which remains covered at all times, except when the application equipment is being handled in the container, or transferred into or out of the container; or
 - b) A commercially sold gun cleaning machine which shall be operated and maintained according to manufacturer's instructions.
- 2) Vapor Pressure Limits: The Permittee shall only use solvent which, as used, has a vapor pressure below 35 mm Hg at 20° C (68° F), except spray-less equipment exempted by County and SIP Rule 336 §305.6.

[County Rule 336 §303] [SIP Rule 336 §303]

d. Monitoring and Recordkeeping Requirements

The following records shall be retained for 5 years and shall be made available to the County upon request:

- i. The Permittee shall inspect each filter installed on a spray booth or enclosure, for gaps, sags or holes prior to each use. Should the Permittee observe any gaps, sags or holes in any of the filters, it shall immediately repair or replace the filter and record the name of the inspector, the location of filtering system containing the filter, and the date that the filter was replaced. If no gaps, sags or holes are observed in any of the filters, the Permittee shall record the name of the inspector, the location of the filtering system containing the filter, a statement that no gaps, sags or holes were observed, and the time and date that the filter was inspected.

[County Rule 210 §302]
- ii. The Permittee shall inspect the facility for evidence of any spraying activity that occurred outside of the spray booth once per week. The Permittee shall record the name of the inspector, the location of the inspection, a statement summarizing the results of the inspection, the date that the inspection was performed and any corrective action taken.

[County Rule 210 §302]
- iii. Before each use, the Permittee shall inspect and record the pressure differential readings from each spray booth in accordance with the most recently approved O&M Plan.

[County Rule 210 §302]
- iv. Maintain a current list of coatings, adhesives, reducers, thinners, gun-cleaning materials, additives, and any other VOC-containing materials regulated by this rule. Give the VOC content of material for each as received (before thinning). A complete, neat assemblage of this data meets the requirements for a list. Express VOC content in 1 of 3 forms: pounds VOC per gallon, grams VOC per liter, or the percent VOC by weight along with the specific gravity or density, (2 numbers are required).

[County Rule 336 §501.1] [SIP Rule 336 §501.1]

- 1) For purposes of recording usage, coatings and adhesives that are in the same category in Table 26-1, herein, and have similar VOC content, may be recorded under a name that includes the category name. The highest VOC content among the members of that grouping shall be assigned to that grouping, rounded to the nearest 10th of a pound. To identify what products belong within each group, after each group name and the group's VOC content of material must appear the name of each product in the group and its VOC content of material. For example: For flexible plastic parts, you use 20 gallons of primer that has 3.04 lb VOC/gal., 30 gallons of primer having 3.14 lb VOC/gal., and 40 gallons of primer having 2.89 lb VOC/gal. You may record usage as 90 gallons of flexible plastic primer containing 3.1 lb VOC/gal. If grams VOC per liter is used to record VOC content, round off to the nearest whole number of grams.

[County Rule 336 §501] [SIP Rule 336 §501]

- 2) The Permittee shall record the following:
 - a) Coatings:

For all coatings make the following listings for coatings and adhesives that have VOC limits in Table 1 in this permit condition:

- i) VOC before Reducing:
The VOC content of each coating as received; minus exempt compounds (this figure is sometimes called the “EPA Method 24” VOC content on manufacturer’s data sheets). If the coating is a multi-part coating, list the VOC content which the manufacturer states the coating will have once you have mixed all the necessary parts together in the proportions specified by the manufacturer.

[County Rule 336 §501.1c(1)(a)] [SIP Rule 336 §501.1c(1)(a)]

- ii) List Maximum VOC Content of Coating as Applied:
For each coating that you thin/reduce or add any additive to, record in a permanent log either of the following:

- (1) The maximum number of fluid ounces thinner/reducer that you ever add to a gallon of unreduced coating (or maximum g/liter), and the maximum fluid ounces of every other additive you mix into a gallon of the coating; or
- (2) The VOC content of the coating, after adding the maximum amount of thinner/reducer and other additives that you would ever add, as determined by the formula in County Rule 336 §255.1.

[County Rule 336 §501.1c(1)(b)] [SIP Rule 336 §501.1c(1)(b)]

- b) Applicator Cleanup Solvent:
Have a hardcopy of the VOC vapor pressure (VP) at 20°C (68°F) of solvent(s) used to clean spray guns, hoses, reservoirs, and any other coating application equipment. Any one of the following ways of providing the VP data is sufficient:

- i) A current manufacturer’s technical data sheet;
- ii) A current manufacturer’s safety data sheet (MSDS);
- iii) Actual test results; or
- iv) A letter signed by an official or lab manager of the supplying facility.

[County Rule 336 §501.1c(2)] [SIP Rule 336 §501.1c(2)]

- 3) The Spray Booth shall be operated and maintained in accordance with the O&M Plan most recently approved by the Control Officer. The O&M Plan shall contain at a minimum, the operating parameters and maintenance procedures acceptable to the Control Officer.

A permanent log shall be maintained on site and shall be made available upon request of the Control Officer. The logbook shall contain the following information:

- a) The date and time of each inspection;
- b) The name or initials of the person who performed the inspection;
- c) Whether or not any gaps, sags or holes were found on the filter;
- d) The differential pressure reading of the spray booth if the magnehelic gauge on each spray booth;
- e) Whether or not there was any observed spraying activity that occurred outside of the spray; and
- f) A summary of any corrective action taken.

[County Rule 210 §302.1]

- v. Frequency of Updating Usage Records

The Permittee shall update its records, showing the type and amount used of each VOC-containing coating or adhesive which is regulated by name or type in Table 26-1 herein, and updates each VOC-containing material, related to surface coating, that is not addressed by Table 26-1, herein. This includes, but is not limited to, thinners, surfacers, and diluents. Maintain records according to the following schedule:

- 1) Monthly update records of each coating used that complies with the VOC limits in Table 26-1.

Complete a month's update by the end of the following month.

- 2) Daily update the usage of each coating that exceeds its limits in Table 26-1.
[County Rule 336 §501.2] [SIP Rule 336 §501.2]

- vi. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.
[County Rule 210 §302.1c]

e. Reporting Requirements

For the purposes of the semi-annual Compliance Monitoring Report, the Permittee shall provide the following information:

- i. If the Permittee operates all spray coating equipment outside of a building and inside an enclosure without fixed air exhaust, the Permittee shall provide a statement certifying the following:
 - 1) That the enclosure has at least three sides that are a minimum of eight feet in height;
 - 2) That no spraying was conducted within three feet of any open end, or within two feet of any open top of the enclosure; and
 - 3) 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 315 §301.1] [SIP Rule 34]

- ii. If the Permittee operates 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:
 - 1) That each filter installed on a spray booth or enclosure was inspected for gaps, sags or holes prior to each use;
 - 2) That all filters that were observed to have gaps, sags or holes were immediately replaced; and
 - 3) Details of the make and manufacturer of each filter used as well as its overspray control efficiency.

[County Rule 315 §301.2]

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.

- iii. 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.

Table 26-1

SURFACE COATING EMISSION LIMITS		
TYPE OF SURFACE COATING Column I	LIMITS AS APPLIED: VOC content minus exempt compounds (see Rule 336 §255.1)	
	Column II lbs/gal	g/liter
Can Coating		
Sheet Basecoat (Exterior and Interior) and Overvarnish	2.8	340

SURFACE COATING EMISSION LIMITS		
TYPE OF SURFACE COATING Column I	LIMITS AS APPLIED: VOC content minus exempt compounds (see Rule 336 §255.1)	
	Column II lbs/gal	g/liter
Two-Piece Can Exterior (Basecoat and Overvarnish)	2.8	340
Two and Three-Piece Can Interior Body Spray	4.2	510
Two-Piece Can Exterior End (Spray or Roll Coat)	4.2	510
Three-Piece Can Side-Seam Spray	5.5	660
End Sealing Compound	3.7	440
Can Printing Ink	2.5	300
Coil Coating (any coat)	2.6	310
Metal Furniture Coating	3.0	360
Large Appliance Coating	2.8	340
OTHER METAL PARTS AND PRODUCTS COATING (As defined in Rule 336 §231.)		
The following includes Non-adhesive Coating, Adhesive, Adhesive Primer, Caulking, and Beaded Sealants:		
Air-Dried Coating	3.5	420
Baked Coating [above 200°F (93°C)]	3.0	360
Silicone Release Coating: Baked or Air-Dried	3.5	420
Fabric Coating	2.9	350
Film Coating	2.9	350
COATING PLASTIC PARTS AND PRODUCTS THAT ARE Not Defined as Flexible	3.5	420
COATING FLEXIBLE PLASTIC PARTS AND PRODUCTS		
Primer	4.1	490
Color Topcoat	3.8	450
Basecoat/Clear Coat (Combined System) – Limit for either coat	4.5	540
Paper Coating, including Adhesives	2.9	350
Vinyl Coating (Coating on Vinyl)	3.8	450
STRIPPABLE BOOTH COATINGS	2.0	240

27. ARCHITECTURAL COATINGS

- a. Affected Sources include plant wide facilities.
- b. Allowable Emission Limits
The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
[County Rule 320 §300][SIP Rule 32.A]
- c. Operational Limitations
 - i. 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]
 - ii. The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 grams/liter [g/l]) of VOCs per gallon (gal) of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings.

The Permittee shall not apply any architectural coating that exceeds the limits for Specialty Coatings. Limits are expressed in pounds of VOC per gal of coating as applied, excluding water and any colorant added to tint bases.

[County Rule 335 §§303 & 305] [SIP Rule 335 §§303 & 305]

iii. Specialty Coating Limits

COATING	<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 Polymer	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 and Undercoaters	2.9
Stains, All	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
Wood Preservatives except Below Ground	2.9

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

- iv. The Permittee shall not apply any flat architectural coating which contains more than 2.1 lbs (250 g/l) of VOC/gal of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings.

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

- v. The following coatings are exempt from the architectural coatings requirements specified in the permit conditions above:
- 1) Architectural coatings supplied in containers having capacities of one quart or less.
 - 2) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - a) Below ground wood preservative coatings.
 - b) Bond breakers.
 - c) Fire retardant coatings.

- d) Graphic arts coatings (sign paints)
- e) Mastic texture coatings.
- f) Metallic pigmented coatings.
- g) Multi-colored paints.
- h) Quick-dry primers, sealers and undercoaters.
- i) Shellacs.
- j) Swimming pool paints.
- k) Tile-like glaze coatings.

