AIR QUALITY PERMIT
(As required by Title 17.11, Article II, Pima County Code)

ISSUED TO

R.E. DARLING CO., INC.
3749 N ROMERO ROAD
TUCSON, ARIZONA 85705

This air quality permit does not relieve applicant of responsibility for meeting all air pollution regulations

THIS PERMIT ISSUED SUBJECT TO THE SPECIFIC CONDITIONS IDENTIFIED IN THIS PERMIT.

PERMIT NUMBER 1618
PERMIT CLASS II

ISSUED: EXPIRES:

Rupesh Patel, Air Program Manager, PDEQ
TABLE OF CONTENTS

Permit Summary.................................................................................................................. 4

Specific Conditions............................................................................................................. 5

Category 1  Applicability.................................................................................................... 5
  I. Statutory Authority........................................................................................................ 5
  II. Permitted Facility Sources......................................................................................... 5
  III. Permit Sections........................................................................................................ 5
  IV. Applicability of more than one standard................................................................. 5

Category 2  Facility-Wide Operations.................................................................................. 6
  I. Emission Limitations and Standards......................................................................... 6
  II. Monitoring Requirements......................................................................................... 8
  III. Recordkeeping Requirements................................................................................ 9
  IV. Reporting Requirements......................................................................................... 10
  V. Facility Changes........................................................................................................ 10
  VI. Testing Requirements............................................................................................ 11

Category 3  National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart T –
  National Emission Standards for Halogenated Solvent Cleaning.............................. 12
  I. Designation of Source............................................................................................... 12
  II. Definitions................................................................................................................ 12
  III. Emission Limitation............................................................................................... 16
  IV. Batch Vapor Cleaning Machine Standards Alternative Standards.................... 16
  V. Test Methods............................................................................................................ 17
  VI. Monitoring Procedures.......................................................................................... 18
  VII. Recordkeeping Requirements............................................................................... 18
  VIII. Reporting Requirements...................................................................................... 19
  IX. Equivalent Methods of Control.............................................................................. 20
  X. Implementation and Enforcement.......................................................................... 20

Category 4  New and Existing Stationary Source Performance Standards for Surface Coating and
  Solvent Degreasing Activities....................................................................................... 21
  I. Surface Coating and Solvent Degreasing/Cleaning Operations............................ 21
  II. Abrasive Blasting Operations................................................................................... 22

Category 5  Fossil Fuel Fired Industrial and Commercial Equipment (Boilers & Heaters)........ 23
  I. Emission Limitations and Standards..................................................................... 23
  II. Monitoring and Recordkeeping Requirements..................................................... 23
  III. Reporting Requirements......................................................................................... 23
  IV. Testing Requirements............................................................................................. 23
Category 6 – Specific Applicability Provisions

I. Permitted Facility Sources ........................................................................................................ 24
   A. Facility-Wide Operations ..................................................................................................... 24
   B. Fossil Fuel Fired Industrial and Commercial Equipment (Boilers and Heaters) ................. 24
   C. Local (New and Existing) Stationary Performance Standards ............................................... 24
   D. Exempt Sources .................................................................................................................. 24

General Conditions .......................................................................................................................... 25

   I. Compliance with Permit Conditions .................................................................................... 25
   II. Permit revision, reopening, revocation and reissuance, or termination for cause ................. 25
   III. Duty to provide information .............................................................................................. 25
   IV. Severability Clause ............................................................................................................. 25

Attachment 1: Applicable Regulations ........................................................................................... 26

Attachment 2: Equipment List ......................................................................................................... 28

Attachment 3: Insignificant Activities ........................................................................................... 30

Attachment 4: Emission Discharge and Opacity Limiting Standards ............................................ 31
SUMMARY

The R. E. Darling Co., Inc. facility is located at 3749 North Romero Road, Tucson, Arizona. The Company supplies specialty fabricated rubber and composite products mainly to the aerospace and defense industry. The primary product lines of the Company are rocket motor insulation and exhaust components, oxygen breathing hose and related life support equipment, custom mixed rubber compounds, compression molded rubber components, and non-destructive testing services. Some of the products have structural metal rocket motor/aircraft parts incorporated into them.

The facility has fuel-fired natural gas boilers and surface coating operations where the rubber moldings and metal parts are coated with adhesives. There is one Batch solvent vapor degreaser, Equipment ID #581 in operation and an abrasive blasting operation where the components are blasted in preparation for adhesive bonding operations. The vapor degreaser is used to clean the miscellaneous structural metal rocket motor/aircraft parts. For the surface coating operations, the company primarily applies the adhesives by hand with brushes. On rare occasions depending on contract requirements, the company may apply adhesive coatings with spray equipment.

The potential pollution producing processes at the facility are surface coating operations, abrasive blasting, and halogenated solvent cleaning. The primary potential air pollutants emitted from the source are Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) from the halogenated solvent cleaning operations and surface coating operations. The pollutants of concern are solvents used in the cleaning operations, as well as, adhesives, thinners and reducers from the surface coating operations. PM_{10} is emitted from the abrasive blasting operations and spray adhesive operations. Control devices include a cooling tower for fume control, bag house, and enclosed abrasive blasting equipment.

This is a five-year permit for a Class II stationary source. The source is a true minor for all regulated air pollutants.
SPECIFIC CONDITIONS

[References are to Title 17 of the Pima County Code [PCC] unless otherwise noted]

CATEGORY 1

APPLICABILITY

Section I. Statutory Authority

The Specific Conditions contained in this air quality permit apply to the operations, equipment, and sources provided in the permit application and shall not relieve the Permittee or its subcontractors from compliance with all local, county, state, and federal laws, statutes, and codes or from obtaining permits for other operations or activities when required. [PCC 17.11.010.D & PCC 17.13.010]

Section II. Permitted Facility Sources

The Specific Conditions apply to the following source categories, affected facilities, equipment, emission sources, installations, activities and operations at the facility.


