

**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Program**

33 N. Stone Avenue • Tucson, • Arizona 85701 • Phone: (520) 243-7400

AIR QUALITY OPERATING PERMIT

(As required by Title 17.12, Article II, Pima County Code)

ISSUED TO

LOEWS TUCSON HOTEL RESORT, INC.

**7000 N. RESORT DRIVE
TUCSON, ARIZONA 85750**

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

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

PERMIT NUMBER **1353**

PERMIT CLASS **II**

ISSUED: **October 11, 2011**

EXPIRES: **October 10, 2016**



Mukonde Chama, P.E., Air Permits Supervisor, PDEQ

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PERMIT SUMMARY

Loews Tucson Hotel Resort is located at 7000 North Resort Drive, Tucson Arizona. The emission sources at the facility include a dry cleaning machine, various natural gas fired boilers and a single diesel fired emergency generator. The boilers are used to supply steam and heating hot water and the generator is used for backup electrical power in the case of an emergency or power outage.

Emissions result from the burning of fuel in the boilers and generators as well as use of the dry cleaning system. The primary air pollutants emitted from the source are PM₁₀, NO_x, SO_x, CO, VOCs and HAPs and the most significant of these are the nitrogen oxides. The resort has one diesel fuel storage tank that has been classified as an insignificant activity.

The source is a true minor source for all air pollutants. The annual allowable Potential to Emit for individual pollutants, from all resort operations is shown in the Table below. These numbers are for reference purposes only and are not intended for direct enforcement unless specified otherwise in the permit.

Source	Uncontrolled Potential To Emit (Tons/yr)					
	NO _x	SO _x	CO	VOC	PM ₁₀	HAP _s
Facility Wide Emissions	18.9	0.9	7.5	1.5	1.3	0.1

All requirements of this permit that are Federally Enforceable or Material Permit Conditions are specifically indicated as such. All conditions in Category A are Federally Enforceable.

