

**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY**

**AIR PROGRAM**

**33 N. Stone Avenue, Suite 700 • Tucson, AZ 85701 • Phone: (520) 243-7400**

**AIR QUALITY OPERATING PERMIT**

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

**ISSUED TO**

**MISSION LINEN SUPPLY**

**301 S. PARK, AVE**

**TUCSON, AZ 85705**

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

THIS PERMIT ISSUED SUBJECT TO THE SPECIFIC AND ADDITIONAL CONDITIONS IDENTIFIED IN THIS PERMIT

PERMIT NUMBER **2144**

PERMIT CLASS **III**

ISSUED **June XX, 2014**

EXPIRES: **June xx, 2019**

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*Scott Porter, Environmental Quality Manager, PDEQ*

SIGNATURE, TITLE

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## Permit Summary

This operating permit is a renewal of the 5-yr permit issued to Mission Linen Supply. Mission Linen Supply owns and operates a Multi-Phase Extraction (MPE) and alternate Soil Vapor Extraction (SVE) system as well as a linen supply, uniform rental, and industrial laundering business at 301 S. Park Ave, Tucson AZ. The facility constitutes a **Class III, Synthetic Minor Source** of volatile organic compounds (VOC) and hazardous air pollutants (HAPS). The facility operates under the following industrial classifications:

- MPE/ SVE systems: SIC code: 1799 (NAICS 562910)
- Linen supply and Industrial Laundering Operations: SIC codes: 7213,7218 (NAICS 812331,812332)

### Background

The facility originally operated a soil vapor extraction unit with vapor-phase granular activated carbon under a portable source permit, issued by the Arizona Department of Environmental Quality (ADEQ), to clean up VOC contamination from the former dry cleaning facility. The extraction system was originally permitted by the Pima County Department of Environmental Quality on October 19, 2006. URS Corporation (URS) is the consultant for Mission Linen and operates the MPE and alternate SVE system on their behalf.

### MPE and Alternate SVE System

The MPE system is used for the extraction of the mixture of diesel fuel, groundwater, and soil vapor from the subsurface through a series of wells. After the liquid/vapor mixture has been extracted, the liquid stream (diesel and water) is separated from the vapor stream in the unvented Total Fluid Recovery Vessel (TFRV) upstream of the liquid ring blower. The vapor stream is pulled from the TFRV by the liquid ring blower. The liquid stream is transferred from the TFRV to an oil/water separator (OWS). The OWS is passively vented through a Granulated Activated Carbon (GAC) bed (Exhaust Stream #1). The vapor stream from the TFRV passes through the liquid ring blower and volatile organic compounds are removed by three GAC beds, in series. The treated vapor stream then passes through the Permanganate-Impregnated Zeolite Bead (PIZB) unit and is emitted to the atmosphere (Exhaust Stream #2). The installed air pollution control (APC) equipment utilized by the extraction system is necessary to control and reduce air emissions of HAPs and VOCs to permissible concentrations from the exhaust streams. The installed APC includes a Vapor phase Carbon Unit (VPC) and GAC beds to treat the VOC's, PCE, TCE and cis-1, 2-DCE from both exhaust streams (#1 and #2). An additional PIZB bed is used as a polisher downstream of the GAC beds in Exhaust Stream #2 to remove vinyl chloride that "rolls" through the GAC beds as it is displaced by PCE and TCE.

For this renewal, a request was submitted by URS to modify the existing extraction system and allow for flexibility in the permit to operate an alternate SVE train and blower. The alternate SVE system is designed to extract soil vapors from wells screened in a lower zone of the subsurface and will extract similar VOC species as the MPE system. When operating the system in SVE mode, the SVE blower will be connected through piping and valves to the installed air pollution control (APC) train (Exhaust Train #2) and be subject to the same emissions limits, monitoring, and recordkeeping provisions. Only one extraction system will be operated at a time (MPE mode or SVE mode). While operating in one mode the other extraction train will be shut down by turning off its associated pump/blower and isolating it with a shutoff valve.

### Linen Supply and Industrial Laundering Operations

A minor permit revision dated April 18, 2014, was submitted by the Permittee to include the linen supply and industrial laundering operations into the current permit after receiving information from industry sources that VOC and HAP emissions result from the washing and drying of soiled industrial towels. Approximately 7,000,000 pounds (clean dry weight) of textiles are laundered annually at the facility. The laundering of soiled industrial shop towels make up a smaller portion of this total. Entrained solvents and chemicals present on the soiled industrial shop towels contribute VOC and HAP emissions from the facility. The facility minimizes the impact of emissions by not accepting towels that are saturated with solvents. The facility has voluntarily limited the amount of shop towels laundered at the facility not to exceed 3,000,000 lbs of shop towels and 100,000 lbs of printer towels to reduce potential emissions from these sources.