The provisions of this regulation apply to the batch vapor solvent cleaning machine, Equipment ID: #581, that uses a solvent containing trichloroethylene (CAS No. 79-01-6). Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this regulation. [40 CFR 63.460(a) (Federally Enforceable Conditions, unless otherwise stated)

B. New and Existing Stationary Source Performance Standards for Surface Coating and Solvent Degreasing Activities. [PCC 17.16.230]

(Locally Enforceable Conditions, unless otherwise stated)

C. New and Existing Stationary Source Performance Standards for Fossil-Fuel Fired Industrial and Commercial Equipment (Boilers, Heaters, & Other Equipment, not subject to NSPS). [PCC 17.16.165]

(Locally Enforceable Conditions, unless otherwise stated)

Section III. Permit Sections

The Specific Conditions have been organized into the following permit sections:

Category 1 - General Applicability (This Category)
Category 2 - Facility-Wide Operations
Category 3 - Halogenated Solvent Cleaning
Category 4 - Surface Coating and Solvent Degreasing Activities
Category 5 - Fossil Fuel Fired Industrial and Commercial Equipment (Boilers, Heaters, & Other Equipment)
Category 6 - Specific Applicability Provisions
Category 7 - Fugitive Dust Control Plan

Section IV. Applicability of More Than one standard

If more than one emission limit or emission standard in this permit is applicable to the same source, the more stringent standard or emission limit shall apply. [PCC 17.16.010.B]
CATEGORY 2
FACILITY-WIDE OPERATIONS

The provisions of this Category apply to facility-wide operations and all sources of air contaminants. All provisions in this Category are locally enforceable unless otherwise noted. [PCC 17.16.010.B]

Section I. EMISSION LIMITS AND STANDARDS

A. Emission Limitations [PCC 17.11.190.B]

[Material Permit Condition]

The Permittee shall limit Hazardous Air Pollutant (HAP) emissions to the following rates:

1. 9 tons or less of any single HAP in any 12-consecutive month period.
2. 22.5 tons or less of any combination of individual HAPs in any 12-consecutive month period.

B. Operating Restrictions

The Permittee shall comply with the additional limitations in Category 3, Category 4 and Category 5 of this permit. [PCC 17.11.120.A.3.a]

C. General Control Standards

1. The Permittee shall not cause or permit the planning, construction, installation, erection, modification, use or operation of an emission source which will cause or contribute to a violation of a performance standard in Title 17 of the Pima County Code. [PCC 17.11.020 & PCC 17.16.020.A]

2. The Permittee shall keep complete records of the materials used as fuel for any stationary or portable source of air pollution which burns any material except natural gas. [PCC 17.16.010.C]

3. The Permittee is prohibited from firing high sulfur oil in any stationary or portable source without submitting a revision, as provided in V of this Category, demonstrating to the satisfaction of the Control Officer, both that sufficient quantities of low sulfur oil are not available for use by the Permittee, and that the Permittee has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards will not be violated. For purposes of this paragraph “high sulfur oil” means oil containing 0.90 percent or more by weight of sulfur. Notwithstanding the prohibition to use high sulfur oil, the Specific Conditions contained in this permit may prescribe lower fuel sulfur limits for specific stationary or portable sources. [PCC 17.13.020.A.2 & PCC 17.11.190.B]

[Federally Enforceable Condition]

4. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent or other outlet by the Permittee thereof to a degree that will adequately reduce or eliminate the discharge of air pollution to adjoining property. [PCC 17.16.020.B]
D. Materials Handling Standards

1. The Permittee shall not transport or store VOC’s without taking necessary and feasible measures to control evaporation, leakage, or other discharge into the atmosphere. [PCC 17.16.400.A]

2. Materials including solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizers and manure shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory. [PCC 17.16.430.F]

E. Odor Limiting Standard

The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution. [PCC 17.16.030]

F. Opacity Standards

Except as otherwise specified in the Specific Conditions of this permit and the Table in Attachment 4, the opacity of all plumes and effluents from all point, non-point, or fugitive emission sources shall not exceed 20% as determined by EPA Reference Method 9, Appendix A, 40 CFR Part 60.

[This condition is Federally Enforceable when opacity is above 40%]

1. Opacities (optical densities), as measured in accordance with Method 9, of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument. [PCC 17.16.040.A.1]

2. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted in this permit. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be as specified in Attachment 4. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation. [PCC 17.16.040.A.2]

3. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited. [PCC 17.16.040.A.3]

4. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements of sections I.F and I.G of this Category shall not apply. [PCC 17.16.040.B]

G. Visibility Limiting Standard

1. The Permittee shall not cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.
2. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter in accordance with the fugitive dust control plan in Section 5 of this Permit. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

   a. Section I.G.2 of this Category shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

   b. Section I.G.2 of this Category shall not apply to the generation of airborne particulate matter from undisturbed land.

H. Asbestos Requirements for Demolition and Renovation Activities

The Permittee shall not allow or commence demolition or renovation of any NESHAP facility, as defined in 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants – Asbestos, without first obtaining an activity permit from the Control Officer. Should this stationary source, pursuant to 40 CFR Part 61, Subpart M, become subject to asbestos regulations when conducting any renovation or demolition at this premises, then the Permittee or operator shall submit proper notification as described in 40 CFR Part 61, Subpart M and shall comply with all other applicable requirements of Subpart M. The Permittee shall keep a record of all relevant paperwork on file. [PCC 17.14.060.A & 40 CFR 61, Subpart M]

Section II. Monitoring Requirements

A. Material Usage – HAP Emissions

1. The Permittee shall maintain on site a Manufacturer's Product Information Sheet (Safety Data Sheet or its equivalent) for each HAP containing product shipped to the facility and used in the facility operations.

   a. The Product Information Sheet must contain sufficient information to allow the Permittee to determine the weight or density of each product and the amount (in weight percent) and chemical abstract service (CAS) number of each HAP contained in each product.

   b. Where the Product Information Sheet contains content information of a product’s constituent in terms of a range of values (e.g., 40% to 60%), the Permittee shall assume the content of the constituent to be the highest value of the range (not to exceed 100% total HAP content).
2. The Permittee shall demonstrate compliance with the HAP emissions limitation of I.A of this Category by monitoring and recording (within 10 days of the end of the month) the following information:

   a. The amount of each HAP containing product used each month (monthly Usage).

   b. The amount of each HAP used for each month and total HAPS used in each month.

      The monthly usage for each product, multiplied by the maximum HAP content (percent by weight taken from the Product Information Sheets described in condition II.A.1 of this section), The results will be a weight, in pounds, of each HAP usage and weight in pounds of total combined HAP usage for that month.

   c. The twelve-month rolling total HAP usage.

      12-month rolling totals shall be calculated by adding the current month's HAP usage to the sum of the previous eleven consecutive months’ usage.

B. Visible Emissions (VE)

If at any time, or while conducting an opacity check required by the Specific Conditions of this permit, the Permittee sees any plume or effluent from a facility source, that on an instantaneous basis, appears to exceed the opacity limit, or diffuse beyond the property boundary line, the Permittee shall investigate the source of the emissions and take corrective action, if required. If the plume persists or the activity or operation which is causing or contributing to the emissions cannot be corrected or halted, the Permittee shall, when practicable, make a visual determination of the opacity in accordance with section I.F of this Category. If the VE determination exceeds the applicable opacity limit, or the emissions diffuse beyond the property boundary line, the Permittee shall report this as an excess emission in accordance with section IV.A of this Category. [PCC 17.16.040]

C. Additional Monitoring Requirement

Except as otherwise contained in the Specific Conditions of this permit, additional monitoring for compliance with the facility-wide standards in sections I.B through H of this Category shall not be necessary. The Control Officer may require the Permittee to conduct additional monitoring if the Control Officer has reasonable cause to believe a violation of the standards has been committed.