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

d. Recordkeeping and Monitoring

- i. The Permittee shall keep the material list of all coatings used. The material list should contain the name of each coating, short description of the material, lbs of VOCs per gal of coating, excluding water and colorant added to tint bases and amount used. If the coating is exempt from the VOCs content requirements, the justification for the determination shall be documented and kept on file.
- ii. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c]

e. Reporting Requirements

- i. The Permittee shall file a semiannual Compliance Monitoring Report and include in this report the compliance status of the source during the six-month period. The report shall be done in accordance with the already established reporting schedule. The report shall include a material list and a list of the coatings that are exempt from the VOCs content requirements.
- ii. 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 §302.1d]

28. SOLVENT CLEANING (DEGREASING) OPERATIONS AND MATERIAL USAGE

a. Affected Sources include, but are not limited to, solvent cleaning equipment listed in the most current equipment list approved by the Control Officer.

b. Allowable Emission Limits

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][SIP Rule 32.A]

c. Operational Limitations and Standards

i. 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 solvent dip tan);
- 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 §502 of County Rule 331); or

[County Rule 331 §305] [SIP Rule 331 §305]

ii. Solvent Handling Requirements

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. If any cleaning solvent escapes from a container:

- 1) Wipe up or otherwise remove immediately if in accessible areas.
- 2) 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]

iii. Equipment Requirements for Cleaning Machines

- 1) The Permittee shall provide a leak-free container (degreaser) for the solvents and the articles being cleaned. The VOC containment portion shall be impervious to VOC-containing liquid and vapors. 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 properly maintain and operate all cleaning machine equipment required by this Permit.

[County Rule 331 §302.2] [SIP Rule 331 §302.2]

iv. 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) If using a cleaning solvent spray system:
 - i) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
 - ii) 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.
 - iii) 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.
 - iv) 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 fifteen (15) 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 eleven (11) ft/min (3.3 m/min);
- i) The Permittee shall prevent cross contamination of solvents regulated by §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 ¾ 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]

v. Required Solvent Specifications

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

[County Rule 331 §304.1] [SIP Rule 331 §304.1]

vi. 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 cm²).
 - 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 not 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]

vii. Special Non-Vapor Cleaning Requirements

- 1) The Permittee shall operate and equip the devices as follows when blasting or misting with conforming solvents:

- a) 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) 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]

- 2) The Permittee shall use a sealed system for all blasting or misting with a non-conforming solvent.

[County Rule 331 §307.2] [SIP Rule 331 §307.1]

- 3) Cleaning systems using cleaning solvent that emerges from an object undergoing flushing with a visible mist or at a pressure exceeding 10 psig, shall comply as follows:

- a) For conforming solvents, use a containment system that is designed to prevent any perceptible cleaning solvent liquid from becoming airborne outside the containment system, such as a completely enclosed chamber.
- b) Use a sealed system for non-conforming solvents.

[County Rule 331 §307.3] [SIP Rule 331 §307.3]

d. Monitoring and Recordkeeping Requirements

- i. 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.

[County Rule 331 §501.1] [SIP Rule 331 §501.1]

- ii. 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 by November 1, 1999, in one of the following forms:

- 1) A manufacturer's technical data sheet,
- 2) A manufacturer's safety data sheet (MSDS), or
- 3) Actual test results.

[County Rule 331 §501.1] [SIP Rule 331 §501.1]

- iii. 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.

[County Rule 331 §501.2a] [SIP Rule 331 §501.2]

- iv. Annually the Permittee shall document the use of concentrate that is used only in the formulation of Low VOC Cleaner.

[County Rule 331 §501.2b] [SIP Rule 331 §501.2b]

- v. 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 §501.2c] [SIP Rule 331 §501.2c]

- vi. 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 the name and phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c]

e. Reporting Requirements

The Permittee shall include the following information in each semiannual Compliance Monitoring Report:

- i. Certification that the operational requirements, specifically applicable The Permittee's type of cleaning, continue to be in compliance;
- ii. A summary of the listed cleaning solvents currently used at the facility and state the VOC-content of each in VOC per gallon of material or grams per liter of material;
- iii. Certification that monthly and annual recordkeeping was performed as directed in the monitoring/recordkeeping requirements above; and
- iv. A summary of any testing that may have been performed during the period.
- v. 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)]

29. WOODWORKING OPERATIONS

- a. Affected Sources include, but are not limited to, dust collection operations listed in the most current equipment list approved by the Control Officer.

b. Allowable Emissions Limitations

- i. 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]

- ii. Except as otherwise provided in Regulation I, Rule 4, Exceptions, 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]

c. Operational Limitations and Standards

Any woodworking equipment particulate matter exhaust captured through a centralized dust collection system such as those listed on the most current equipment list approved by the Control Officer shall vent into a Department approved particulate matter emission control system, (e. g. baghouse/cyclone), without bypass.

[County Rule 210 §302.1]

d. Monitoring and Recordkeeping Requirements

- i. The Permittee shall conduct a weekly facility walk-through and observe visible emissions from any

source capable of emitting any air contaminant, other than uncombined water, to the ambient air. The Permittee shall log the visual observations, including the date and approximate time when that reading, location of visible emissions or a statement that no visible emissions were observed, name of the person who took the observation and any other related information.

[County Rule 300] [County Rule 210 §302.1c(1)] [SIP Rule 30]

ii. 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]

iii. 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.

iv. 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 25 consecutive readings shall be required at 15-second intervals for the averaging time.

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

v. The Permittee must monitor the dust collection systems as specified in the most recently Department approved O&M Plan.

[County Rule 210 §302.1 (c)]

e. Reporting

The Permittee shall file semiannual compliance monitoring reports with the Control Officer, Attn: Compliance Division. The initial reporting period shall begin on the initial 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 reports shall be filed by the end of the month following the reporting period. The Permittee shall include the following in each semi-annual Compliance Report:

- 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; and
- 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 §302.1.e.(1)]

30. CUTBACK AND EMULSIFIED ASPHALT

- a. Affected Sources include all facility areas.
- b. Allowable Emission Limits
The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.
[County Rule 320 §300][SIP Rule 32.A]

- c. Operational Limitations
The Permittee shall not use or apply the following materials for paving, construction, or maintenance of highways, streets, driveways, parking lots or for any other use to which County Rule 340 §300 and SIP Rule 340 §300 applies:
 - i. Rapid cure cutback asphalt.
 - ii. Any cutback asphalt material, road oils, or tar which contains more than 0.5 percent by volume VOCs which evaporate at 500°F (260 °C) or less using ASTM Test Method D 402-76.
 - iii. Any emulsified asphalt or emulsified tar containing more than 3.0 percent by volume VOCs which evaporates at 500°F (260°C) or less as determined by ASTM Method D244-89.

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

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.

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

- d. Exemptions
The provisions of these Permit Conditions shall not apply to 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 §302.1] [SIP Rule 340 §302.1]

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 kilograms) 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 that yield 0.5 percent or less solvent-VOC evaporated using the test in County Rule 340 §502.1.

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

- e. Monitoring and Recordkeeping
The Permittee shall keep daily records of the amount and type of asphaltic/bituminous material received and used, as well as the solvent-VOC content of this material. Material Safety Data Sheets or technical data sheets shall be kept available.
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 the name and

phone number of the complainant. The log shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective action taken.

[County Rule 210 §302.1c] [County Rule 340 §501] [SIP Rule 340 §50]

f. Reporting Requirements

The Permittee shall file a semiannual Compliance Monitoring Report in accordance with its established reporting period for all other reports under this permit to MCAQD attention: Compliance Division containing the dates and description of any usage of cutback and emulsified asphalt.

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)] [Locally enforceable only]

31. WASTE WATER TREATMENT PLANT

a. Allowable Emission Limitations:

The Permittee shall not emit hydrogen sulfide (H₂S) in such a manner or amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume (ppmv) for any averaging period of 30 minutes or more.

[County Rule 320 §304][SIP Rule 32]

b. Monitoring:

If the Department or the Permittee receive more than three off-site odor complaints during any four consecutive weeks, the Permittee shall conduct property line monitoring for H₂S within 48 hours of receiving the third complaint or within 48 hours of being notified of a third complaint by the Department. The Permittee shall notify the Control Officer, Compliance Division, by telephone or in writing at least 24 hours in advance of conducting the required monitoring.

The monitoring shall be performed using a portable H₂S gas analyzer approved by the Control Officer, with the capability to detect H₂S at concentrations in the parts per billion by volume (ppbv) range. The analyzer shall be calibrated and operated in accordance with the manufacturer's operating instruction book.

Monitoring shall be conducted at a minimum of 12 locations of equal spacing along the property line of the facility and shall be collected from between three and six feet above ground surface. The monitoring period for each location shall be a period of ten (10) minutes and the period shall begin as soon as possible after the tester arrives at the sampling location.

If odors are detectable when the tester arrives at a monitoring location, three readings shall be taken at roughly five-minute intervals.

If no odors are detectable when the tester arrives at a monitoring location, the tester shall not immediately begin to take readings. If odors become noticeable during the ten-minute monitoring period, the tester shall take three readings that are evenly spaced over the remainder of the ten-minute monitoring period. If no odors are detectable during the first nine minutes of the sampling period, then the three required readings shall be taken during the final minute of the monitoring period.

[County Rule 270 §408] [County Rule 210 §302][Locally Enforceable Only]

c. Compliance Plan:

If the property line monitoring shows an average H₂S concentration of 0.03 ppmv or higher at any of the monitoring locations, the Permittee shall submit a compliance plan to control the H₂S emissions including the following:

- 1) Technological evaluation of additional H₂S control alternatives.
- 2) Additional monitoring and or air dispersion modeling to determine property line H₂S concentration based on the implementation of selected H₂S control alternatives.
- 3) Conceptual design and preliminary cost estimate for the proposed H₂S control alternatives.
- 4) Schedule for design and construction of the proposed control alternatives.

5) Description of recommended actions.

The Permittee shall complete and submit the Compliance Plan within seven calendar days of the last monitoring measurement indicating an exceedance of the H₂S limit in Permit Condition 31.a.

Upon implementation of the H₂S control plan, the Permittee shall monitor property line concentrations weekly until three weeks of data indicate the H₂S emissions have been controlled to 0.03 ppmv or less.

[County Rule 210 §302][Locally Enforceable Only]

d. Recordkeeping:

The Permittee shall maintain records of all property line H₂S monitoring that is conducted at the facility, including the location, time monitoring measurement was taken, the measured concentration of H₂S, whether any noticeable odors were present, the general direction and speed of the wind when the measurement was taken.

[County Rule 210 §302.1][Locally Enforceable Only]

e. Reporting:

The Permittee shall submit a report of complaints, actions taken to implement the H₂S control plan, records of property line H₂S monitoring results within 14 days of completing the requirements of this Permit Condition.

[County Rule 210 §302.1e (1)][County Rule 220]

32. OPEN OUTDOOR BURNING

a. Affected sources include all facility areas.

b. Standards-Prohibition

It shall be unlawful for any person to ignite, cause or permit to be ignited, allow, or maintain any open outdoor fire within the limits of Maricopa County, except as provided in County Rule 314 the provisions of which are incorporated in this permit by reference thereto as if such rule were set forth in writing in full herein.

[County Rule 314]

c. Administrative Requirements

If a person has obtained a Title V Permit under Regulation II of these rules that includes conditions regarding open outdoor fires, then such person shall not be required to obtain a separate Burn Permit from the Control Officer.