SPECIFIC CONDITIONS

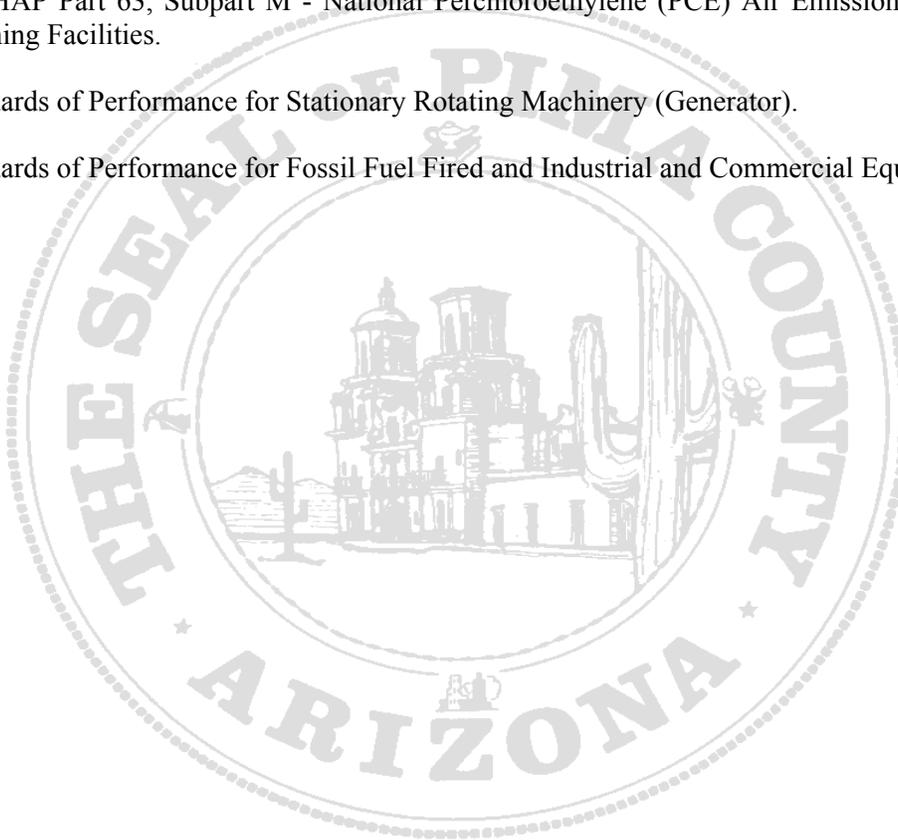
I. APPLICABILITY

This is an existing Class II, true minor stationary source for all pollutants. The facility operates a diesel-fired generator (100 hp), six natural gas-fired boilers (ranging from 1,350,000 BTU/hr to 3,780,000 BTU/hr), and a dry cleaning system (dry-to-dry machine consuming <2100 gallons per year PERC).

The operation of the dry cleaning unit results in the facility being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Part 63, Subpart M - National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.

The affected facilities are grouped into the following emission categories:

- A. NESHAP Part 63, Subpart M - National Perchloroethylene (PCE) Air Emission Standards for Dry Cleaning Facilities.
- B. Standards of Performance for Stationary Rotating Machinery (Generator).
- C. Standards of Performance for Fossil Fuel Fired and Industrial and Commercial Equipment (Boilers).



II. SPECIFIC CONDITIONS:

Category A – Dry Cleaning System

This category applies to the dry-to-dry dry cleaning system identified in Table 1 of Attachment 1 for which installation, relocation or reconstruction was commenced on or after December 9, 1991, and before or on December 21, 2005; and which are located at a facility with a facility-wide, total yearly perchloroethylene consumption of less than, or equal to, 2100 gallons/year.

A. Required Emissions Control Device (Refrigerated Condenser)

1. The Permittee shall route the air-Perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or equivalent control device. [40 CFR 63.322(a)]
2. Each refrigerated condenser used for the purpose of complying with paragraph II.A.1.a of this Category shall:
 - a. Be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating.
 - b. Be monitored according to II.C.1 or II.C.2 of this Category, and;
 - c. Prevent air drawn into the dry cleaning machine when the door is open from passing through the refrigerated condenser. [40 CFR 63.322(e)]

B. Standards for Operating Dry Cleaning Machinery

1. The Permittee shall operate the dry cleaning system according to the manufacturer's specifications and recommendations. [40 CFR 63.322(d)]
2. The Permittee shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine and shall keep the door closed at all other times. [40 CFR 63.322(e)]
3. The Permittee shall store all PCE and wastes that contain PCE in solvent tanks or solvent containers with no perceptible leaks. The exception to this requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still. [40 CFR 63.322(j) & 17.16.400.A]
4. The Permittee shall drain all cartridge filters in their housing, or other sealed container, for a minimum of 24 hours, or shall treat such filters in an equivalent manner, before removal from the dry cleaning facility. [40 CFR 63.322(i)]

C. Monitoring of Emissions Control Device (Refrigerated Condenser)

Each refrigerated condenser used to comply with II.A.1 of this Category, shall be monitored by the Permittee for the following parameters on a weekly basis: [40 CFR 63.323(a)]

1. The refrigeration system high pressure and low pressure during the drying phase to determine if they are in the range specified in the manufacturer's operating instructions; or [40 CFR 63.323(a)(1)(i)]

2. If the machine is not equipped with refrigeration system pressure gauges, the temperature of the air-Perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on each dry cleaning machine with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F) before the end of the cool-down or drying cycle while the gas-vapor is flowing through the condenser; and [40 CFR 63.323(a)(1)(ii)]
3. The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of ± 1.1 °C (± 2 °F). [40 CFR 63.323(a)(1)(ii)]

D. Maintenance, Leak Detection, and Repair

1. General Maintenance Requirement

The Permittee shall maintain the dry cleaning system according to the manufacturer's specifications and recommendations. [40 CFR 63.322(d)]