Section III. RECORDKEEPING REQUIREMENTS

A. Monitoring Records

The Permittee shall maintain records of required monitoring information. Records shall include at a minimum:

   [PCC 17.13.020.A.4.a]

1. The date, time, and the place defined in the permit requiring the measurement, sampling, inspection, or observation;

2. The name of the person conducting the measurement, sampling, inspection or observation;

3. The particular piece of equipment, process, or area being measured, sampled, inspected or observed including a description of the operating conditions and monitoring techniques or methods used as applicable; and,
4. The results of the measurement, sampling, inspection or observation including any discrepancy or excess emissions. If there are any monitoring discrepancies or excess emissions, the record shall include the corrective action taken.

B. Record Retention

The Permittee shall retain records of all required monitoring and support information for at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, and copies of all reports required by the permit.

C. Recordkeeping for Compliance Determinations

The Permittee shall retain a copy of the permit onsite including all required monitoring records and support information for review by the Control Officer. In addition, all equipment identified in the permit equipment list shall be marked with a unique, clearly visible, and accessible ID to identify the piece of equipment. The Permittee shall be considered in compliance by demonstrating that sufficient information on the equipment and facility operations is periodically collected, recorded, and maintained to assure that the compliance status of any specific condition of this permit can be readily ascertained at any time.

Section IV. REPORTING REQUIREMENTS

A. Excess Emissions Reporting

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit in accordance with section I.B of the General Conditions.

B. Emissions Inventory Reporting:

When requested by the Control Officer, the Permittee shall complete and submit an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Control Officer makes request and inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. The questionnaire shall be on a form provided by or approved by the Control Officer and shall include the information required by PCC 17.13.180.

C. Certification of Truth Accuracy and Completeness

All reports required by this permit shall contain certification by a responsible official of truth, accuracy and completeness. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Section V. FACILITY CHANGES

A. Permit Revision Application

Before installing additional emission sources, modifying existing emission sources, switching fuels, or changing the method of operation at the facility such that the changes increase actual emissions more than 10% of the major source threshold for any conventional pollutant, the Permittee shall, if applicable, apply for the appropriate revision in accordance with PCC 17.13.100, PCC 17.13.130, or PCC 17.13.140.
B. Notification

For facility changes that do not require revision, the Permittee may make the changes if written notice is provided to the Control Officer in advance of the changes in accordance with PCC 17.13.110.C.

C. Recordkeeping Log

The Permittee shall maintain a log of other facility changes that do not require revision or notice in accordance with PCC 17.13.110.B.

Section VI. TESTING REQUIREMENTS

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. Unless otherwise noted, the following test methods and standards are from 40 CFR Part 60, Appendix A or incorporated by reference in 40 CFR §60.17.

A. When required, EPA Test Method 9 shall be used to monitor compliance with the opacity standards identified in this Permit.

B. When required, the Permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A, to the Control Officer in a test plan, for approval by the Control Officer.

C. Documentation, such as invoices or statements from the fuel supplier, showing that the fuel sulfur content is below the applicable standards shall be an acceptable means to demonstrate compliance with fuel sulfur limitations identified in this Permit. If otherwise required or when requested by the Control Officer, the fuel sulfur content of fuels shall be determined using ASTM D-129-91 or an equivalent for liquid fuels, and ASTM D0172-90 or an equivalent for gaseous fuels.

D. Except as provided in this Category, should the Permittee desire to test or be required to test to demonstrate compliance with the standards contained in this permit, the Permittee shall contact the Control Officer for test methods and guidelines.
CATEGORY 3

National Emission Standard for Hazardous Air Pollutants (NESHAP)
Subpart T – National Emission Standards for Halogenated Solvent Cleaning

Section I. Designation of Source

The halogenated solvent cleaner NESHAP rule applies to the batch vapor solvent cleaning machine, Equipment ID #581, listed in Table 2, Attachment 2 of this Permit.

Section II. Definitions

Unless defined below, all terms used in this subpart are used as defined in the 1990 Clean Air Act, or in subpart A of 40 CFR part 63:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., State that has been delegated the authority to implement the provisions of this part.)

Air blanket means the layer of air inside the solvent cleaning machine freeboard located above the solvent/air interface. The centerline of the air blanket is equidistant between the sides of the machine.

Air knife system means a device that directs forced air at high pressure, high volume, or a combination of high pressure and high volume, through a small opening directly at the surface of a continuous web part. The purpose of this system is to remove the solvent film from the surfaces of the continuous web part.

Automated parts handling system means a mechanical device that carries all parts and parts baskets at a controlled speed from the initial loading of soiled or wet parts through the removal of the cleaned or dried parts. Automated parts handling systems include, but are not limited to, hoists and conveyors.

Batch cleaning machine means a solvent cleaning machine in which individual parts or a set of parts move through the entire cleaning cycle before new parts are introduced into the solvent cleaning machine. An open-top vapor cleaning machine is a type of batch cleaning machine. A solvent cleaning machine, such as a ferris wheel or a cross-rod degreaser, that clean multiple batch loads simultaneously and are manually loaded are batch cleaning machines.

Carbon adsorber means a bed of activated carbon into which an air-solvent gas-vapor stream is routed and which adsorbs the solvent on the carbon.

Clean liquid solvent means fresh unused solvent, recycled solvent, or used solvent that has been cleaned of soils (e.g., skimmed of oils or sludge and strained of metal chips).

Cleaning capacity means, for a cleaning machine without a solvent/air interface, the maximum volume of parts that can be cleaned at one time. In most cases, the cleaning capacity is equal to the volume (length times width times height) of the cleaning chamber.

Cold cleaning machine means any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated, nonboiling solvent to clean the parts are classified as cold cleaning machines.

Combined squeegee and air-knife system means a system consisting of a combination of a squeegee system and an air-knife system within a single enclosure.
Consumption means the amount of halogenated hazardous air pollutant solvent added to the solvent cleaning machine.

Continuous web cleaning machine means a solvent cleaning machine in which parts such as film, coils, wire, and metal strips are cleaned at speeds typically in excess of 11 feet per minute. Parts are generally uncoiled, cleaned such that the same part is simultaneously entering and exiting the solvent application area of the solvent cleaning machine, and then recoiled or cut. For the purposes of this subpart, all continuous web cleaning machines are considered to be a subset of in-line solvent cleaning machines.

Cover means a lid, top, or portal cover that shields the solvent cleaning machine openings from air disturbances when in place and is designed to be easily opened and closed without disturbing the vapor zone. Air disturbances include, but are not limited to, lip exhausts, ventilation fans, and general room drafts. Types of covers include, but are not limited to, sliding, biparting, and rolltop covers.