### **Fossil Fuel Fired Industrial and Commercial Equipment**

The facility also operates a boiler and commercial dryers that provide heat for the processes and operations at the facility. The boiler and dryers supply indirect heat from the combustion of natural gas and are subject to local performance standards for fossil-fuel fired industrial and commercial equipment.

The Potential to Emit for the facility is based on the voluntary industrial shop towel limits and continuous operation of the natural gas fired equipment and MPE or alternate SVE systems.

The following emission rates are for reference purposes and are used to establish whether or not the source is a major source in terms of the Title V permit program. They are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of this permit.

<b>Facility Wide Potential to Emit</b>						
<b>Pollutant</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>VOC</b>	<b>HAP's</b>
<b>Tons/Year</b>	14.64	12.30	0.09	1.11	34.71	13.49

All provisions of this Permit that are federally enforceable or material permit conditions are specifically indicated as such.

**Specific Conditions**

**Applicability**

I. The Specific Conditions contained in this permit apply to the facilities, equipment, sources and operations listed in the permit application and shall not relieve the Permittee or its subcontractors from compliance with all local or county codes, state statutes and federal laws or from obtaining permits for other operations or activities when required. [PCC 17.12.010.D & PCC 17.12.165]

II. The facility covered by this permit constitutes an existing **Class III; Synthetic Minor Stationary Source for HAPs and VOCs**. The Specific Conditions contained in this permit apply to the following affected facilities, equipment, sources, and operations at the facility:

A. Multiphase Extraction (MPE) and Alternate Soil Vapor Extraction (SVE) System

Applicable to the MPE and alternate SVE system: The affected emission source is a MPE and alternate SVE system and associated equipment with exhaust streams #1 and #2 that are to be equipped and operated at all times with air pollution controls.

[PCC 17.16.430, PCC 17.12.185.A.2 & PCC 17.12.190.B]

**[Federally Enforceable Condition]**

B. Industrial Laundering Operations

Applicable to the industrial shop and printer towel laundering operations.

[PCC 17.16.430, PCC 17.12.185.A.2 & PCC 17.12.190.B]

**[Federally Enforceable Condition]**

C. Fossil Fuel Fired Industrial and Commercial Equipment

Applicable to the fossil-fuel fired industrial and commercial equipment: The affected equipment is all industrial and commercial installations which are less than 250 MMBTU/hr; but in aggregate on any premises are rated greater than 0.5 MMBTU/hr in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases, or solids. [PCC 17.16.165.A]

D. Facility-Wide Operations

Applicable to Facility Wide Operations: All sources of air contaminants operating at the facility.

[PCC 17.16.010.A & PCC 17.16.430]

III. The Specific Conditions applicable to the facility are grouped into the following permit sections:

Section 1: Multiphase Extraction (MPE) and Alternate Soil Vapor Extraction (SVE) System

Section 2: Industrial Laundering Operations

Section 3: Fossil Fuel Fired Industrial and Commercial Equipment

Section 4: Facility Wide Operations

IV. If more than one emission limit or emission standard is applicable to the same source, the more stringent standard or emission limit shall apply. [PCC 17.16.010.B]

**Section 1****Multi-Phase Extraction (MPE) and Alternate Soil Vapor Extraction (SVE) System**

The provisions of this Section are applicable to the affected Multi-Phase Extraction (MPE) and alternate Soil Vapor Extraction (SVE) system, exhaust streams #1 and #2, and APC equipment identified in Table I of Attachment 2. All provisions of this Section that are federally enforceable or material permit conditions are specifically indicated as such. **The affected emission source is a MPE and alternate SVE system to be operated at all times with air pollution controls (APC) in Exhaust Stream #1 and #2 as described in Table I of Attachment 2 and this Section.**

[PCC 17.16.430, PCC 17.12.185.A.2 &amp; PCC 17.12.190.B]

**I. Emission Limitations and Standards**

[PCC 17.12.185.A.2]

**A. Particulate Matter Standard**

The Permittee shall not discharge into the atmosphere in any one hour from any unclassified process source in total quantities in excess of the amount calculated by the following equation:

[PCC 17.16.430.A.1.a]

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

Where: E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

**B. Opacity Standard**

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 20%.

[PCC 17.16.040.A]

**C. Visibility Limiting Standard**

[PCC 17.16.050.D]

The Permittee shall not allow the 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. 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.