2. Perceptible Leak Checks

The Permittee shall inspect the system **weekly** for *perceptible leaks* while the dry cleaning system is operating. (*Perceptible leaks* are PCE vapor or liquid leaks that are obvious from the odor of PCE, visual observation, such as pools or droplets of liquid, or the detection of gas flow by passing the fingers over the surface of equipment.) Inspection with a halogenated leak detector or PCE gas analyzer also fulfills the requirement for inspection of *perceptible leaks*. The following components shall be inspected: [40 CFR 63.321, & 40 CFR 63.322(k)]

- a. Hose and pipe connections, fittings, couplings, and valves;
- b. Door gaskets and seatings;
- c. Filter gaskets and seatings;
- d. Pumps;
- e. Solvent tanks and containers;
- f. Water separators;
- g. Muck cookers;
- h. Stills;
- i. Exhaust dampers;
- j. Diverter valves; and
- k. All Filter housings.

3. Vapor Leak Checks

The Permittee shall inspect the components listed in II.D.2.a through k of this Category for *vapor leaks* **monthly** while the component is in operation. (*Vapor leaks* are emissions of PCE vapor of a concentration exceeding 25 parts per million by volume—50 parts per million by volume as methane—as indicated by a halogenated hydrocarbon detector or PCE gas analyzer.) [40 CFR 63.322(o) & 40 CFR 63.321]

- a. Inspections shall be conducted using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The operator shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery. [40 CFR 63.322(o)(1)(i)]
- b. Any inspection conducted according to this paragraph shall satisfy the requirements to conduct an inspection for perceptible leaks under II.D.2 of this Category. [40 CFR 63.322(o)(1)(iii)]

4. Repair Requirements for Leaks Detected

The Permittee shall repair all leaks detected during the inspections required by II.D.2 or II.D.3 of this Category within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within 2 working days of detecting such a leak. Such repair parts shall be installed within 5 working days after receipt. [40 CFR 63.322(m)]

5. Repair Requirements for Faulty Emissions Control Devices (Refrigerated Condenser)

If parameter values monitored under paragraph II.A.2.b of this Category do not meet the values specified in paragraph II.C.1. or II.C.2 of this Category, adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. [40 CFR 63.322(n)]

6. The Permittee shall keep records of all inspections, parts orders and repairs conducted, as specified in section II.E.2 of this Category. [PCC 17.12.185.A.4]

E. Recordkeeping

1. Emissions Control Device (Refrigerated Condenser) Monitoring Records

The Permittee shall keep a log of the following information and maintain such information on-site and show it upon request for a period of 5 years, as applicable:

- a. The date and refrigeration high pressure and low pressure monitoring results, as specified in paragraph II.C.1 of this Category; or [PCC 17.12.185.A.4]
- b. The date and temperature sensor monitoring results, as specified in paragraph II.C.2 of this Category if no refrigeration system pressure gauges are installed. [40 CFR 63.324(d)(5)]

2. Inspection and Repair Records

The Permittee shall keep a log of the following information and maintain such information on-site and show it upon request for a period of 5 years:

- a. The dates when the dry cleaning system components are inspected for leaks, as specified in II.D.2 and II.D.3 of this Category, and the name or location of the dry cleaning system components where leaks are detected; [40 CFR 63.324(d)(3)]
- b. The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with D.4 and D.5 of this Category. [40 CFR 63.324(d)(4)]

3. PCE Consumption Calculations and Records

The Permittee shall keep all receipts of PCE purchases and a log of the following information (*including* all calculations.) The Permittee shall maintain such information on-site and show it upon request for a period of 5 years:

- a. The Permittee shall, on the first working day of each month record the total volume of all PCE purchases made in the *previous month* for the entire facility (if no PCE was purchased in a given month, the record shall record zero gallons for that month.) [40 CFR 63.324(d)]