Cross-rod solvent cleaning machine means a batch solvent cleaning machine in which parts baskets are suspended from “cross-rods” as they are moved through the machine. In a cross-rod cleaning machine, parts are loaded semi-continuously, and enter and exit the machine from a single portal.

Downtime mode means the time period when a solvent cleaning machine is not cleaning parts and the sump heating coils, if present, are turned off.

Dwell means the technique of holding parts within the freeboard area but above the vapor zone of the solvent cleaning machine. Dwell occurs after cleaning to allow solvent to drain from the parts or parts baskets back into the solvent cleaning machine.

Dwell time means the required minimum length of time that a part must dwell, as determined by §63.465(d).

Emissions means halogenated hazardous air pollutant solvent consumed (i.e., halogenated hazardous air pollutant solvent added to the machine) minus the liquid halogenated hazardous air pollutant solvent removed from the machine and the halogenated hazardous air pollutant solvent removed from the machine in the solid waste.

Existing means any solvent cleaning machine the construction or reconstruction of which was commenced on or before November 29, 1993. A machine, the construction or reconstruction of which was commenced on or before November 29, 1993, but that did not meet the definition of a solvent cleaning machine on December 2, 1994, because it did not use halogenated HAP solvent liquid or vapor covered under this subpart to remove soils, becomes an existing source when it commences to use such liquid or vapor. A solvent cleaning machine moved within a contiguous facility or to another facility under the same ownership, constitutes an existing machine.

Freeboard area means; for a batch cleaning machine, the area within the solvent cleaning machine that extends from the solvent/air interface to the top of the solvent cleaning machine; for an in-line cleaning machine, it is the area within the solvent cleaning machine that extends from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower.

Freeboard height means; for a batch cleaning machine, the distance from the solvent/air interface, as measured during the idling mode, to the top of the cleaning machine; for an in-line cleaning machine, it is the distance from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower, as measured during the idling mode.

Freeboard ratio means the ratio of the solvent cleaning machine freeboard height to the smaller interior dimension (length, width, or diameter) of the solvent cleaning machine.

Freeboard refrigeration device (also called a chiller) means a set of secondary coils mounted in the freeboard area that carries a refrigerant or other chilled substance to provide a chilled air blanket above
the solvent vapor. A primary condenser capable of meeting the requirements of §63.463(e)(2)(i) is defined as both a freeboard refrigeration device and a primary condenser for the purposes of these standards.

**Halogenated hazardous air pollutant solvent or halogenated HAP solvent** means methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5), and chloroform (CAS No. 67-66-3).

**Hoist** means a mechanical device that carries the parts basket and the parts to be cleaned from the loading area into the solvent cleaning machine and to the unloading area at a controlled speed. A hoist may be operated by controls or may be programmed to cycle parts through the cleaning cycle automatically.

**Idling mode** means the time period when a solvent cleaning machine is not actively cleaning parts and the sump heating coils, if present, are turned on.

**Idling-mode cover** means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings during the idling mode. A cover that meets this definition can also be used as a working-mode cover if that definition is also met.

**Immersion cold cleaning machine** means a cold cleaning machine in which the parts are immersed in the solvent when being cleaned. A remote reservoir cold cleaning machine that is also an immersion cold cleaning machine is considered an immersion cold cleaning machine for purposes of this subpart.

**In-line cleaning machine or continuous cleaning machine** means a solvent cleaning machine that uses an automated parts handling system, typically a conveyor, to automatically provide a continuous supply of parts to be cleaned. These units are fully enclosed except for the conveyor inlet and exit portals. In-line cleaning machines can be either cold or vapor cleaning machines.

**Leak-proof coupling** means a threaded or other type of coupling that prevents solvents from leaking while filling or draining solvent to and from the solvent cleaning machine.

**Lip exhaust** means a device installed at the top of the opening of a solvent cleaning machine that draws in air and solvent vapor from the freeboard area and ducts the air and vapor away from the solvent cleaning area.

**Monthly reporting period** means any calendar month in which the Permittee of a solvent cleaning machine is required to calculate and report the solvent emissions from each solvent cleaning machine.

**New** means any solvent cleaning machine the construction or reconstruction of which is commenced after November 29, 1993.

**Open-top vapor cleaning machine** means a batch solvent cleaning machine that has its upper surface open to the air and boils solvent to create solvent vapor used to clean and/or dry parts.

**Part** means any object that is cleaned in a solvent cleaning machine. Parts include, but are not limited to, discrete parts, assemblies, sets of parts, and parts cleaned in a continuous web cleaning machine (i.e., continuous sheets of metal, film).

**Primary condenser** means a series of circumferential cooling coils on a vapor cleaning machine through which a chilled substance is circulated or recirculated to provide continuous condensation of rising solvent vapors and, thereby, create a concentrated solvent vapor zone.

**Reduced room draft** means decreasing the flow or movement of air across the top of the freeboard area of the solvent cleaning machine to meet the specifications of §63.463(e)(2)(ii). Methods of achieving a
reduced room draft include, but are not limited to, redirecting fans and/or air vents to not blow across the cleaning machine, moving the cleaning machine to a corner where there is less room draft, and constructing a partial or complete enclosure around the cleaning machine.

*Remote reservoir cold cleaning machine* means any device in which liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool in the work area.

*Remote reservoir continuous web cleaning machine* means a continuous web cleaning machine in which there is no exposed solvent sump. In these units, the solvent is pumped from an enclosed chamber and is typically applied to the continuous web part through a nozzle or series of nozzles. The solvent then drains from the part and is collected and recycled through the machine, allowing no solvent to pool in the work or cleaning area.

*Soils* means contaminants that are removed from the parts being cleaned. Soils include, but are not limited to, grease, oils, waxes, metal chips, carbon deposits, fluxes, and tars.

*Solvent/air interface* means, for a vapor cleaning machine, the location of contact between the concentrated solvent vapor layer and the air. This location of contact is defined as the mid-line height of the primary condenser coils. For a cold cleaning machine, it is the location of contact between the liquid solvent and the air.

*Solvent/air interface area* means; for a vapor cleaning machine, the surface area of the solvent vapor zone that is exposed to the air; for an in-line cleaning machine, it is the total surface area of all the sumps; for a cold cleaning machine, it is the surface area of the liquid solvent that is exposed to the air.

*Solvent cleaning machine* means any device or piece of equipment that uses halogenated HAP solvent liquid or vapor to remove soils from the surfaces of materials. Types of solvent cleaning machines include, but are not limited to, batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines. Buckets, pails, and beakers with capacities of 7.6 liters (2 gallons) or less are not considered solvent cleaning machines.

*Solvent vapor zone* means; for a vapor cleaning machine, the area that extends from the liquid solvent surface to the level that solvent vapor is condensed. This condensation level is defined as the midline height of the primary condenser coils.

*Squeegee system* means a system that uses a series of pliable surfaces to remove the solvent film from the surfaces of the continuous web part. These pliable surfaces, called squeegees, are typically made of rubber or plastic media, and need to be periodically replaced to ensure continued proper function.