[County Rule 314 §402.5]

d. Other Conditions

i. The Control Officer may impose any conditions that are necessary to ensure compliance with Federal laws, State laws, or these rules which may include, but not be limited to, burning hours, notification of intent to burn and Burn Permit posting.

ii. For each day burning is to be conducted the Permittee must call the area fire department and this Division High Pollution Advisory Line at 602-506-6010 for permission to burn.

iii. The fire must not be left unattended and adequate fire fighting systems must be on site.

iv. Creation of a smoke nuisance is prohibited.

v. Tumbleweeds must be dry and piled in small piles no larger than 10 feet to 15 feet in diameter.

vi. Burning garbage, trash, debris and salvage materials is prohibited.

vii. A high temperature mechanical burner must be used to burn ditch banks, canal laterals, and/or fence rows.

[County Rule 314 §§300, 400]

e. Recordkeeping and Reporting

The following information shall be provided to the Control Officer for each time open burning occurs. This information shall be provided on a daily basis either by writing, fax, or electronically and shall include:

i. The date of the burn, and

- ii. The type and quantity of fuel burned for each date that open burning occurs; and
- iii. The fire type such as a pile or windrow for each date that open burning occurs; and
- iv. The legal location, to the nearest township, range and section, or latitude and longitude, to the nearest degree minute, street address, parcel number.

[County Rule 314 §§501, 502]

33. PERMIT SHIELD

Specifically identified in the following tables are all the federal, state, and local air pollution control requirements applicable to Luke Air Force Base at the time this permit is issued. For each part, subpart, section and subsection reference listed, all subsequent sections are assumed applicable. Compliance with the conditions of this Permit shall be deemed compliance with any applicable requirements as of the date of issuance. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §407][40 CFR Part 70 §71.6(f)]

Maricopa County

Air Pollution Control Regulations

Regulation I General Provisions

Rule 100	General Provisions and Definitions (3/7/01 revision)
§104	Circumvention
§105	Right of Inspection of Premises
§106	Right of Inspection of Records
§200	Definitions
§301	Air Pollution Prohibited
§501	Reporting Requirements
§502	Data Reporting
§503	Emission Statements Required as Stated in the Act
§504	Retention of Records
§505	Annual Emissions Inventory Report
Rule 130	Emergency Provisions (7/26/02 revision)
§200	Definitions
Rule 130	Emergency Provisions (7/26/02 revision)
§400	Administrative Requirements
Rule 140	Excess Emissions (7/26/00 revision)
§400	Administrative Requirements
§500	Monitoring and Records

Regulation II Permits and Fee

Rule 200	Permit Requirements (5/20/98 revision)
§301	Permits Required
§302	Title V Permit
§305	Earth Moving Permit
§306	Permit to Burn
§309	Permit Conditions

Rule 200	Permit Requirements (5/20/98 revision)
§308	Application Standards
§310	Prohibition – Permit Modification
§311	Permit Posting Required
§404	Permit Transfers
§408	Testing Procedure
§409	Fees
§410	Portable Sources
Rule 210	Title V Permit Provisions (2/7/01 revision)
§200	Definitions
§301	Permit Application Processing Procedures
§302	Permit Contents
§305	Compliance Plan
§400	Administrative Requirements
§401	Fees
§402	Permit Term
§403	Source Changes Allowed without Permit Revisions
§404	Administrative Permit Revisions
§405	Minor Permit Revisions
§406	Significant Permit Revisions
§407	Permit Shields
Rule 270	Performance Tests (11/15/93 revision)
§300	Standards
§301	Performance Tests Required (approved test methods)
§301.1	Applicable Procedures and Testing Methods
§301.2	Opacity determined by Reference Method 9 of the AZ Testing Manual
§400	Administrative Requirements
§401	Performance Tests Required
§402	Testing Criteria
§403	Testing Conditions
§404	Notice of Testing
§405	Testing Facilities Provided
§406	Minimum Testing Required
§407	Compliance with the Emissions Limits
§408	Additional Testing
Rule 280	Fees

Rule 200	Permit Requirements (5/20/98 revision)
§301	Title V Permit Fees
§304	Calculation of Emission Fees
§307	Gasoline Delivery Vessel Fee
§308	Permit To Burn Fee
§309	Earthmoving Permit Fee
§310	Asbestos Notification and Plan Review Filing Fee
§401	Payment of Fees

Regulation III Control of Air Contaminants

Rule 300	Visible Emissions (2/7/01 revision)
§301	Limitations – Opacity/General: Opacity \leq 20%
§302	Exceptions
§501	Compliance Determination – Opacity
§502	Compliance Determination – Opacity of Visible Emissions from Intermittent Sources
Rule 310	Fugitive Dust Sources (02/16/00 revision)
§200	Definitions
§301	Opacity Limitation for Fugitive Dust Sources
§302	Stabilization Requirements for Fugitive Dust Sources
§303	Dust Control Plan Required
§304	Elements of a Dust Control Plan
§305	Dust Control Plan Revisions
§306	Control Measures
§307	Project Information Sign
§308	Work Practices
§401	Dust Control Plan Posting
§402	Compliance Schedule
§501	Compliance Determinations
§502	Recordkeeping
§503	Records Retention
Rule 311	Particulate Matter from Process Industries (08/02/93 revision)
§200	Definitions
§306	Operation and Maintenance Plan Required
§502	Recordkeeping and Reporting
§503	Record Retention
Rule 312	Abrasive Blasting (07/13/88 revision)
§200	Definitions

Rule 300	Visible Emissions (2/7/01 revision)
§301	Limitations – 20 Percent Opacity
§302	Control Required
§401	Visible Emission Evaluation Techniques
Rule 314	Open Outdoor Fires (12/19/01 revision)
§301	Prohibition - Open Outdoor Fires
§302	Burn Permit
§303	Exemptions
§401	Fees Required
§402	Burn Permit Application
§403	Burn Permit Conditions
§405	Burn Permit Term
Rule 315	Spray Coating Operations (11/17/99 revision)
§301	Controls Required
§302	Exemptions
Rule 320	Odors and Gaseous Air Contaminants (7/13/88 revision)
§300	Standards
§302	Material Containment Required
§303	Stack Height
Rule 330	Volatile Organic Compounds (6/16/96 revision)
§200	Definitions
§302	Limitations – Non-Complying Solvents
§305	Equipment Cleanup
§306	Containment and Disposal
§307	Exemptions
§502	Determination of Compliance
§503	Recordkeeping and Reporting
Rule 331	Solvent Cleaning (04/07/99 revision)
§200	Definitions
§301	Solvent Handling Requirements
§302	Equipment Requirements for All Cleaning Machines
§303	Specific Operating & Signage Requirements for Cleaning Machines
§304	Solvent Specifications For Non-Vapor Cleaning and Degreasing
§305	Non-Vapor Batch Cleaning Machines
§306	Non-Vapor Inline Cleaning
§308	Exemptions

Rule 300	Visible Emissions (2/7/01 revision)
§501	Recordkeeping and Reporting
Rule 335	Architectural Coatings (07/13/88 adopted)
§200	Definitions
§305	Limits – Specialty Coatings
Rule 336	Surface Coating Operations (04/07/99 revision)
§200	Definitions
§301	Surface Coatings
§302	Application Methods for Surface Coatings
§303	Cleanup of Application Equipment
§304	Handling and Disposal of VOC
§305	Exemptions
§501	Recordkeeping and Reporting
Rule 345	Vehicle and Mobile Equipment Coating (04/21/99 revision)
§200	Definitions
§301	Limitations: VOC Content of Refinish Coatings for Light Duty Vehicles
§302	Refinishing Heavy Duty Trucks and Truck-Trailers
§303	Coating New Surfaces and Refinishing Heavy Vehicles
§304	Mixing Requirements
§305	Surface Preparation and Surface Cleaning Fluids
§306	Maintenance
§307	Paint Gun Requirements and Limits
§309	Cleanup and Cleaning Supply and Application Equipment
§310	Gun Cleaning Machines
§311	Storage and Disposal of VOC and VOC-Containing Material
§312	Exemptions
§501	Recordkeeping and Reporting
§502	Compliance Determination
Rule 348	Aerospace Manufacturing and Rework Operations (04/07/99 adopted)
§200	Definitions
§301	Limitations: VOC Emissions
§302	Emission Control System
§303	Application Equipment
§305	Solvent Cleaning
§306	Spray Gun Cleaning
§307	VOC Containment and Disposal

Rule 300	Visible Emissions (2/7/01 revision)
§308	Exemptions
§501	Recordkeeping and Reporting
§502	Compliance Determination
Rule 350	Storage of Organic Liquids at Bulk Plants and Terminals (04/06/92 revised)
§200	Definitions
§301	All Storage Tanks Greater than 250 Gallons
§302	Gasoline Storage Tanks Between 250 and 40,000 Gallons
§306	External Floating Roof Tanks
§307	Internal Floating Roof Tanks
§308	Vapor Collection/Processing System
§309	Additional Requirements
§310	Exemptions
§401	Annual Inspections of External Floating Roof Tanks
§402	Annual Inspections of Internal Floating Roof Tanks
§403	Five-Year Circumference Inspections
§404	Semi-Annual Inspections By Owner or Operator
§501	Vapor Pressure Records
§502	Compliance Determination – Test Methods
Rule 351	Loading of Organic Liquids (02/15/95 revised)
§200	Definitions
§301	General Loading Requirements for Loading Facilities
§302	Operating Requirements for Vapor Loss Control Devices
§303	Repair and Retesting Equipment
§304	Equipment Maintenance and Operating Practices
§305	Exemptions
§401	Equipment Leaks
§501	Leak Detection
§502	Compliance Inspections
§503	Records Retention
§504	Compliance Determination – Test Methods
Rule 352	Gasoline Delivery Vessel Testing and Use (05/05/99 revised)
§200	Definitions
§301	Prevent Leaks and Spills
§302	Gasoline Delivery Vessel Leak Test Required
§303	Display a Valid Decal

Rule 300	Visible Emissions (2/7/01 revision)
§304	Purging Prohibited
§305	Exemptions
§401	Testing
§501	Recordkeeping and Reporting Requirements
§502	Monitoring for Leaks
§503	Compliance Determinations
§504	Test Methods
Rule 353	Gasoline in Stationary Dispensing Storage Tanks (06/16/99 revised)
§200	Definitions
§301	Basic Tank Integrity
§302	Fill Pipe Requirements
§303	Vapor Recovery System
§304	Equipment Maintenance and Use Required
§305	Exemptions
§501	Compliance Inspections
§502	Recordkeeping
§503	Compliance Determination
§504	Test Methods

Rule 370	Federal Hazardous Air Pollutant Program (3/1/00 revision)
§200	Definitions
§301.8	Subpart M National Emission Standard for Asbestos
Rule 600	Emergency Episodes
§302	Control Actions