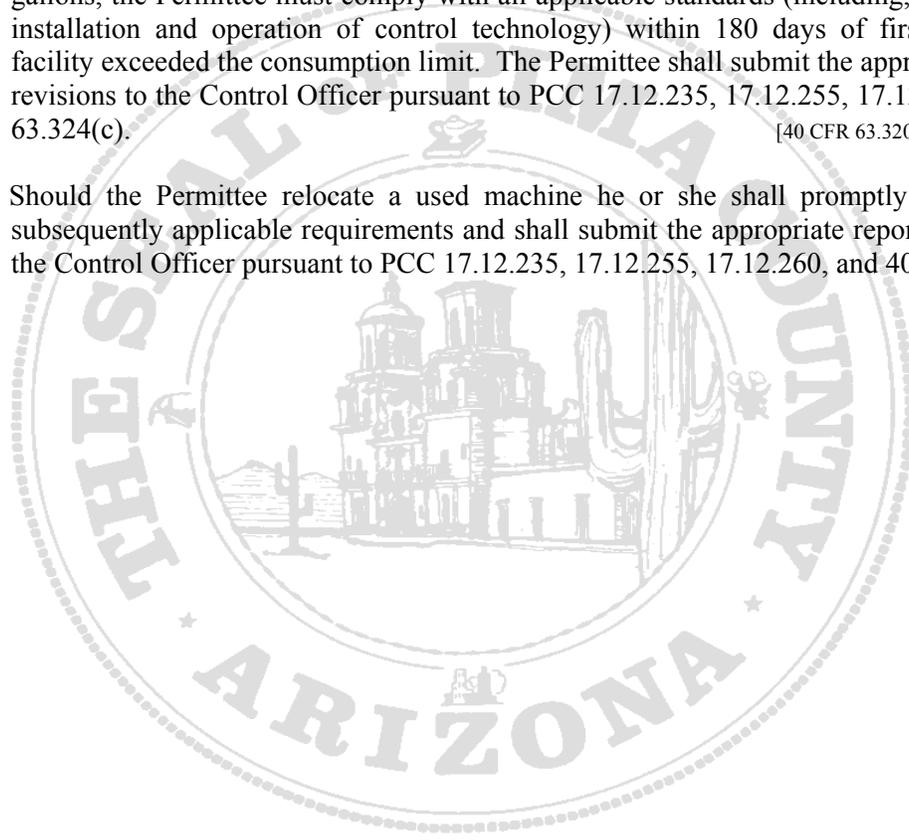
- b. The Permittee shall, on the first working day of each month, sum and record the volume of all PCE purchases made *in each of the previous 12 months* for the entire facility, as recorded in the log described in E.3.a of this Category (if no PCE was purchased in a given month, the record shall record zero gallons for that month). The total sum recorded in this manner is the yearly PCE consumption for the permitted facility. [40 CFR 63.323(d)]

4. Operating Manuals and Design Specifications

The Permittee shall retain on-site a copy of the design specifications and the operating manuals for each dry cleaning system located at the dry cleaning facility. [40 CFR 63.324(e)]

F. Reporting Requirements

1. If the total yearly perchloroethylene consumption of the dry cleaning facility exceeds 2100 gallons, the Permittee must comply with all applicable standards (including, but not limited to, installation and operation of control technology) within 180 days of first determining the facility exceeded the consumption limit. The Permittee shall submit the appropriate reports and revisions to the Control Officer pursuant to PCC 17.12.235, 17.12.255, 17.12.260, and 40 CFR 63.324(c). [40 CFR 63.320(i) & PCC 17.12.185.A.5]
2. Should the Permittee relocate a used machine he or she shall promptly comply with any subsequently applicable requirements and shall submit the appropriate reports and revisions to the Control Officer pursuant to PCC 17.12.235, 17.12.255, 17.12.260, and 40 CFR 63.324(b). [PCC 17.12.185.A.5]



II. SPECIFIC CONDITIONS: (continued)

Category B – Generator

The provisions of this category are applicable to the generator in Table 2 of Attachment 1.