*Sump* means the part of a solvent cleaning machine where the liquid solvent is located.

*Sump heater coils* means the heating system on a cleaning machine that uses steam, electricity, or hot water to heat or boil the liquid solvent.

*Superheated part technology* means a system that is part of the continuous web process that heats the continuous web part either directly or indirectly to a temperature above the boiling point of the cleaning solvent. This could include a process step, such as a tooling die that heats the part as it is processed, as long as the part remains superheated through the cleaning machine.
Superheated vapor system means a system that heats the solvent vapor, either passively or actively, to a temperature above the solvent's boiling point. Parts are held in the superheated vapor before exiting the machine to evaporate the liquid solvent on them. Hot vapor recycle is an example of a superheated vapor system.

Vapor cleaning machine means a batch or in-line solvent cleaning machine that boils liquid solvent generating solvent vapor that is used as a part of the cleaning or drying cycle.

Water layer means a layer of water that floats above the denser solvent and provides control of solvent emissions. In many cases, the solvent used in batch cold cleaning machines is sold containing the appropriate amount of water to create a water cover.

Working mode means the time period when the solvent cleaning machine is actively cleaning parts.

Working-mode cover means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings from outside air disturbances while parts are being cleaned in the cleaning machine. A cover that is used during the working mode is opened only during parts entry and removal. A cover that meets this definition can also be used as an idling-mode cover if that definition is also met.

Section III. Emission Limitation

A. The Permittee shall not use more than 8,830 pounds per year (731 gals) of Trichloroethylene (TCE) in the batch vapor cleaning machine, Equipment ID #581, per rolling 12-month period. [40 CFR 63.464(a)(1)(ii), PCC 17.11.120.A.3.a] [Material Permit Condition]

Section IV. Batch Vapor Cleaning Machine Alternative Standards Elected by Permittee. [40 CFR 63.464]

A. The Permittee shall comply with the following requirements.

   (i) Maintain a log of solvent additions and deletions for the solvent cleaning machine. [40 CFR 63.464(a)(1)(i)]

   (ii) Ensure that the emissions from the batch solvent cleaning machine are equal to or less than the applicable emission limit presented in Table 5 of this Category as determined using the procedures in section V.B of this Category. [40 CFR 63.464(a)(1)(ii)]

<table>
<thead>
<tr>
<th>TABLE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMISSION LIMITS FOR BATCH VAPOR SOLVENT CLEANING MACHINES WITH A SOLVENT/AIR INTERFACE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solvent cleaning machine</th>
<th>3-month rolling average monthly emission limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch vapor solvent cleaning machine, Equipment ID #581</td>
<td>736 lbs/month (334.5 kg/month)</td>
</tr>
</tbody>
</table>

B. The Permittee shall demonstrate compliance with the 3-month rolling average monthly emission limit on a monthly basis as described in section V.A and V.B (Test Methods) of this Category.

C. If the 3-month rolling average emission limit (736 lbs) exceeds the limit in Table 5 above, an exceedance has occurred. All exceedances shall be reported as required in section VIII.B (Reporting Requirements) of this Category.
Section V. Test Methods

A. The Permittee shall, on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in paragraph C of this Section. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations. [40 CFR 63.465(b)]

B. The Permittee shall, on the first operating day of the month, comply with the requirements specified in paragraphs 1 through 3 of this Section. [40 CFR 63.465(c)]

1. Using the records of all solvent additions and deletions for the previous monthly reporting period required under section IV.A, determine solvent emissions (Ei) using Equation 2 for cleaning machines with a solvent/air interface.

\[
E_i = \frac{S_{Ai} - L_{Si} - S_{SR_i}}{A_{REA_i}} 
\]  
(Equation 2)

where:

\(E_i\) = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per square meter of solvent/air interface area per month).

\(S_{Ai}\) = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

\(L_{SR_i}\) = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

\(S_{SR_i}\) = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph B.2.(2) of this Section, during the most recent monthly reporting period i, (kilograms of solvent per month).

\(A_{REA_i}\) = the solvent/air interface area of the solvent cleaning machine (square meters).

2. Determine \(S_{SR_i}\) using the method specified in paragraph B.2.(i) or B.2.(ii) of this Section.

(i) From tests conducted using EPA reference method 25d.

(ii) By engineering calculations included in the compliance report.
3. Determine the monthly rolling average, EA, for the 3-month period ending with the most recent reporting period using Equation 4:

\[ EA_i = \frac{\sum_{j=1}^{3} E_i}{3} \]  

(Equation 4)

Where:

- \( EA_i \) = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).
- \( E_i \) = halogenated HAP solvent emissions for each month \( j \) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area).

\( j = 1 \) = the most recent monthly reporting period.
\( j = 2 \) = the monthly reporting period immediately prior to \( j = 1 \).
\( j = 3 \) = the monthly reporting period immediately prior to \( j = 2 \).

Section VI. Monitoring Procedures

[40 CFR 63.466]

A. The Permittee shall demonstrate compliance with the product usage limitation requirement in section III of this Category by recording (within 10 days of the end of the month) the following:

1. The inventory/usage of Trichloroethylene (TCE) used each month.

2. Yearly totals of Trichloroethylene (TCE) used for the most recent 12-consecutive month period. This shall be kept by adding the totals from section VI.A.1 (above) to the record of the previous 11 consecutive months.

Section VII. Recordkeeping Requirements

[40 CFR 63.467.c]

A. The Permittee shall maintain records specified in paragraphs VII.A.1 through VII.A.3 of this Category either in electronic or written form for a period of 5 years.

1. The dates and amounts of solvent that are added to the solvent cleaning machine.

2. The solvent composition of wastes removed from cleaning machines as determined using the procedure described in section V.B.2 of this Category.

3. Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

B. The Permittee shall keep the following records:

1. The inventory/usage of Trichloroethylene (TCE) used each month.

2. Yearly totals of Trichloroethylene (TCE) for the most recent 12-consecutive month period.
Section VIII. Reporting Requirements

A. The Permittee shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs VIII.A.1 through VIII.A.3 of this Category. [40 CFR 63.468.g]

1. The size and type of each unit subject to this subpart (solvent/air interface area).
2. The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.
3. The 3-month, monthly rolling average solvent emission estimates calculated each month using the method as described in section V.B of this Category.

B. The Permittee shall submit an exceedance report to the Control Officer semiannually for Equipment ID 581 except when, the Control Officer determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under Condition VIII.C of this category is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs VIII.B.1 and VIII.B.2 of this Category. [40 CFR 63.468(h)]

1. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
2. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

C. If the Permittee is required to submit an exceedance report on a quarterly (or more frequent) basis, the Permittee may reduce the frequency of reporting to semiannual if the conditions in paragraphs VIII.C.1 through VIII.C.3 of this Category are met. [40 CFR 63.468(i)]

1. The Permittee has demonstrated a full year of compliance without an exceedance.
2. The Permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in subpart A (General Provisions) and in this subpart.
3. The Administrator does not object to a reduced frequency of reporting for the affected source as provided in the following paragraph:

[40 CFR 63.468 (i)(3) and 40 CFR 63.10 (c)(3)(iii) of Subpart A (General Provisions).]