Federal Requirements

NSPS Program (40 CFR Part 60)

Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Subpart KB Standards of Performance for Volatile Organic Liquid Storage Vessels

NESHAP Program (40 CFR Part 61)

Subpart M - National Emission Standard for Asbestos

§61.145(a)(2)	Standard for demolition and renovation
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§61.145(b)(1), (2), (3)(i) and (3)(iv), (4)(i) through (vii) and (4)(ix) and (4)(xvi)	Notification requirements when demolition involves less than 80 linear meters on pipes and less than 15 square meters on other surfaces and less than one cubic meter of regulated asbestos containing material (RACM) from other facility components where the length or area could not be measured previously or there is no asbestos.
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NESHAP Program (40 CFR 63)

Subpart BBBBBB National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipelines

Subpart CCCCCC National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities

Accidental Release Program (40 CFR Part 68)

40 CFR Part 68 Subpart F- Regulated Substances for Accidental Release Prevention

§ 68.115	Threshold Determinations of general duty to identify, prevent and minimize the consequences of accidental releases of listed and other extremely hazardous substances.
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Protection of Stratospheric Ozone (40 CFR Part 82)

Subpart B - Servicing of Motor Vehicle Air Conditioners

§82.42(b)(3)	No person may sell, distribute, or offer for sale or distribution any Class I or Class II substance that is suitable for use as a refrigerant in motor vehicle air-conditioner in a container that contains less than 20 pounds of such refrigerant to any person unless that person is properly trained and certified, or purchases the containers for resale purposes only, and so certifies to the seller.
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Subpart D - Procurement of Class I and Class II substances

§82.156	Federal departments, agencies, and instrumentalities to adopt procurement regulations that conform to the policies and requirements of Title VI of the CAA and that maximize the substitution of safe alternatives in federal procurement
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Subpart F- Recycling and Emissions Reduction

§82.156	Required Practices
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§82.158	Standards
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§82.161	Technician Certification
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Federal Requirements

MARICOPA COUNTY STATE IMPLEMENTATION PLAN

(AS OF 12/31/99)

Regulation I General Provisions

Rule 2	Definitions
Rule 3	Air Pollution Prohibited

Regulation II Permits

Rule 220	Permits To Operate
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200	Definitions
301	Permit Requirements
302	Standards for Granting Permits
401	Application Procedures for Permits to Operate
402	Testing Required
403	Additional Information or Modeling Required
404	Procedures for Submission of Control Plan Demonstrating RACT
406	Permit Provisions
407	Inspection of Equipment
408	Permit Renewal
409	Annual Renewal Date
410	Fees Required
Rule 27	Performance Tests
§§ A, B	

Regulation III Control of Air Contaminants

Rule 30	Visible Emissions
§§ A, B	
Rule 32	Odors and Gaseous Emissions
§§ A, C, D, F	
Rule 33.1	Storage and Handling of Petroleum Products Unless Daybreak Couplings are Used
§§ A, B	
Rule 33.2	Delivery Vessels
§§ A, B, C, D	
Rule 33.3	Loading into Stationary Storage Tanks
§§ A, B, C	
Rule 34	Organic Solvents – Volatile Organic Compounds (VOC)
§§ A, B, C, E, F, G, H, I, J, K	
Rule 310	Fugitive Dust Sources (12/19/94)
§200	Definitions
§301	Limitation - Opacity
§302	Dust Generating Operations – Permits Required
§303	Control Plan Required With Permit Application
§304	Control Plan Revision
§305	Vehicle Use in Open Areas and Vacant Lots

	§306	Unpaved Parking Areas/Staging Areas
	§307	Unpaved Haul/Access Roads
	§308	Disturbed Surface Areas
	§309	Vacant Areas
	§310	Material Handling
	§311	Material Transport
	§312	Roadways, Streets and Alleys
	§313	Erosion, Sedimentation and Dispositions of Bulk Material onto Paved Surfaces
	§401	Information Required to be in a Control Plan
	§402	Permit and Control Plan Posting Required
	§501	Opacity Determination
	§502	Wind Speed Determination
	§503	Recordkeeping
	§504	Records Retention
Rule 331		Solvent Cleaning (8/10/92)
	§200	Definitions
	§301	General Equipment Requirements
	§302	Cold Degreasing/Cleaning
	§303	Batch-Loaded Vapor Degreasing
	§304	Non-Vapor ConveyORIZED Degreasing
	§305	Vapor ConveyORIZED Cleaning
	§306	General Operating Requirements
	§307	Exemptions
	§501	Solvent Records Required
	§502	Compliance Determination – Test Methods
Rule 335		Architectural Coatings (07/13/88)
	§200	Definitions
	§305	Limits – Specialty Coatings
Rule 350		Storage of Organic Liquids at Bulk Plants and Terminals (04/06/92 revised)
	§200	Definitions
	§301	All Storage Tanks Greater than 250 Gallons
	§302	Gasoline Storage Tanks Between 250 and 40,000 Gallons
	§306	External Floating Roof Tanks
	§307	Internal Floating Roof Tanks
	§308	Vapor Collection/Processing System
	§309	Additional Requirements

	§310	Exemptions
	§401	Annual Inspections of External Floating Roof Tanks
	§402	Annual Inspections of Internal Floating Roof Tanks
	§403	Five-Year Circumference Inspections
	§404	Semi-Annual Inspections By Owner or Operator
	§501	Vapor Pressure Records
	§502	Compliance Determination – Test Methods
Rule 351		Loading of Organic Liquids (04/06/92 revised)
	§200	Definitions
	§301	General Loading Requirements for Loading Facilities
	§302	Operating Requirements for Vapor Loss Control Devices
	§303	Repair and Retesting Equipment
	§304	Equipment Maintenance and Operating Practices
	§305	Exemptions
	§401	Testing – Leak Detection
	§501	Leak Detection – Test Procedure
	§502	Compliance Inspections
	§503	Records Retention
	§504	Compliance Determination – Test Methods
Rule 352		Gasoline Delivery Vessel Testing and Use (11/16/92 revised)
	§200	Definitions
	§301	Vapor Recovery Required
	§302	Gasoline Delivery Vessel Leak Test Required
	§303	Purging Prohibited
	§304	Exemptions
	§401	Testing
	§501	Recordkeeping and Reporting Requirements
	§502	Monitoring for Leaks
	§503	Compliance Determinations – Test Methods

Rule 353		Gasoline in Stationary Dispensing Storage Tanks (04/06/92 revised)
	§200	Definitions
	§301	Vapor Loss Control Measures Required
	§302	Equipment Maintenance and Use Required
	§303	Exemptions
	§401	Use of Stage I Equipment

Rule 353	Gasoline in Stationary Dispensing Storage Tanks (04/06/92 revised)
§501	Compliance Inspections
§502	Recordkeeping
§503	Burden of Proof
§504	Compliance Determination - Test Methods

Rule IV Production of Records: Monitoring, Testing and Sampling Facilities

Rule 40	Recordkeeping and Reporting
§§ A, B, C, D	
Rule 41	Monitoring
§§ A	
Rule 42	Testing and Sampling
§§ A, B	
Rule 43	Right of Inspection

Regulation V Unlawful Open Burning

Rule 50	Open Outdoor Fires
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EQUIPMENT LIST – ABRASIVE BLASTING

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactured	Year Installed
Significant	907	Sand Blaster	Pauli-Griffin	PD4111D	N/A		
Significant	415	Cyclone - Bead Media	Pauli & Griffin	PRAM # 32	5583		
Insignificant	943	Sand Blaster	Pauli Abrasive Blast Systems	RAM35	011315		

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EQUIPMENT LIST – INTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactured	Year Installed	HP Rating	kW Rating	Phase	Voltage	Fuel Type	Tank Type	Tank Capacity
Significant	11	Generator	Onan	60.0DVB-15R	B870876603	1987		80.5	60	3	277/480	D	CV	500
Significant	122	Generator	Onan	DQDAA-2688033	A100079521	2010	2010	335.3	250	3	120/208	D	CV	1,000
Significant	176	Generator	Cummins	TBD	TBD	2016	2016	134.1	100	3	120/208			
Significant	310	Generator	Onan	3170-0810	BA2275EA	2000	2000	167.6	125	3	120/208	D	CV	500
Significant	321	Generator	MTU	7570101003	6R1600DS275	2016	2016	469.4	350	3	120/208			225
Significant	343	Generator	Onan	100.0DYC-15R/28074J	B850748482	1985		134.1	100	3	120/208	D	CV	500
Significant	343	Generator	OTAN	MEP-806B	MX63365	2003	Mob	80.5	60	3	120/208	D		60
Significant	343	Generator	OTAN	MEP-806B	HX62705	2002	Mob	80.5	60	3	120/208	D		60
Significant	450	Generator	Onan	DSGAB-7563823	A090228434	2009		167.6	125			D		
Significant	450	Generator	Onan	0587-63MR3	46971316	2009		167.6	125	3	120/208	D	CV	500
Significant	453	Generator	Onan	250FAC (DFAC-5634576)	L030579229	2004	2010	335.3	250	3	120/208	D	CV	1,000
Significant	500	Generator	Cummins / CPG	DSFAD-7194941	E110217179	2011	June 2011	80.6	60			D		
Significant	798	Generator	Onan	100.0DVC-15R/3051B	1890841860	1988		134.1	100	3	277/480	D	CV	500
Significant	815	Generator	Power	MEP-009B	RZ00582	1989		268.2	200	3	240/416	D		200
Significant	843	Generator	Catapillar	C6.6	E6L01165		2015	234.7	205	3		D	Public Wall St	408
Significant	859	Generator	Onan	DGHE-5712792	E050778710	2005		67.1	50	3	120/208	D	Attached	75
Significant	885	Generator	Onan	DGDB-5702801	A050737879	2005		134.1	100	3	120/208	D	S	129
Significant	901	Generator	Onan	DSFAE-1516287	6150855132	2016		107.3	80		120/240	D	S	250
Significant	905	Generator	Cummings	D60-6	CAT00C44ELC400538	2016		80.5	60	3		Diesel	S	162
Significant	910	Generator	Cummins	DSGAB-5186119	G100142102	2010		167.8	125	3	120/208	D	CV	825
Significant	961	Generator	Onan	50DGAL30547A	A890201224	1988		67.1	50	3	120/208	D	CV	250
Significant	969	Generator	Onan	60DGCB	A980686970	1998		80.5	60	3	120/208	D	CV	350
Significant	979	Generator	Onan	DQDAA-1922047	L090071381	2009	2010	335.3	250	3	120/208	D	CV	2,000
Significant	988	Generator	Cummins	DGBC-5956055	L070136371	2007		67.1	50	3	120/208	D	CV	1,000
Significant	998	Generator	Onan	DFCC-4493870	A010198172	2000		469.4	350	3	277/480	D	ST	1,750
Significant	999	Generator	Onan	60DgCBL30523A	1890265911	2000		80.5	60	3	120/208	D	CV	250
Significant	1000	Generator	Cummins	DEFEH-1333681	G130534832	2013	Aug 2014	536.4	400	3	277/480	D	CV	2,000
Significant	1013	Generator	Onan	Q529-G3NR3	A034394	2011	April 2011	335.3	250			D		
Significant	1013	Generator	Onan	QSL9-G3-NR3	A0348694	2011		335.3	250	3	277/480	D	CV	1,000
Significant	1013	Generator	Onan	DQDAA-6337643	A110184665	2011								
Significant	1032	Generator	Onan	135ROZJ	RG6081T143545	2003		181.0	135	3	120/208	D	CV	500
Significant	1034	Generator	Power	MEP-806B	MX63365	2003	2005	80.5	60			D		
Significant	1074	Generator	Power	MEP-806B	HX62705	2002		80.5	60			D		
Significant	1132	Generator	Onan	800DFJB	A920445339	1992		1072.8	800	3	277/480	D	CV	6,000
Significant	1132	Generator	Onan	800DFJB	A920444213	1992		1072.8	800	3	277/480	D	CV	6,000
Significant	1150	Generator	Onan	N/A	N/A			536.4	400	3	277/480	D	CV	500
Significant	1153	Generator	Onan	DGDB-5702801	A050737878	2005		134.1	100	3	120/208	D	S	127
Significant	1216	Generator	Onan	D6FB-4482037	E000108652	2000	1999	234.7	175	3	120/208	D	CV	500
Significant	1239	Generator	Onan	C060893241	DFEH 5750419	2006		536.8	400			D		
Significant	1239	Generator	Onan	QSX15-69 NR2	79160964	1993		536.4	400	3	277/480	D	CV	4,000
Significant	1387	Generator	Power	MEP-009B	RZ00770	1989		268.2	200	3	240/416	D		200
Significant	1550	Generator	John Deere	4024HF285B	PE4024L061741	2011	Jan 2011	80.5	60			D		
Significant	5106	Generator	Onan	60-DGCB-42244N	A990851692	1999		80.5	60	3	120/208	D	CV	250
Significant	8226	Generator	Onan	DGHE-5737877	570282	2005		67.1	50	3	120/208	D	S	75