A. Operational Limitation

[PCC 17.12.185.A]

1. The Permittee shall not operate the generator(s) for more than the number of hours per year allowed in Table 2 of Attachment 1 on a rolling twelve (12) month total basis.
2. The Permittee shall record the monthly operating hours at the close of each month and recalculate a rolling twelve (12) month total. All records shall be maintained for five years.

B. Opacity Standard

[PCC 17.12.185.A]

1. The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than ten consecutive seconds that exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [PCC 17.16.340.E]
2. The Permittee shall not cause or permit the effluent from a single emission point, multiple emission point, or a fugitive emissions source to have an average optical density equal to or greater than 60 percent when a cold diesel engine is started or when a diesel engine is accelerated under load as measured in accordance with EPA Method 9. [PCC 17.16.040]
3. The Permittee shall conduct a visible emissions check on the exhaust stack of each generator at least quarterly while the generator is operating. For the purposes of this permit, a visible emission check is verification that abnormal emissions are not present at the generator stack. The Permittee shall record the date and time of the check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required). All records shall be maintained for five years.
4. When requested by the Control Officer, the Permittee shall perform EPA Method 9 visible emissions observations on the generator(s) to demonstrate compliance with the opacity standard.

C. Fuel Limitation

[PCC 17.12.185.A]

- a. The Permittee shall burn only the specified fuel(s) allowed for each generator in Table 2 of Attachment 1. The Permittee shall not fire high sulfur oil ($\geq 0.90\%$ by weight). [PCC 17.12.190.B & PCC 17.16.340.H]
[Material Permit Condition]
- b. In order to demonstrate compliance with the fuel limitation required in II.C.a of this Category, the Permittee shall maintain records of fuel supplier specifications which verify the sulfur content of the fuel, piped and/or as delivered. All records shall be maintained for five years.

D. Additional Permit Conditions Effective May 3, 2013

Effective May 3, 2013, the generator in Table 2 of Attachment 1 will be subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines..

II. SPECIFIC CONDITIONS: (continued)

Category C – Boilers

The provisions of this category are applicable to the fuel burning equipment (boilers) in Table 3 of Attachment 1.

Emission Limits & Standards

A. Fuel Limitation

[PCC 17.12.185.A]

1. The Permittee shall burn only the specified fuel(s) allowed for the boiler(s) in Table 3 of Attachment 2. The Permittee shall not fire high sulfur oil ($\geq 0.90\%$ by weight).

[PCC 17.12.190.B & PCC 17.16.165.G]

[Material Permit Condition]

2. In order to demonstrate compliance with the fuel limitation required in II.A.1 of this Category, the Permittee shall maintain records of fuel supplier specifications which verify the fuel and sulfur content of the fuel, as delivered. All records shall be maintained for five years.

B. Opacity Limitation

1. The Permittee shall not cause or permit the effluent from a single emission point, multiple emission point, or fugitive emissions source to have an average optical density equal to or greater than twenty percent (20%).

[PCC 17.16.040.A]

2. The Permittee shall conduct a visible emissions check on the exhaust stack of the boilers at least quarterly while the boilers are operating. For the purposes of this permit, a visible emissions check is verification that abnormal emissions are not present at the boiler stack. The Permittee shall record the date and time of the check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required). All records shall be maintained for five years.

3. When required by the Control Officer, the Permittee shall perform visible emissions observations in accordance with EPA Method 9, Appendix A in 40 CFR 60, on the boiler to demonstrate compliance with the opacity standard.

[PCC 17.16.040 & PCC 17.20.010]

III. FACILITY CHANGES (Applicable to all Categories A, B and C of this permit)

Should the Permittee desire to change the facility or operations in any way (including, but not limited to, addition of new equipment, modification of current equipment or usage of fuels not specified within this Permit,) the Permittee will first submit the proper notification and follow the required permit revision procedure pursuant to PCC 17.12.240, PCC 17.12.255, or PCC 17.12.260.