The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the Control Officer in writing of his or her intention to make such a change and the Control Officer does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Control Officer may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Control Officer to make a judgment about the source's potential for noncompliance in the future. If the Control Officer disapproves the owner or operator's request to reduce the frequency of reporting, the Control Officer will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Control Officer to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
D. The Permittee requesting an equivalency determination, as described in section IX (Equivalent Test Methods of Control) of this Category shall submit an equivalency request report to the Administrator. For existing sources, this report must be submitted to the Control Officer no later than June 3, 1996. For new sources, this report must be submitted and approved by the Administrator prior to startup. [40 CFR 63.468(k)]

E. The Permittee shall retain records of all required monitoring and support information for at least 5 years from the date of the monitoring sample, measurement or report. Support information includes copies of all reports required by the permit. [PCC 17.13.020.4.b]

Section IX. Equivalent Methods of Control

A. Upon written application, the Control Officer may approve the use of equipment or procedures after they have been satisfactorily demonstrated to be equivalent, in terms of reducing emissions of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform to the atmosphere, to those prescribed for compliance within a specified paragraph of this subpart. The application must contain a complete description of the equipment or procedure and the proposed equivalency testing procedure and the date, time, and location scheduled for the equivalency demonstration. [40 CFR 63.469]

Section X. Implementation and Enforcement

A. This Category can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local (Pima County), or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local (Pima County), or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart.

B. In delegating implementation and enforcement authority of this subpart to a State, local (Pima County), or Tribal agency under Subpart E (Approval of State Programs and Delegation of Federal Authorities ) of 40 CFR Part 63, the authorities contained in paragraph X.C of this subsection are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local (Pima County), or Tribal agency.

C. The authorities that cannot be delegated to State, local (Pima County), or Tribal agencies are as specified in paragraphs C.1 through 4 of this Section.

1. Approval of alternatives to the requirements in section III, and section IV of this Category. Use the procedures in section IX (Equivalent Methods of Control) of this Category to request the use of alternative equipment or procedures.

2. Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

3. Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

4. Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.
CATEGORY 4

NEW AND EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS FOR SURFACE COATING AND SOLVENT DEGREASING/CLEANING ACTIVITIES

Section I. Surface Coating and Solvent Degreasing/Cleaning Operations [PCC 17.16.400.C]

A. Spray Paint Operations

1. The Permittee shall not conduct any spray paint operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than ninety-six percent of the overspray. [PCC 17.16.400.C.1] [Material Permit Condition]

2. The Permittee is prohibited from performing paint stripping operations that involve the use of methylene chloride (MeCl, CAS # 75092), and except for facility maintenance, the Permittee is prohibited from conducting any spray application of coatings that contain target Hazardous air Pollutants (HAP) to metal or plastic parts or products, without applying for a permit revision as provided in section V.A of this Category and submitting an Initial Notification in accordance with 40 CFR Part 63, Subpart HHHHH to the Control Officer. For the purpose of this provision “a target HAP containing coating” means a spray applied coating that contains compounds of Chromium (Cr), Lead (Pb), Manganese (Mn), Nickel (Ni), or Cadmium (Cd) as defined in 40 CFR 63.11180. [PCC 17.16.530.B.111, 40 CFR 63.11169, & 40 CFR 63.11180]

B. Surface Coating Operations (includes spray paint operations)

A facility engaged in the surface coating of miscellaneous metal parts and products may not operate a coating application system subject to section I.D of this Category that emits volatile organic compounds in excess of any of the following: [PCC 17.16.400.C.5]

1. 4.3 pounds per gallon (0.5 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies clear coatings.

2. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to one hundred ninety-four degrees Fahrenheit (ninety degrees centigrade).

3. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings.

4. 3.0 pounds per gallon (0.36 kilograms per liter) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.

5. If more than one emission limitation in section I.D.2 of this Category applies to a specific coating, then the least stringent emission limitation shall be applied.
### C. Solvent Degreasing/Cleaning Operations

Solvent degreasing and cleaning operations shall comply with the general materials handling standards in section I.B of Category 2. In addition, all VOC emissions from solvent washings shall be considered in the emission limitations in section I.D.2 of this Category, unless the solvent is directed into containers that prevent evaporation into the atmosphere. For the purpose of this provision, Solvent degreasing or cleaning shall mean “the removal of loosely held uncured adhesives, uncured ink, uncured coatings and contaminants which include dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas using a solvent that contains two percent by weight of any regulated air pollutant.” [PCC 17.16.400.A &17.16.400.C.7]

### D. Architectural Coating Operations

1. The Permittee shall not do either of the following: [PCC 17.16.400.C.2]
   a. Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
   b. Thin or dilute any architectural coating with a photochemically reactive solvent.

2. For purposes of section I.D.1 of this Category, a photochemically reactive solvent shall be any solvent with an aggregate of more than twenty percent of its total volume composed of the chemical compounds classified in section I.D.2.a through c of this Category, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent: [PCC 17.16.400.C.3]
   a. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent.
   b. A combination of aromatic compounds with eight or more carbon atoms to the molecule, except ethylbenzene: eight percent.
   c. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: twenty percent.

3. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in section I.D.2.a through c of this Category, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents. [PCC 17.16.400.C.4]

### Section II. Abrasive Blasting Operations [PCC 17.16.100.D]

Emissions from a sandblasting or other abrasive blasting operation shall be effectively controlled by applying water to suppress visible emissions (wet blasting), enclosing the operation, or use of other equivalently effective controls.
CATEGORY 5

FOSSIL FUEL FIRED INDUSTRIAL AND COMMERCIAL EQUIPMENT
(BOILERS and HEATERS)

The provisions of this Category are applicable to boilers, heaters, and other fuel fired equipment identified on the equipment list in Table 2 of Attachment 2. In addition to the following provisions, the general provisions of 40 CFR Part 60 and 63, Subpart A apply to affected steam generating units (boilers) as applicable. All Provisions of this Category are locally enforceable unless otherwise noted. [PCC 17.16.010.B]

Section I. EMISSION LIMITATIONS AND STANDARDS [PCC 17.13.020.A.2]

A. Fuel Limitations

The Permittee shall burn only the following fuels in each boiler, heater, or other fuel fired equipment listed in Table 2 of Attachment 2, subject to the following limitations: [PCC 17.11.190.B & PCC 17.11.120.A.3.a]

(Material Permit Conditions)

1. Natural Gas

   a. There are no operating hours or fuel limitations for equipment, boilers or heaters when burning natural gas. For the purpose of this permit, Natural gas means: A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835; or a mixture of hydrocarbons that maintains a gaseous state at ISO conditions (i.e., a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals), additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot); or propane or propane-derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8. [40 CFR 63.11237]

B. Opacity Standard

Boilers, heaters, and other fuel fired equipment listed in Table 2 of Attachment 2 shall not exceed the facility wide opacity standards in section I.F of Category 2. [PCC 17.16.165, PCC 17.16.130.B]

Section II. MONITORING AND RECORDKEEPING REQUIREMENTS [PCC 17.13.020.A.3]

Follow the monitoring and recordkeeping requirements in sections II and III of Category 2.