EQUIPMENT LIST – INTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactured	Year Installed	HP Rating	kW Rating	Phase	Voltage	Fuel Type	Tank Type	Tank Capacity
Insignificant	328	Generator	Onan	30.0DL6-15R / 29889D	I860841684	1987		40.2	30	3	120/208	D	CV	250
Insignificant	330	Generator	MEP	MEP 805B	HX39379	2009	April 2011	0.0				D		
Insignificant	355	Generator	Onan	MEP 804B	FZ61597	2009		20.1	15	3	120/208	D		40
Insignificant	360	Generator	Onan	MEP-804B	61599	2009		20.1	15	3	120/208	D		40
Insignificant	885	Generator	Cummins	MEP-804B	FZ61599	2009		20.1	15	3	120/208	D		40
Insignificant	1002	Generator	Catapillar	TBD	TBD	2016	2016		15	1	120/240			
Insignificant	1040	Generator	Kubota / Cummins	V2203-M-BG-ET02	EKBXL02.FCC	2016	2016		26.9			Ultra Low Diesel		
Insignificant	1056	Generator	Onan	15DKAZ	C960601768	1996		0.0				D		
Insignificant	1056	Generator	Onan	15DKAC	C960601767	1996		20.1	15	1	120/240	D	CV	250
Insignificant	1057	Generator	Kubota / Cummins	D1708 / DSKAB-1213591	7CS6963 / J120403290	2012	Nov 2011	0.0				D		
Insignificant	1065	Generator	Onan	D1703-M-BGET01	7CS6963	2012		20.1	15	1	120/240	D	CV	100
Insignificant	1365	Generator	Onan	20.0DL4-3R/26933D	J870932786	1988		26.8	20	1	120/240	D	CV	250
Insignificant	1365	Generator	Whisperwatt	WHISPER QUIET	8100157	2004		19.4	14.5	3	120/208	D		50
Insignificant	1375	Generator	Onan	D1703-M-BGET01	7CU0982	2012		20.1	15	1	120/240	D	CV	100
Insignificant	1381	Generator	Kubota / Cummins	D1708 / DSKAB-1213591	7CU0982 / J120403291	2012	Nov 2012	0.0				D		
Insignificant	5102	Generator	Onan	30DLGB36102E	L890285851	1989		40.2	30	3	120/208	D	CV	250
Insignificant	1049	Generator	Cummins	C20D6	B160919680	2016	2016	26.8	20	4				

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EQUIPMENT LIST – EXTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Ratin	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Significant	25	Boiler	American Standard Products									0.3	
Significant	26	Boiler	American Standard Products	G-6013	1BN - J3							1.7	
Significant	122	Boiler	Ajax Boiler & Heater	WGFD-525	84-36369		1984					0.525	
Significant	133	Boiler	Lochinvar	CHN0502	L11H00237684							0.5	
Significant	133	Boiler	Lochinvar	CFN0652PM	H11H00234942							0.5	
Significant	156	Boiler	RayPak, Inc.	659-T	079463							0.7	
Significant	161	Boiler	Parker Boiler	T-2160	37993	1990						2.2	
Significant	176	Boiler	Ajax Boiler & Heater	WG-525	167177R							0.53	
Significant	219	Boiler	Rite Heating Boiler	55	8821222		1988					0.55	
Significant	300	Boiler	Camus Dyno Max	DFNH-1101-MGI-HV	61113313							1.1	
Significant	331	Boiler	Lochinvar	CHN1261	I07H00201395							1.3	
Significant	339	Boiler	Rite Heating Boiler	76X	7114457							0.8	
Significant	343	Boiler	Ajax Boiler & Heater	WG-400D	80-32534		1980					0.4	
Significant	400	Boiler	Ajax Boiler & Heater	WG525D	85-37165		1985					0.4	
Significant	408	Boiler	Burnham FD/24	R6.2-G-03	34000446							1.1	
Significant	415	Boiler	Ajax Boiler & Heater	WG-600	82933		1982					0.6	
Significant	416	Boiler	Lochinvar	CHN0991	L05H00181930		2007					0.99	
Significant	417	Boiler	Rite	120WE	30532	2008	2010					1.2	
Significant	417	Boiler	Lochinvar	CHN401	B003048							0.4	
Significant	431	Boiler	Burham	FD/24	34000447							1.1	
Significant	445	Boiler	Ajax Boiler & Heater	WG-350-D	81-34235		1981					0.4	
Significant	450	Boiler	Lochinvar	EBN300	J03H00159205							0.3	
Significant	452	Boiler	Rite Heating Boiler	48WG	9022168							0.5	
Significant	453	Boiler	Teledyne Laars Mighty Therm	PH-0250C-N12K	8990606							0.3	
Significant	460	Boiler	Camus Hydronics	DMNH-0291-MSI-HLS	081317784	2014	2014					0.4	
Significant	460	Boiler	Dynamax	DMNH0391	081317785							0.4	
Significant	461	Boiler	Dynamax	DMNH0391	HWB103091318008							0.4	
Significant	471	Boiler	Camus Hydronics	DMNH-0391-MSI-HLS	091318008	2014	2014					0.4	
Significant	471	Boiler	Camus Hydronics	DMNH-0391-MSI-HLS	081317785	2014	2014					0.4	
Significant	485	Boiler	Rite Heating Boiler	76	8720550							0.8	

EQUIPMENT LIST – EXTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Rating	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Significant	500	Boiler	TeleDyne Laars	HB 560-C-03	7490847								0.6
Significant	528	Boiler	Lochinvar	CBN0665	D863967								0.7
Significant	528	Boiler	Lochinvar	CHN501	G09H00220255								0.5
Significant	528	Boiler	Lochinvar	CFN651-PM	C09H00217606								0.7
Significant	542	Boiler	TeleDyne Laars	HH0500 IN 09 K I A C CT	C00C03073								0.5
Significant	545	Boiler	Bryan Flexible Tube Boilers	CL240 W 125 G	77-472	1995							2.4
Significant	546	Boiler	Bryan Flexible Tube Boiler	CL90-W-FDG	82965	1998							0.9
Significant	569	Boiler	Kewanee	M55-KGO	R0514								0.6
Significant	586	Boiler	Bryan	080369	96929	2008	2009						1.5
Significant	586	Boiler	Laars	PNCV0750NACKBJN	C08202809	2009	2009						0.8
Significant	617	Boiler	Lochinvar	CBN1796	L04H00172252	2004							1.8
Significant	617	Boiler	TeleDyne Laars	PH 0500 IN 09 K 1A	C93K08622								0.5
Significant	618	Boiler	Aero International	BMK3000-GWB	G-13-2110								3
Significant	618	Boiler	Aero International	BMK3000-GWB	G-13-2111								3
Significant	635	Boiler	Rite Heating Boiler	450	7114471								4.5
Significant	635	Boiler	Lochinvar	CFN0991PM	K09H00222768								1
Significant	636	Boiler	Lochinvar	CHN0502	L11H00237732								0.425
Significant	636	Boiler	Lochinvar	CFN0652PM	L11H00237737								0.65
Significant	637	Boiler	Lochinvar	CFN0652PM	L11H00237738								0.65
Significant	637	Boiler	Lochinvar	CHN05025	L11H00237731								0.425
Significant	640	Boiler	Bryan Flexible Tube Boilers	CL120-W-FDG	80312	1997							0.8
Significant	663	Boiler	Lochinvar Copper Fin	CBN-0986	L03H00160575	2003							1
Significant	668	Boiler	Bryan Flexible Tube Boilers	CL120-W-FDG	75822	1994	1994						1.2
Significant	687	Boiler	Bryan Flexible Tube Boilers	CL150-W-FDG	79244	1996							1.5
Significant	700	Boiler	Ajax Boiler & Heater	WG-1500D	83-35489			1983					1.5
Significant	700	Boiler	MACH	C-750	W646-15-12343	2015		2016					0.75
Significant	750	Boiler	Fulton	PHW-1400LE	95371	2004							1.4
Significant	799	Boiler	TeleDyne Laars	PH 0500 IN 09 K 1A	C94H07086								0.5
Significant	820	Boiler	Peerless	TC-11-WP	619686-200906								2.4
Significant	840	Boiler	Unilux	ZW 100W	2009	1995							1
Significant	859	Boiler	Trane	YCH180B4LFGA	231101040D	2002							0.3
Significant	904	Boiler	Rite Heating Boiler	42X	12049R4								0.4
Significant	905	Boiler	Trane	YCH301C4LOCA	H371428330 (505101306D)			1993					0.3
Significant	905	Boiler	Trane	YCH301C4LOCA	H371428320 (505101270D)			1993					0.3
Significant	913	Boiler	Ajax Boiler & Heater	WG-1250 9	80-32870			1980					1.25
Significant	914	Boiler	Lochinvar	CH1261	L10H00230359								1.25
Significant	915	Boiler	TeleDyne Laars	HH0600IN09K01	8890137								0.6
Significant	917	Boiler	Parker Boiler	T-395	36990	1989	1989						0.4
Significant	922	Boiler	Ajax Boiler	WNG5000W	54435			1998					5.0
Significant	922	Boiler	Ajax Boiler	WNG5000W	54436			1998					5.0