ADDITIONAL PERMIT CONDITIONS

I. COMPLIANCE WITH PERMIT CONDITIONS

[PCC 17.12.185.A.7.a & b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the 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: [PCC 17.12.185.A.5 & PCC 17.12.040]
1. Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emission that includes all available information pursuant to PCC 17.12.040.B. To report excess emissions call **520-243-7400** or fax to **520-838-7432**
 2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification in I.B.1 above. **Send to PDEQ 33 N. Stone Avenue, Ste. 700, Tucson, AZ 85701.**
- 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 17.12.400. [PCC 17.12.185.A.8 & PCC 17.12.400]

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

[PCC 17.12.185.A.7.c]

The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to PCC 17.12.270. 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

[PCC 17.12.165.G & PCC 17.12.185.A.7.e]

- 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

[PCC 17.12.185.A.6]

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.

Attachment 1 - Equipment List

TABLE 1: NSPS National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities

Equipment Type	Manufacture/ Model	Serial Number	Capacity (lbs/load)	Date of Construction/ Reconstruction/ Relocation	Source Classification	Control Technology	Allowable Annual Perchloroethylene Throughput (Gallons)
Dry Cleaning System (Dry-to Dry)	Realstar	RS323	36-M6- 385	02-18-1997	New Area Source	Refrigerated Condenser	< 2100

TABLE 2: Standards of Performance for Stationary Rotating Machinery

Type of Equipment	Manufacture	Model	Serial Number	Manufacture Date ²	Allowable Hours of Operation ¹	Capacity	Primary Fuel
Emergency Generator Set	Kohler Co	75R0Z71	145472	<1985	N/A	75 kW	Diesel

¹Allowable hours of operation for emergency generators are limited to maintenance testing and readiness checks. There is no limit on hours of operation during true emergencies.

²The most recent date of order, manufacture, reconstruction, or modification.

TABLE 3: Standards of Performance for Fossil Fuel Fired and Industrial and Commercial Equipment

Type of Equipment	Manufacture	Model	Serial Number	Date of Installation	Capacity	Primary Fuel
Boiler	Parker	T-2970	30963	1985	2,970,000 Btu/hr	Natural Gas
Boiler	Parker	T-2970	30964	1985	2,970,000 Btu/hr	Natural Gas
Boiler	Parker	90	30049	1985	3,780,000 Btu/hr	Natural Gas
Boiler	RBI	FW1500	080850641	2009	1,350,000 Btu/hr	Natural Gas
Boiler	RBI	FW1500	080850691	2009	1,350,000 Btu/hr	Natural Gas

Attachment 2 – Applicable Regulations

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

40 CFR Part 63 Subpart M: National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.

40 CFR Part 63 Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
(Compliance Date May, 3, 2013)

For Emergency Compression Ignition Engines. Existing Stationary Engine ≤ 500 HP Located at Area Sources of HAP constructed before 6/12/2006. See Attachment 3 of this permit for specific conditions.

Pima County Code (PCC) Title 17:

- 17.16.010 Local Rules and Standards – Applicability of More Than One Standard
- 17.16.040 Visible Emission Standards - Standards and Applicability (Includes NESHAP)
- 17.16.130.B Opacity Limitation
- 17.16.165.G Standards of Performance for Fossil-Fuel Fired Industrial and Commercial Equipment (Fuel Limitation)
- 17.16.340 Standards of Performance for Stationary Rotating Machinery

Attachment 3 - RICE NESHAP Summary of Requirements
(For Emergency Compression Ignition Engines)

Existing Stationary Engine ≤ 500 HP Located at Area Sources of HAP constructed before 6/12/2006

The emission limitations, monitoring, installation, collection, operation and maintenance requirements of this federal regulation are not effective until May 3, 2013. The Permittee will be required to submit a minor permit revision to incorporate the applicable federal conditions no later than May 3, 2012.