1. This provision 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.
2. This shall not apply to the generation of airborne particulate matter from undisturbed land.

**D. 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 17.16.430.D]

E. Air Flow Limit

The Permittee is not authorized to use the extraction system when the nominal airflow rate through the soil vapor treatment train is greater than 150 scfm in order to guarantee the maximum concentrations for effective processing of the pollutants. [PCC 17.16.430.G]

F. Air Pollution Control (APC) Requirement

The Permittee is not allowed to directly discharge uncontrolled emissions from the extraction system into the atmosphere at any time. [PCC 17.12.190.B]

G. Non Compliance with applicable standards

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 owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property. [PCC 17.16.430.G]

**[Material Permit Condition]**

H. Fuel Limitation

Other than electric energy for powering the pump/blower, extraction system, and ancillary equipment, the Permittee shall not use any other fuel/product without first applying for and receiving the appropriate revision pursuant to PCC 17.12.240, PCC 17.12.255, and PCC 17.12.260.

I. Operating Limitations

The Permittee shall operate the following air pollution controls (APC) at all times that extraction system is employed using the MPE or alternate SVE system. The Permittee shall only operate the system in one extraction mode at a time (MPE or SVE). When operating in either mode, the other extraction system shall be shut down by turning off its associated pump/blower and isolating that system with a shutoff valve. Controls shall be fully operational upon startup of the system in either mode.

[PCC 17.12.350.A.3.e]

**[Material Permit Condition]**

1. Granular Activated Carbon, (GAC) & Permanganate-Impregnated Zeolite Bead Unit, (PIZB)

The Permittee shall use the three 2000-lb GAC units and PIZB equipment identified in Attachment 2 to absorb VOCs and HAPs contained in Exhaust Stream #2. The equipment shall be operated as follows:

[PCC 17.12.190.B, PCC 17.16.430.G & PCC 17.12.350.A.3.e]

**[Federally Enforceable & Material Permit Conditions]**

- a. The PIZB unit shall be used at all times to remove vinyl chloride rolling through the GAC bed train in exhaust stream #2 only when the nominal flow rate is no greater than 150 scfm through the system.
- b. The PIZB unit shall be installed, maintained, and operated in accordance with the manufacturer's specifications.
- c. A flow meter shall be installed and maintained at the exit of exhaust stream #2 to measure and display the total flow rate.

- d. The three 2000 lb GAC units in exhaust stream #2 shall at all times be used when the extraction system is in operation and the nominal flow rate is no more than 150 scfm through the extraction system.
- e. Exhaust stream #2 stack emission limitations.
  - i. The Permittee shall limit the concentration of tetrachloroethene (PCE) to not more than 34.9 parts per million volume (ppmv).
  - ii. The Permittee shall limit the concentration of trichloroethene (TCE) to not more than 15 ppmv.
  - iii. The Permittee shall limit the concentration of vinyl chloride to not more than 0.7 ppmv.
  - iv. The Permittee shall limit the concentration of cis-1, 2-dichloroethene (cis-1, 2-DCE) to not more than 210 ppmv.
  - v. The Permittee shall limit the concentration of ethylbenzene to not more than 0.95 ppmv.
  - vi. The Permittee shall limit the concentration of total xylenes to not more than 1.7 ppmv.
  - vii. The Permittee shall limit the concentration of volatile fuel hydrocarbons to not more than 99 ppmv.
- f. The Permittee shall operate and maintain the vapor-phase GAC units in exhaust stream #2 pursuant to an Operations & Maintenance Plan (O & M Plan) approved by PDEQ.
- g. The GAC units shall be installed, maintained, and operated in accordance with the manufacturer's specifications.
- h. GAC unit change-out for exhaust stream #2 shall be performed within three weeks following initial discovery – based on weekly photoionization detector (PID) readings – of breakthrough on the first of the three GAC beds in series. If change-out cannot be performed within that timeframe, operation of the system shall be suspended until the change-out has been performed.

Breakthrough for I.1.h. of this Section shall be defined as the point at which the effluent concentration for the initial GAC bed, as measured with the PID, approaches a value that is within 10% of the influent concentration (i.e., greater than 90% of the influent value).

- i. Upon discovery that the vinyl chloride concentration in the effluent of the PIZB (as determined through analysis of grab samples collected on the schedule set forth in section II.E.1.c of this Section) is equal to or greater than 0.63 ppmv (i.e., 90% of the emission limit set forth in this permit), operation of the system shall be suspended until PIZB change-out has been performed.