EQUIPMENT LIST – EXTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Ratin	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Significant	928	Boiler	Lochinvar	CHN-501	K04H00170683	2004						0.425	
Significant	930	Boiler	Ajax Boiler & Heater	WG-1375	86-38524		1986					1.375	
Significant	930	Boiler	Weil McLain Co	J-5								0.63	
Significant	931	Boiler	Lochinvar	KBN400	T14H10318105							0.4	
Significant	931	Boiler	Lochinvar	KBN400	K4H10329383							0.4	
Significant	936	Boiler	TeleDyne Laars	HH0400CN12KBACX	9090792 (D02CK0007)							0.4	
Significant	937	Boiler	Grieve Oven	HC 1250	540026							0.7	
Significant	938	Boiler	Bryan Flexible Tube Boilers	F350-W-GT	67H70	1987						0.35	
Significant	942	Boiler	Lochinvar	CBN355	1864862	1986						0.355	
Significant	945	Boiler	Lochinvar	CBN1795	F001079							1.795	
Significant	959	Boiler	Ajax Boiler	WNG-1250	61958		2007					1.25	
Significant	961	Boiler	Ajax Boiler & Heater	WG-150	87-3960 2		1987					1.5	
Significant	962	Boiler	Weil McLain Co	J-6	3							0.75	
Significant	983	Boiler	Inland Heater	GIM 40	63 924							0.5	
Significant	983	Boiler	Inland Heater	GIM 40	63 925							0.5	
Significant	984	Boiler	Bryan	F450-W-GI	79919	1997						0.45	
Significant	985	Boiler	Inland Heater	GDM40	63926							0.5	
Significant	985	Boiler	Inland Heater	GDM40	63929							0.5	
Significant	985	Boiler	Inland Heater	GDM40	63928							0.5	
Significant	985	Boiler	Inland Heater	GDM40	63927							0.5	
Significant	988	Boiler	Ajax Boiler & Heater	WG-300 D	83-36077							0.3	
Significant	993	Boiler	Rite	W180WGE	30686	2008						1.8	
Significant	997	Boiler	TeleDyne Laars		8890415							0.325	
Significant	1019	Boiler	TeleDyne Laars	IW1670IN09H01	88-90889		1988					1.67	
Significant	1019	Boiler	Rite Engineering	S3	88-21260		1988					0.63	
Significant	1022	Boiler	Rite Heating Boiler	150	8720549		1987					1.5	
Significant	1119	Boiler	Buderus	GE315/6	05178842-00-3175-0030							0.454	
Significant	1132	Boiler	Fulton Boiler	PHW-2000	95904	2004	2005					2	
Significant	1132	Boiler	Fulton Boiler	PHW-2000	95901	2004	2005					2	
Significant	1132	Boiler	Fulton Boiler	PHW-2000	95902	2004	2005					2	
Significant	1132	Boiler	Fulton Boiler	PHW-2000	95903	2004	2005					2	
Significant	1143	Boiler	Fulton Fuel Fired Steam Boiler	PHW-1000	1402	1996	1997					1	
Significant	1150	Boiler	Parker Boiler	T-2970	36198	1988	1988					2.97	

EQUIPMENT LIST – EXTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Ratin	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Significant	1236	Boiler	Ray Pac Inc.	H0133A JDA UBCSX	74294							0.136	
Significant	1365	Boiler	Ajax Boiler & Heater	WG-200	76-29616	1976	1976					0.2	
Significant	1515	Boiler	Rite Heating Boiler	55	74-15744		1974					0.55	
Significant	1525	Boiler	Laars	560-D	73-84940M		1973					0.56	
Significant	1540	Boiler	Rite Heating Boiler	400	24087	1994						4	
Significant	1540	Boiler	Rite Heating Boiler	400	24088	1994						4	
Significant	1550	Boiler	PVI	40N90A-G	39378400							0.399	
Significant	161	Water Heater	PVI	40P250AGX	19069172							0.4	
Significant	161	Water Heater	A.O. Smith	BTR 400 A 118	1145M001283	2011						0.39	
Significant	471	Water Heater	Rheem/Ruud	GHD100-300A	133174	2012	2014					0.3	
Significant	546	Water Heater	A.O. Smith	BTH 400A 104	1323M001867	2013						0.4	
Significant	640	Water Heater	A.O. Smith	BTH400A 104	1414M001037							0.4	
Significant	966	Water Heater	A.O. Smith	BT 80 202	MH93-0283631-202							0.751	
Significant	984	Water Heater	Ruud	P30-6	RUNG1298130276	1996						0.32	
Significant	1132	Water Heater	Fulton	ICX30	96022	2004						1.26	
Significant	1132	Water Heater	Fulton	ICX30	96013	2004						1.26	
Significant	1150	Water Heater	A.O. Smith	BTR 400 A 106	LC000951698							0.399	
Significant	291	Vehicle Maintenance	Heater - Paint Booth	Blowtherm	Ultra 3000		2	MMBTU/hr			Natural Gas	Downdraft	
Insignificant	289	Boiler	Lennox	G1203E-137-7	5884L08819	1984						0.1	
Insignificant	289	Boiler	Lennox	G1203E-137-7	588410881							0.1	
Insignificant	289	Boiler	Lennox	G1205E-165-7	8-9205DJG							0.2	
Insignificant	338	Boiler	Rite Heating Boiler	15X	71-14443		1971					0.2	
Insignificant	447	Boiler	Lochinvar	CBN0215	B888608							0.2	
Insignificant	859	Boiler	Carrier	48HCEA06A2A6A0A0A0	3813C81664	2013						0.093	
Insignificant	908	Boiler	Lochinvar	KBN-286	D13H10259392							0.285	
Insignificant	908	Boiler	Lochinvar	KBN-286	D14H10292103							0.285	
Insignificant	934	Boiler	Locknivar	KBN400M9	4215102098778	2015	2016					0.4	
Insignificant	934	Boiler	Locknivar	KBN400M9	4215102098779	2015	2016					0.4	
Insignificant	937	Boiler	Grieve Oven	HY 1000	760013							0.175	
Insignificant	999	Boiler	Lochinvar	CNA 251-100-DF9	SH0840119		2007					0.25	
Insignificant	999	Boiler	State Industries	SBD100250NEA 118	1103M001996	2011						0.25	
Insignificant	1018	Boiler	Laars	NTH210NXN3	G15348036	2015	2015					0.21	
Insignificant	1019	Boiler	Bradford	M15036FBN2	ZL3924351		2007					0.04	
Insignificant	1236	Boiler	Ajax Boiler & Heater	WG 150	86-39134		1986					0.15	
Insignificant	25	Chiller	Carrier	38AKS024---S21--	4609G10045								
Insignificant	133	Chiller	EVAPCO	AT14612	10401373								

EQUIPMENT LIST – EXTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Ratin	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Insignificant	161	Chiller	Marley	MD-10016059-A1	MD5008NAD11-CAF	2009							
Insignificant	219	Chiller	EVAPCO	AT1499	10401371								
Insignificant	415	Chiller	BAC	VTO-78-K	U038440701MAD								
Insignificant	416	Chiller	EVAPCO	ICT496	5134367								
Insignificant	417	Chiller	Marley		827150-A1 A V61001B 08								
Insignificant	417	Chiller	EVAPCO	AT19-76	99-8964W								
Insignificant	668	Chiller	EVAPCO	LSTA 461	94 7393W								
Insignificant	682	Chiller	EVAPCO	ICT4 64	969644W								
Insignificant	808	Chiller	EVAPCO	AT 19-66	4-113792								
Insignificant	820	Chiller	EVAPCO	AT 19-89	W037867								
Insignificant	820	Chiller	EVAPCO	AT 19-89	W037866								
Insignificant	840	Chiller	EVAPCO	USS1469	9 361476								
Insignificant	915	Chiller	BAC	VT0-75/K	U041658301MAD								
Insignificant	928	Chiller	EVAPCO	AT19-56	4-113797								
Insignificant	931	Chiller	BAC	DTO-41-J	U014477501MHD								
Insignificant	936	Chiller	EVAPCO	USS1499	14697616								
Insignificant	936	Chiller	EVAPCO	AI 19 56	14-113777								
Insignificant	938	Chiller	EVAPCO	ICT 496	4 112084								
Insignificant	942	Chiller	EVAPCO	AT1496	10401372								
Insignificant	945	Chiller	EVAPCO	ATW68A2	W006961								
Insignificant	993	Chiller	EVAPCO	USS1896	8340122								
Insignificant	998	Chiller	EVAPCO	ICT393	W006638								
Insignificant	998	Chiller	EVAPCO	ICT393	W006639								
Insignificant	999	Chiller	BAC	15146L	U016230801NAD								
Insignificant	547	Cooling Tower	NA	NA	NA			1972					
Insignificant	959	Cooling Tower	BAC	15201 W	U025498701MAD								
Insignificant	983	Cooling Tower	Trane	YCH12CC3MOAB	L12101886D	1996							
Insignificant	1119	Cooling Tower	EVAPCO	ICT 4 86	11 413628								
Insignificant	1132	Cooling Tower	Marley	NC4221GS-00	166591-001								