Section III. REPORTING REQUIREMENTS [PCC 17.13.020.A.5]

Follow the reporting requirements in sections IV.A through C of Category 2.

Section IV. TESTING REQUIREMENTS [PCC 17.11.160, PCC 17.11.210 & PCC 17.20.010]

Comply with the testing requirements in section VI of Category 2 of this permit.
CATEGORY 6  
SPECIFIC APPLICABILITY PROVISIONS

Section I. Permitted Facility Sources

The Specific Conditions in this permit apply to the following source categories, affected facilities, equipment, emission sources, installations, activities and operations at the facility.

A. Facility-Wide Operations

Except as provided in I.D of this Category, the following provisions apply to facility-wide operations (Category 2) and to all sources of air contaminants operating at the facility: Voluntary Limitations, general control standards, materials handling standards, odor limiting standard, opacity standards, visibility limiting standard, and asbestos requirements for demolition and renovation activities.

[Locally Enforceable Conditions]

B. Fossil-Fuel Fired Industrial and Commercial Equipment (Boilers and Heaters)

1. This Category applies to existing industrial and commercial installations which are less than seventy-three megawatts capacity (two hundred fifty million British thermal units per hour); but in the aggregate on any premises are rated at greater than five hundred thousand British thermal units per hour (0.146 megawatts); and in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials.

2. Voluntary Requirements

[PCC 17.11.190.B]  
[Voluntary and Material Permit Conditions]

a. Applicable boilers identified in Table 2 of Attachment 2 that comply with Category 2 of this permit shall be considered to be compliant with the applicable requirements PCC 17.16.165.

[40 CFR 60.42c(d), 40 CFR 60.43c(e)(4), & 40 CFR 60.48(g) & PCC 17.16.165]

b. Should the Permittee desire to fire fuels in a boiler that do not meet the fuel limitations in Category 5 of this permit, the Permittee shall submit a significant revision in accordance with V.A of Section 2 of this permit.

[40 CFR 60.43c(e)(1), 40 CFR 63.1194(d), 40 CFR 63.11201(a), & Table 2, to NESHAP Subpart JJJJJ]

C. Local (New and Existing) Stationary Source Performance Standards

Local performance standards apply to the following facilities or operations: Fossil fuel fired industrial and commercial equipment, each internal combustion engine, and each unclassified source.

[Locally Enforceable Conditions]

D. Exempt Sources

The Specific Conditions contained in this air quality permit shall not apply to motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations, unless their operation without a permit would result in a violation of the Act.

[PCC 17.11.090.C.3]
GENERAL CONDITIONS

I. COMPLIANCE WITH PERMIT CONDITIONS

A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.

B. The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. The report shall be in 2 parts as specified below:

1. Notification by telephone, facsimile or email within 24 hours of the time the Permittee first learned of the occurrence of excess emission that includes all available information from 17.13.190.B. The number to report excess emissions is 520-724-7400. The facsimile number is 520-838-7432. The email to report excess emissions is Air.Notices@pima.gov

2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under I.B.1 above. Notifications should be mailed or e-mailed to:

   PDEQ 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701
   Air.Notices@pima.gov

C. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. The permit does not convey any property rights of any sort, or any exclusive privilege to the permit holder.

E. The Permittee shall pay fees to the Control Officer pursuant to PCC 17.13.240.

II. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to PCC 17.13.150. 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.

III. DUTY TO PROVIDE INFORMATION

A. 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, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records to the Control Officer along with a claim of confidentiality.

B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

IV. SEVERABILITY CLAUSE

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.
Requirements Specifically Identified as Applicable:

Code of Federal Regulations, Title 40 Part 60

Subpart A: General Provisions.
60.7(a)(1), 60.7(a)(3), 60.7(a)(4), 60.7(b), 60.7(f), 60.7(f)(3), 60.8(a), 60.8(b), 60.8(c), 60.8(d), 60.8(e),
60.8(f), 60.11(d), 60.11(g), 60.12, and 60.15

Code of Federal Regulations, Title 40 Part 63

Subpart T National Emission Standards for Halogenated Solvent Cleaning
Appendix A to Subpart T of Part 63 – Test of Solvent Cleaning Procedures

40 CFR, Part 63 Standards of Performance for New Stationary Sources

Subpart A General Provisions
Appendix A Test Methods
Appendix B General Provisions Applicability to Subpart T

Pima County Code Title 17, Chapter 17.12 – Permits and Permit Revisions

Article I – General Provisions

17.11.010 Statutory Authority
17.11.020 Planning, Constructing, or Operating Without a Permit
17.13.190 Reporting requirements
17.11.160 Test methods and procedures
17.11.210 Performance tests
17.11.060 Permit Display or Posting

Article II – Individual Source Permits

17.13.010 Permit application processing procedures for Class II and Class III permits
17.13.020 Permit contents for Class II and Class III permits
17.11.190 Permits containing synthetic emission limitations and standards
17.13.100 Facility Changes that require a permit revision
17.13.110 Procedures for certain changes that do not require a permit revision Class II or Class III
17.13.130 Minor Permit Revision
17.13.140 Significant Permit Revision
17.13.150 Permit Reopenings – Revocation and reissuance – Termination
17.11.120 Material permit condition

Article VI – Individual Source Permits

17.13.240 Fees related to Class II and Class III permits
Pima County Code Title 17, Chapter 17.16 – Emission Limiting Standards

Article I – General Provisions

17.16.010 Local rules and standards; Applicability of more than one standard
17.16.020 Noncompliance with applicable standards
17.16.030 Odor limiting standards

Article II – Visible Emission Standards

17.16.040 Standards and applicability (includes NESHAP)
17.16.050 Visibility limiting standard

Article IV – New and Existing Stationary Source Performance Standards

17.16.130 Applicability
17.16.165 Standards of performance for fossil-fuel fired industrial commercial equipment
17.16.340 Standards of performance for stationary rotating machinery
17.16.430 Standards of performance for unclassified sources

Pima County Code Title 17, Chapter 17.20 – Emissions Source Testing and Monitoring

17.20.010 Source sampling, monitoring and testing
17.20.040 Concealment of emissions

Pima County Code Title 17, Chapter 17.24:

17.24.020 Recordkeeping for compliance determination
### Table 1 – Solvent Cleaning Machine (ref. Category 3)

<table>
<thead>
<tr>
<th>Equipment ID</th>
<th>Description</th>
<th>Manufacturer</th>
<th>Model</th>
<th>Solvent/Air Interface Area m² (ft²)</th>
<th>3-month Rolling Average Monthly Emission Limit Kg (lbs)</th>
<th>12-month Rolling Average Emission Limit Kg (lbs)</th>
<th>HAP Solvent</th>
<th>Serial Number</th>
<th>Manufacturer Year</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>581</td>
<td>Batch Vapor Engineered Degreaser</td>
<td>BACT 96X</td>
<td>2.23 (24)</td>
<td>334.5 (736)</td>
<td>4014 (8830)</td>
<td>TCE</td>
<td>BACT 96X</td>
<td>2013</td>
<td></td>
<td>90 Gallons</td>
</tr>
</tbody>
</table>

### Table 2 – Boilers, Heaters, & Other Fuel Fired Equipment (ref. Category 5)

<table>
<thead>
<tr>
<th>Description</th>
<th>MFR/Model</th>
<th>Serial Number/Unique ID</th>
<th>Maximum Rated Capacity BTU</th>
<th>Date of MFR</th>
<th>Date Installed</th>
<th>Allowable Fuels and Annual Limits</th>
<th>Applicability 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Gas (MMcf, hours, CF)</td>
<td>Fuel Oil (Gallons, hours, CF)</td>
<td>NSPS Subpart</td>
<td>NESHAP Subpart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#3 Boiler</td>
<td>Parker 70 HP</td>
<td>64762</td>
<td>2,940,000</td>
<td>2021</td>
<td>2021</td>
<td>Unlimited</td>
<td>N/A</td>
</tr>
<tr>
<td>#5 Boiler</td>
<td>Parker 70 HP</td>
<td>26543</td>
<td>2,940,000</td>
<td>1981</td>
<td>1981</td>
<td>Unlimited</td>
<td>N/A</td>
</tr>
<tr>
<td>#6 Boiler</td>
<td>Parker 70 HP</td>
<td>49158</td>
<td>2,940,000</td>
<td>1998</td>
<td>1998</td>
<td>Unlimited</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporator</td>
<td>R.E. Darling</td>
<td>37497</td>
<td>TBD</td>
<td>2022</td>
<td>2022</td>
<td>Unlimited</td>
<td>N/A</td>
</tr>
<tr>
<td>Oven</td>
<td>Wisconsin</td>
<td>47670298</td>
<td>700,000</td>
<td>N/A</td>
<td>N/A</td>
<td>Unlimited</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table 3

<table>
<thead>
<tr>
<th>Description</th>
<th>Serial Number / Mfg Yr</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber Mixing Operation</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Engineering Solvent Recovery Still</td>
<td>E15/2013</td>
<td>30 Gallons</td>
</tr>
<tr>
<td>AAF Dust Collector</td>
<td>OP03-0018</td>
<td>N/A</td>
</tr>
<tr>
<td>AAF Dust Collector</td>
<td>CP110011</td>
<td>N/A</td>
</tr>
<tr>
<td>Rees Bag House on Sand Blaster</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Farr Dust Collector</td>
<td>9212J0</td>
<td>N/A</td>
</tr>
<tr>
<td>Impco Bag House</td>
<td>730917-1</td>
<td>N/A</td>
</tr>
<tr>
<td>2 Grit Blast Cabinets</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Grit Blast Cabinet</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Grit Blast Unit (Self-Contained)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Solvent/ Buffing room (Vented Outside)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2nd Solvent/ Buffing room (Vented Outside)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1 The Permittee must submit a significant permit revision and meet applicable NESHAP subpart JJJJJJ work practices (tune-ups), notification, and reporting requirements for boilers that switch to fuel oil use and become subject to the Subpart JJJJJJ in the oil firing subcategory as defined in 40 CFR 63.11237.
## INSIGNIFICANT ACTIVITIES

The following equipment or operations have been determined by the control officer, because of their size or production rate, to be de minimus emission sources and insignificant or trivial activities in accordance with PCC 17.04.340.A.(114)

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Rated Capacity</th>
<th>Fuels Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscaping, building maintenance, or janitorial services.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gasoline storage tanks; provided such storage tanks are equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions in accordance with PCC 17.16.230.B.</td>
<td>≤ 10,000 gallons</td>
<td>Gasoline</td>
</tr>
<tr>
<td>Diesel or Fuel Oil Storage Tanks.</td>
<td>≤ 40,000 gallons each</td>
<td>Diesel</td>
</tr>
<tr>
<td>Batch mixers.</td>
<td>≤ 5 cubic feet</td>
<td>-</td>
</tr>
<tr>
<td>Wet sand and gravel production facilities whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any nonmetallic minerals.</td>
<td>≤ 200 tons/hour</td>
<td>-</td>
</tr>
<tr>
<td>Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass or wood.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Powder Coating Operations</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets, and IC engine-driven water pumps used only for emergency replacement or standby service.</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:** Portable or temporary IC engines or other non-road engines that operate, or are planned for operation, at a fixed location for more than 12 months are subject to stationary source permitting requirements. Portable or temporary IC located at a facility, may be required to keep records showing when the sources are transferred to or from the facility, or moved to alternate locations at the facility in order to establish that the sources are not stationary IC engines.

| Lab equipment used exclusively for chemical and physical analyses.          | -                      | -                   |
| Trivial activities as provided in PCC 17.04.340.A.237 a through xx.         | -                      | -                   |
## ATTACHMENT 4
### EMISSIONS DISCHARGE OPACITY LIMITING STANDARDS

Table 17.16.040: EMISSIONS-DISCHARGE OPACITY LIMITING STANDARDS

<table>
<thead>
<tr>
<th>Type of Source</th>
<th>Instantaneous Opacity Measurements</th>
<th>Maximum Allowable Average Opacity, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required No. (For a Set)</td>
<td>Excluded No. (Highest Values)</td>
</tr>
<tr>
<td>Asbestos-Containing Operation</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Cold Diesel Engines</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Loaded Diesel Engines</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>Incinerators</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>Portland Cement Plants</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Other Sources</td>
<td>25</td>
<td>0</td>
</tr>
</tbody>
</table>

1. An asbestos mill, manufacturing or fabrication operation which uses asbestos as a raw material, or spraying operation which sprays materials containing more than 1% asbestos by weight.

2. Applicable to the first 10 consecutive minutes after starting up a diesel engine.

3. Applicable to a diesel engine being accelerated under load.

4. Applicable to kiln, clinker cooler, and other process equipment.

5. Any source not otherwise specifically covered within this table, unless otherwise specifically covered in this chapter.