2. Vapor Phase Carbon Unit (VPC) – Exhaust Stream #1

The Permittee shall use the VPC identified in Attachment 2 to absorb VOCs and HAPs contained in Exhaust Stream #1. The equipment shall be operated as follows:

[PCC 17.16.430.G, PCC 17.12.190.B & PCC 17.12.350.A.3.]

**[Federally Enforceable & Material Permit Conditions]**

- a. The 200 lb VPC in exhaust stream #1 shall at all times be used when the system is operating, i.e. the Permittee shall always operate the vapor phase GAC unit unless it is being replaced while the system has been shut down as proposed in the application.
- b. The 200 lb VPC unit in exhaust stream #1 shall be specified to deliver no less than 90% control of VOCs.
- c. The Permittee shall operate and maintain the VPC in exhaust stream #1 pursuant to an Operations & Maintenance Plan (O & M Plan) approved by PDEQ.
- d. The VPC shall be installed, maintained, and operated in accordance with the manufacturer's specifications.
- e. VPC change-out for exhaust stream #1 shall be performed within three weeks following the initial discovery (based on weekly PID readings) that the effluent concentrations have reached the value of 5%, as proposed in the application, of the influent concentration as measured according to II.E.2 of this Section.

**II. Monitoring Requirements**

[PCC 17.12.185.A.3]

A. Particulate Matter Monitoring.

Not required.

B. Opacity Standard Monitoring

See II.E.1.d of this Section

C. Odor Monitoring & Discharge to adjoining property

See II.E.3 of this Section

D. Fuel Limitation

None. The Permittee need only show that electrical power is being used during inspections.

E. Operational Limitations

1. Granular Activated Carbon & Permanganate-Impregnated Zeolite Bead Unit –Exhaust Stream #2

- a. The Permittee shall during system operation, take readings of the influent & effluent gas concentrations for each GAC unit and the PIZB vessel using a handheld PID. The readings shall be taken once a week unless otherwise approved by the Control Officer.
- b. Within 10 hours of initial startup, the Permittee shall collect a grab sample of system effluent vapor. The sample shall be obtained during a period of operation that is representative of continuous operation of the system. The Permittee shall analyze the gas samples by using EPA's Compendium Method TO-15 (TO-15) for volatile organic compounds (VOCs). At the conclusion of the first day of operation, the system shall be shut down pending receipt of laboratory results indicating compliance with the emission limitations set forth in I.I.1.e of this Section.

- c. Following the initial startup, the Permittee shall determine the concentrations of VOCs in the influent and effluent of the vapor abatement system by collecting grab samples according to the schedule below:
- i. Daily for the first five days of continuous operation. This shall be referred to as schedule #1.
  - ii. Twice weekly for the next two weeks of operation. This shall be referred to as schedule #2.
  - iii. Weekly for the next four weeks of operation. This shall be referred to as schedule #3.
  - iv. Monthly thereafter. This shall be referred to as schedule #4.

If the grab samples show that the emission limitations set forth in I.I.1.e of this Section were exceeded, the Permittee shall take corrective action to reduce the concentration of VOCs to the limits established by this permit. The Permittee shall return to TO-15 sampling frequency schedule #1 following the corrective action(s).

- d. The Permittee shall observe the stack of exhaust stream #2 at least once each week for evidence of visible emissions. If the Permittee sees emissions that, on an instantaneous basis, appears to exceed 20%, then the Permittee shall, if practicable, take a six-minute Method 9 observation of the plume. If the emissions are 20% or more, this shall be recorded and reported as an excess emission.

2. VPC – Exhaust Stream #1

The Permittee shall during system operation, take readings of the influent & effluent gas concentration for the VPC using a handheld PID. The readings shall be taken once a week unless otherwise approved by the Control Officer.

3. The Permittee shall perform weekly checks on the MPE, SVE, VPC, PIZB and all the associated equipment and connections to ensure that there are no leaks, breaks or openings and that the equipment is operating according to the approved O & M Plan, manufacturer's specifications or good modern engineering practices.