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Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Ratin	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Insignificant	1132	Cooling Tower	Marley	NC4221GS-00	166591-002								
Insignificant	1132	Cooling Tower	Marley	NC7031GS	070293-001-94								
Insignificant	1143	Cooling Tower	BAC	VT0-155N	U038500401MAD								
Insignificant	25	Water Heater	American	G40H-6	A2222648							0.04	
Insignificant	156	Water Heater	Ruud	PH50	RUNGO303V22548	2003						0.04	
Insignificant	176	Water Heater	American	GV303T	A863408240							0.04	
Insignificant	219	Water Heater	Ruud	PE30-2 D	RU 1298B30040							0.03	
Insignificant	289	Water Heater	A.O. Smith	KGA 30910								0.04	
Insignificant	331	Water Heater	Lochinvar	EWN300PM	I07H00201366							0.3	
Insignificant	339	Water Heater	Rheem	G91-200-1	URNG1105G00209	2005						0.2	
Insignificant	343	Water Heater	Ruud	P30S-30F	RULN0703V01404	2003						0.03	
Insignificant	404	Water Heater	Rheem	G75-75N-1	RRLNH104D06311								
Insignificant	404	Water Heater	Ruud	PRO+G75-75N RU	RULNM301418469	2014						0.075	
Insignificant	416	Water Heater	Lochinvar	CNR085-100	CC7454646							0.085	
Insignificant	417	Water Heater	A.O. Smith	BT 65 104	MB00-0712681-104							0.06	
Insignificant	417	Water Heater	Ruud	G60-50N-1	URLN1107512107							0.05	
Insignificant	445	Water Heater	Vanguard	5AV69	VGLN0509415804							0.038	
Insignificant	447	Water Heater	A.O. Smith	BTR 154118	AO7M000015							0.154	
Insignificant	450	Water Heater	Rheem	G91-200	URNG0899G04834							0.2	
Insignificant	453	Water Heater	A.O. Smith	BT80110	MH021856211-110							0.076	
Insignificant	453	Water Heater	A.O. Smith	BT80110	MH021856210-110							0.076	
Insignificant	470	Water Heater	Rheem	21V30-30F	RHLN1103V05928	2003						0.03	
Insignificant	492	Water Heater	American	MA199-85-1	A087200004							0.2	
Insignificant	530	Water Heater	PVI	27P250A-G	48657839							0.27	
Insignificant	530	Water Heater	PVI	27G250A-G	48657837							0.27	
Insignificant	533	Water Heater	PVI	27P250A-G	19275068							0.27	
Insignificant	533	Water Heater	PVI	27P250A-G	19275067							0.27	
Insignificant	542	Water Heater	Vanguard	6E743A	VGN0497G02332							0.2	
Insignificant	545	Water Heater	A.O. Smith	BTH199100	0833M000768	2008						0.2	
Insignificant	617	Water Heater	Envirotemp	GIF4034T3NV	0231107721							0.034	
Insignificant	617	Water Heater	Ruud	PROG 40-38N RU62	M251514024	2015	2015					0.04	
Insignificant	663	Water Heater	Lochinvar	EWN150PW	L03H00160660	2003						0.15	
Insignificant	663	Water Heater	Lochinvar	EWN150PM	L03H00160661	2003						0.15	
Insignificant	687	Water Heater	AO Smith	BTH 250A 100	1403M000242							0.25	
Insignificant	700	Water Heater	Ruud	PR75	RUN0197G01195							0.0755	
Insignificant	750	Water Heater	A.O. Smith	BTR197	ML030000266	2003						0.2	
Insignificant	750	Water Heater	A.O. Smith	BTR197	ML030000907	2003						0.2	
Insignificant	799	Water Heater	Carrier	58PA V055-GC	4893A09883							0.066	
Insignificant	799	Water Heater	Carrier	58PA V055-GC	none							0.066	
Insignificant	799	Water Heater	A.O. Smith	FSG 30 222	GC94-1769484-222							0.032	
Insignificant	799	Water Heater	Bradford White	MI30T6FBN	EH11032937							0.032	NG

EQUIPMENT LIST – EXTERNAL COMBUSTION

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Installed	HP Rating	kW Ratin	Phase	Voltage	Input MMTBU/hr Rating	Fuel Type
Insignificant	820	Water Heater	PVI	27 P 250A-G	0409126836							0.27	
Insignificant	820	Water Heater	PVI	27 P 250A-G	0409126837							0.27	
Insignificant	840	Water Heater	Rheem	G91-200-1	URNG0606 G01603							0.2	
Insignificant	859	Water Heater	Vanguard	5AU69	VGLN0611405629	2011						0.038	
Insignificant	904	Water Heater	A.O. Sntih	BTC 154 920	MA95-0405102-920							0.154	
Insignificant	905	Water Heater	Vanguard	5AU69	VGLN0910421643	2010						0.038	
Insignificant	908	Water Heater	Lochinvar	AWN151PM	D14H20067819							0.15	
Insignificant	913	Water Heater	American	5700	20529							0.14	
Insignificant	913	Water Heater	Ruud	P2-50F1	RULN1211Z09484	2011						0.038	
Insignificant	917	Water Heater	Ruud	P30-6	0797111662							0.032	
Insignificant	917	Water Heater	Bradford White	MI30T6FBN	HL15800719							0.03	
Insignificant	930	Water Heater	State Select	GS60YOCTG300	1122J001083							0.04	
Insignificant	930	Water Heater	Ruud	G75-75N-2	RELN 0208108162	2008						0.075	
Insignificant	931	Water Heater	Ruud	G75-75N-2	0210100981	2010						0.075	
Insignificant	936	Water Heater	A.O. Smith	FCG 75 300	0905J005623	2009						0.0751	
Insignificant	938	Water Heater	A.O. Smith	PGC 100 910	MD89-0026617-910							0.08	
Insignificant	942	Water Heater	Ruud	PROG40-38N RU59	RULNM291412944	2014						0.038	
Insignificant	945	Water Heater	Bradford-White	MI403T6EN12	WE9590876							0.04	
Insignificant	945	Water Heater	Vanguard	5AU69	VGLN0501211939	2012						0.38	
Insignificant	948	Water Heater	Rheem	21V30-30F	RHLN 1003506015	2003						0.03	
Insignificant	961	Water Heater	Rheem	21V40-38	1202Z08539	2002						0.038	
Insignificant	962	Water Heater	Vanguard	5AU69	VGLN0501211937	2012						0.038	
Insignificant	983	Water Heater	Ruud	P30-6	0697112682							0.032	
Insignificant	983	Water Heater	Vanguard	6E760	VGNG0699164403							0.034	
Insignificant	985	Water Heater	American	GBF754TN	54658							0.0575	
Insignificant	985	Water Heater	Rheem	41V50	RHNG0700108515							0.04	
Insignificant	985	Water Heater	A.O. Smith	GCR 50 400	1527J003677	2015						0.05	
Insignificant	988	Water Heater	A.O. Smith	BTR 154 110	MC040000606	2004						0.154	
Insignificant	993	Water Heater	Ruud	G91-200-1	URNG1106G00131	2006						0.2	
Insignificant	1018	Water Heater	Ruud	PH50	RUNG 0699123839	1996						0.04	
Insignificant	1022	Water Heater	Rheem-Ruud	G100-200	URNG 1002G00889							0.2	
Insignificant	1119	Water Heater	Ruud	PROG50-38N-RU58	M131515140	2015						0.038	
Insignificant	1143	Water Heater	Rheem-Ruud	G75-75N-2	RRLN0109100033	2009						0.0751	
Insignificant	2201	Water Heater	Lochinvar (Knight Heating Boiler)				2014						Propane

EQUIPMENT LIST – SOLVENT CLEANERS

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Install
Significant	291	Solvent Cleaner	Safety Kleen Paint Gun Cleaner	1111/7090	77722087		
Significant	308	Solvent Cleaner	Crystal Clean	30.3R	30246115		Feb 2011
Significant	404	Solvent Cleaner	Zep Dyna 680 T2 Super Brute	FB45ZEP	3031852		2003
Significant	482	Solvent Cleaner	ZEP	Q2011-019	11075075		Aug 2011
Significant	482	Solvent Cleaner	Magido	L192E	10.192E.60	2010	2012
Insignificant	920	Aqueous Cleaner	Stingray Manufacturing	SR5248	8527	2015	2016
Significant	930	Solvent Cleaner	Zep	Dyna 100 FB	3097150		2003
Significant	930	Spray Ring Tester	Bauer	F100	31743		
Significant	931	Solvent Cleaner	Zep Dyna 680 T2 Super Brute	964101	3086086	2003	2003
Significant	931	Solvent Cleaner	Zep Dyna	Dyna-100FB	966501	2015	2016
Significant	931	Solvent Cleaner	Inland Technologies IT95	IT95	70139784	2005	2016
Significant	931	Solvent Cleaner	Zep Dyna 680 T2 Super Brute	FB46ZEP	3031892	2003	2003
Significant	931	Solvent Cleaner	Graymills Corrosion Preventive Finger Print Remover	N/A	N/A		1999
Significant	931	Solvent Cleaner	Graymills TURCO 6321 Carbon Remover	2R	K-87		1999
Significant	986	Solvent Cleaner	Graymills	TRC3626L-A	274641		2014
Significant	1240	Solvent Cleaner	Clarius Technology	PCS-25	LYEQ0E835		2009
Significant	1240	Solvent Cleaner	Safety Kleen	5.0	90200743		
Significant	1240	Solvent Cleaner	Safety Kleen	5.0	90199685		
Insignificant	291	Aqueous Brake Cleaner	Safety Kleen	26.1	9030362		
Insignificant	291	Aqueous Cleaner	Cuda	H20-2840	10434220-100213		
Insignificant	920	Aqueous Cleaner	ADF System	550	508-4851		2005
Insignificant	930	Aqueous Cleaner	Better Engineering				
Insignificant	930	Aqueous Cleaner	Biocircle				

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EQUIPMENT LIST – STORAGE TANKS

Permitting	Facility	Equipment Typ	Manufacturer	Model #	Serial #	Year Manufacture	Year Installed	Fuel Type	Tank Type	Tank Capacity	Tank Roof Typ
Significant	335	Storage Tank						Gasoline	Vaulted Underground	15,000	Fixed
Significant	350	Storage Tank					1989	Jet Fuel (A/A-1)	Mild Steel	206,219	Fixed
Significant	351	Storage Tank					1953	Jet Fuel (A/A-1)	Mild Steel	413,779	External Floating
Significant	356	Storage Tank					1954	Jet Fuel (A/A-1)	Mild Steel	1,629,377	External Floating
Significant	359	Storage Tank					1989	Jet Fuel (A/A-1)	Mild Steel	206,219	Fixed
Significant	366	Storage Tank					1996	Jet Fuel (A/A-1)	Mild Steel	26,438	Fixed
Significant	367	Storage Tank					1996	Diesel	Mild Steel	40,000	Fixed
Significant	368	Storage Tank					1996	Gasoline	Mild Steel	35,000	Fixed
Significant	2201	Storage Tank	Convault				1998	Gasoline	Convault	1,000	Fixed
Insignificant	11	Storage Tank						Diesel		600	Fixed
Insignificant	122	Storage Tank	Convault	RN 1000 35F	N635665			Diesel	Convault	1,000	Fixed
Insignificant	176	Storage Tank	Convault				1993	Diesel	Convault	500	Fixed
Insignificant	179	Storage Tank	Convault/Old Castle				1993	Diesel	Convault	500	Fixed
Insignificant	235	Storage Tank					2000	Used Oil	Mild Steel	500	Fixed
Insignificant	291	Storage Tank	Valley Pump & Machine Works				1997	Used Oil	Mild Steel	1,000	Fixed
Insignificant	291	Storage Tank	Nogales Highway Iron & Steel					Oil	Steel Drum	480	Fixed
Insignificant	291	Storage Tank						Hydraulic Fluid	Mild Steel	240	Fixed
Insignificant	291	Storage Tank						Premix Antifreeze	Mild Steel	275	Fixed
Insignificant	291	Storage Tank						Waste Antifreeze	Mild Steel	275	Fixed
Insignificant	291	Storage Tank						Transmission Fluid	Mild Steel	240	Fixed
Insignificant	310	Storage Tank					1988	Diesel	Mild Steel	500	Fixed
Insignificant	328	Storage Tank	Convault				1999	Diesel	Convault	250	Fixed
Insignificant	335	Storage Tank						Diesel	Vaulted Underground	8,000	Fixed
Insignificant	336	Storage Tank					1995	Rec. Jet Fuel	Mild Steel	250	Fixed
Insignificant	336	Storage Tank	Myers Waste Oil Storage Systems / King					Used Oil	Mild Steel	132	Fixed
Insignificant	336	Storage Tank						Oil	Mild Steel	61	Fixed
Insignificant	336	Storage Tank						Antifreeze	Mild Steel	61	Fixed
Insignificant	336	Storage Tank						Tranmission Fluid	Mild Steel	61	Fixed
Insignificant	336	Storage Tank						Oil	Mild Steel	61	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company					Oil	Mild Steel	65	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company					Oil	Mild Steel	65	Fixed
Insignificant	338	Storage Tank	Beta Systems				1980	Used Oil	Mild Steel	500	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company					Hydraulic Fluid	Mild Steel	65	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company					Oil	Mild Steel	65	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company					Oil	Mild Steel	65	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company					Oil	Mild Steel	65	Fixed
Insignificant	338	Storage Tank	Valley Equipment Company						Mild Steel	65	Fixed
Insignificant	343	Storage Tank	Convault				1982	Diesel	Convault	500	Fixed
Insignificant	404	Storage Tank						Used Oil		1,000	Fixed
Insignificant	405	Storage Tank	Convault				1993	Jet Fuel (A/A-1)	Convault	5,200	Fixed
Insignificant	405	Storage Tank	Convault				1993	Jet Fuel (A/A-1)	Convault	5,200	Fixed
Insignificant	450	Storage Tank	Convault				1993	Diesel	Convault	500	Fixed
Insignificant	453	Storage Tank						Diesel		1,000	Fixed
Insignificant	545	Storage Tank						Used Cooking Oil/Grease		300	Fixed

EQUIPMENT LIST – STORAGE TANKS

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufacture	Year Installed	Fuel Type	Tank Type	Tank Capacity	Tank Roof Type
Insignificant	617	Storage Tank					1996		Mild Steel	200	
Insignificant	617	Storage Tank					1996		Mild Steel	100	
Insignificant	793	Storage Tank					1993	Diesel	Convault	500	
Insignificant	799	Storage Tank	Convault					Diesel	Convault	500	Fixed
Insignificant	859	Storage Tank		159-1463	ODT-32281			Diesel		75	Fixed
Insignificant	887	Storage Tank	Nogales Highway Iron & Steel				1996	Used Oil	Mild Steel	1,000	Fixed
Insignificant	888	Storage Tank	Nogales Highway Iron & Steel				1996	Jet Fuel recycled (JP-8)	Mild Steel	6,000	Fixed
Insignificant	897	Storage Tank						Diesel		127	Fixed
Insignificant	901	Storage Tank						Diesel	Mild Steel	250	
Insignificant	905	Storage Tank	Convault								
Insignificant	910	Storage Tank						Diesel		825	Fixed
Insignificant	930	Storage Tank					1984	Jet Fuel (JP-8)	Mild Steel	3,095	Fixed
Insignificant	930	Storage Tank					1984	Jet Fuel (JP-8)	Mild Steel	3,138	Fixed
Insignificant	930	Storage Tank					1984	Diesel	Mild Steel	1,580	Fixed
Insignificant	930	Storage Tank					1984	Used Oil	Mild Steel	250	Fixed
Insignificant	930	Storage Tank	Convault				1998	Used Oil	Convault	1,000	Fixed
Insignificant	952	Storage Tank						Convault		2,000	
Insignificant	954	Storage Tank						Used Cooking Oil/Grease		300	Fixed
Insignificant	961	Storage Tank					1993	Diesel	Convault	250	
Insignificant	968	Storage Tank						Jet Fuel (Jet A/A-1)		600	Fixed
Insignificant	969	Storage Tank						Diesel		100	Fixed
Insignificant	969	Storage Tank	Convaultt					Diesel	Convault	250	Fixed
Insignificant	979	Storage Tank	Convault				1993	Diesel	Convault	2,000	Fixed
Insignificant	985	Storage Tank	Myers Waste Oil Storage Systems	MVW 500 SD E2	B-176078	2004	1995	Used Oil/Hydraulic Fluid	Mild Steel	132	Fixed
Insignificant	988	Storage Tank	Convault	RN 1000 35F	R147264			Diesel	Convault	1,000	Fixed
Insignificant	998	Storage Tank	BN Manufacturing					Diesel		1,750	Fixed
Insignificant	1000	Storage Tank	Convault					Diesel	Convault	2,000	Fixed
Insignificant	1001	Storage Tank					1996	Diesel	Convault	500	
Insignificant	1002	Storage Tank	Convault					Diesel	Convault	250	Fixed
Insignificant	1006	Storage Tank	Westemman Company					Recovered Jet Fuel (JP-8)	Mild Steel	300	Fixed
Insignificant	1006	Storage Tank						1010 Wt. Oil (Turbine Oil)	Mild Steel	400	Fixed
Insignificant	1006	Storage Tank	Westemman Company					Used Oil	Mild Steel	300	Fixed
Insignificant	1006	Storage Tank						Jet Fuel A	Mild Steel	5,000	
Insignificant	1008	Storage Tank						Hydrazine		10,000	Fixed
Insignificant	1013	Storage Tank	Convault	WRN 1000 35F	R 748072		1996	Diesel	Convault	1,000	Fixed
Insignificant	1016	Storage Tank					1995	Jet Fuel	Cement/R-12 refueler	5,000	
Insignificant	1016	Storage Tank	Westemman Company					Recovered Jet Fuel (JP-8)	Mild Steel	250	Fixed
Insignificant	1016	Storage Tank					1985	1010 Wt. Oil	Mild Steel	320	Fixed
Insignificant	1016	Storage Tank	Westemman Company				1998	Used Oil	Mild Steel	250	Fixed
Insignificant	1018	Storage Tank					2001	Casoline	Mild Steel	200	
Insignificant	1018	Storage Tank					1995	Jet Fuel	Convault	1,000	
Insignificant	1018	Storage Tank					1995	Diesel	Mild Steel	1,000	
Insignificant	1026	Storage Tank	Nogales Highway Iron & Steel					Waste Oil	Mild Steel	200	Fixed
Insignificant	1032	Storage Tank	Convault					Diesel	Convault	1,000	Fixed
Insignificant	1040	Storage Tank	Convault				1996	Diesel	Convault	1,000	Fixed

EQUIPMENT LIST – STORAGE TANKS

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufacture	Year Installed	Fuel Type	Tank Type	Tank Capacity	Tank Roof Type
Insignificant	1047	Storage Tank					1982	Diesel	Mild Steel	350	
Insignificant	1049	Storage Tank	Convault				1995	Diesel	Convault	500	Fixed
Insignificant	1056	Storage Tank	Convault				1995	Diesel	Convault	250	Fixed
Insignificant	1057	Storage Tank	Convault				1995	Diesel	Convault	100	Fixed
Insignificant	1076	Storage Tank					1995	Diesel	Convault	250	
Insignificant	1086	Storage Tank					1982	Diesel	Mild Steel	350	
Insignificant	1132	Storage Tank	Convault				1993	Diesel	Convault	6,000	Fixed
Insignificant	1132	Storage Tank	Convault				1993	Diesel	Convault	6,000	Fixed
Insignificant	1150	Storage Tank	Convault					Diesel	Convault	2,000	Fixed
Insignificant	1153	Storage Tank	Convault					Diesel	S	127	Fixed
Insignificant	1219	Storage Tank	Convault				1999	Diesel	Convault	500	Fixed
Insignificant	1223	Storage Tank	Convault					Diesel	Convault	250	Fixed
Insignificant	1233	Storage Tank	Convault				1995	Diesel	Mild Steel	500	Fixed
Insignificant	1239	Storage Tank						Diesel		4,000	Fixed
Insignificant	1250	Storage Tank					1993	Diesel	Convault	500	Fixed
Insignificant	1365	Storage Tank	Convault				2000	Diesel	Convault	250	Fixed
Insignificant	1375	Storage Tank	Convault					Diesel	Convault	100	Fixed
Insignificant	1381	Storage Tank					1993	Diesel	Convault	100	Fixed
Insignificant	1550	Storage Tank	Sauk Technologies					Diesel		165	Fixed
Insignificant	2201	Storage Tank	Convault				1998	Diesel	Convault	1,000	Fixed
Insignificant	2201	Storage Tank					1998	Used Oil	Mild Steel	300	Fixed
Insignificant	8226	Storage Tank						Diesel		72	Fixed

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EQUIPMENT LIST – SURFACE AERO SPACE COATING

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Rating/Ca pacity and Units		Year Manufactured	Year Installed	Fuel Type	Comments
Significant	291	Paint Booth	Blowthern	Ultra 3000	4940PBLO-3750						Downdraft
Significant	339	Paint Booth	Binks	Dyna Precipitor (75509)		664	gals			---	8' x 12'
Significant	415	Paint Booth	CE Fabricated								6' x 16, overspray collectors
Significant	922	Paint Booth	JB I Inc.								
Significant	922	Paint Booth	JB I Inc.								

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EQUIPMENT LIST – WOODWORKING

Permitting	Facility	Equipment Type	Manufacturer	Model #	Serial #	Year Manufactur	Year Install	HP Rati	kW Rating
Significant	339	Cyclone Dust Collector	Roto Clone Hoppers (Combination Hopper)						
Significant	339	Dust Collector	Cyclone						
Significant	339	Paint Booth	Binks		Dyna Precipitor (75509)				
Insignificant	339	20" Drill Press	Wilton	2550	255212			1.5	
Insignificant	339	24" Band Saw	Delta	28-641	HI-01795	1995?		2	
Insignificant	339	24" Disc Sander	Powermatic	D8-203	11020068	2000		3	
Insignificant	339	24" Planer	Invicta	53509626	1571	2002		10	
Insignificant	339	Jointer	Delta	DJ-20	SH003644			1.5	
Insignificant	339	Miter Saw 10"	Milwaukee	6497	4070323			0.5	
Insignificant	339	Panel Saw 8"	Milwaukee	6411	795A495500056				
Insignificant	339	Radial Arm	Dewalt	96753-00	84870098			5	
Insignificant	339	Router	AXYZ	Cantech SM	3826H3716		2010	3	4.2
Insignificant	339	Sander	Timesaver	1311-12-1	30774			1	
Insignificant	339	Shaper	Delta	43-791	PL00779			7.5	
Insignificant	339	Spindle Sander	Jet	JOVS-10	1062070			1	
Insignificant	339	Spindle Shaper	Jet	JWS34L	7060302			2	
Insignificant	339	Table Saw	Sawstop	ICSS53230	I100500311		2010	5	

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