### III. Recordkeeping Requirements

[PCC 17.12.185.A.4]

- A. The Permittee shall use the tabular format represented in Attachment 3 to record the results of II.E.1.a and II.E.2 of this Section as follows:
1. Date of PID readings;
  2. Type of Air Pollution Control in use (VPC, GAC or PIZB);
  3. The name of company or entity that performed the PID monitoring;
  4. The exhaust stream number according to the permit application;
  5. The concentration of gases in the influent gas stream (ppmV);
  6. The PID readings for the inlet and outlet of each GAC canister and the PIZB;
  7. The flow rate upstream of the first GAC canister,  $Q_{process}$  (scfm); and
  8. The exhaust gas flow rate,  $Q_{process}$  (scfm).
- B. The Permittee shall use the tabular format represented in Attachment 4 to record the results of II.E.1.b & c of the Specific Conditions as follows:

1. Date of TO-15 sampling;
2. Type of air pollution control in use (VPC, GAC or PIZB);
3. The name of company or entity that performed TO-15 sampling;
4. The concentration of VOCs and HAPs upstream of the first GAC canister;
5. The concentration of VOCs and HAPs at the emission outlet;
6. The VOC and HAP removal efficiency of GAC canisters;

- C. The Permittee shall record the results of II.E.1.d of this Section in a log containing the date of the check, the person making the check, the specific stack observed, and whether visible emissions were observed. If visible emissions were observed, the Permittee shall include in the log entry any corrective action taken.
- D. The Permittee shall record the results of II.E.3 of this Section in a log containing the date of the check, the person making the check and the specific equipment observed. If deviations from normal operations are observed, the Permittee shall include in the log entry any corrective action taken.
- E. The Permittee shall display the name, address and phone number of a contact person at the site of the extraction system in a manner as to be clearly visible and accessible.

- F. Records Retention [PCC 17.12.185.A.4]

All required records shall be maintained either in an unchangeable electronic format or handwritten logbook of indelible ink for a minimum period of five (5) years after the date of such record and shall be made readily available to the Department upon request for inspection.

- G. Location of Records.

The Permittee shall retain all records relating to this permit, and a copy of the permit at the permit site or main Tucson office. The Permittee shall comply with the permit posting requirements of PCC 17.12.080 unless otherwise allowed by the Control Officer. All records shall be maintained in accordance with the requirements of PCC 17.12.185.A.4.b.

**IV. Reporting Requirements** [PCC 17.12.185.A.5]

- A. A written report of the results of all sampling tests required for the first month of operation under II.E.1.b of this Section shall be submitted to the Control Officer within 60 days of sampling. The report shall be submitted in accordance with the Arizona Testing Manual and PCC 17.12.050.B and shall use tabular format of Attachment 3.

Reports of all other sampling not requested above shall be kept on site or at the main Tucson office and not submitted unless requested by the Control Officer.

- B. The Permittee shall submit an O & M Plan within 60 days of permit issuance consisting of: [PCC 17.12.030]
1. The process operating parameters and limits,
  2. Maintenance procedures and schedules, and
  3. Documentation methods necessary to demonstrate proper operation and maintenance of the air pollution control system.

**C. Excess Emissions**

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this Section in accordance with Section I.B of the Additional Permit Requirements.

[PCC 17.12.185.A.5 & PCC 17.12.040]

**V. Testing Requirements**

[PCC 17.12.050, PCC 17.12.185.A.3.a & PCC 17.20.010]

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.

A. Should the Permittee desire to test, or be required to test the equipment to demonstrate compliance with the limits in this permit, the Permittee shall contact the control officer for testing requirements.

[PCC 17.20.010.B]

B. PID Calibration Tests.

[PCC 17.20.010.B]

1. Prior to start up, the Permittee shall perform a calibration test of the PID, record the results in a log as described below in V.B.2 of this Section and submit the results to the Control Officer.
2. After start-up, the Permittee shall perform a calibration test of the PID bi-weekly (every two weeks) to ensure that it is accurately indicating VOC concentration. The results shall be recorded in a log containing the date of the test, the person making the test and the deviation from normal that is observed. If no deviation from normal is observed, this shall be recorded in the log. If deviations from normal are observed, the Permittee shall include in the log entry any corrective action taken.

C. The Permittee shall use the following EPA approved test methods to conduct performance tests for the specified pollutants:

1. Particulate Matter. EPA Reference Method 5 shall be used to monitor compliance with I.A of this Section when mass emission testing is required by the Control Officer. [PCC 17.20.010.B]
2. EPA Reference Method 9 shall be used to monitor compliance with I.B of this Section and when an opacity test is required by the Control Officer.
3. EPA Compendium Method TO-15 for VOCs and HAPs, including halogenated organic compounds.
4. The Permittee may submit an alternate and equivalent test method that is listed in 40 CFR Subpart 60, Appendix A, to the Control Officer in a test plan, for approval by the Control Officer.

**Section 2****Industrial Laundering Operations**

The provisions of this Section are applicable to the industrial laundering operations and equipment (washers and dryers) identified in Table II of Attachment 2. All provisions of this Section that are federally enforceable or material permit conditions are specifically indicated as such.

**I. Emission Limitations and Standards**

[PCC 17.12.185.A.2]

**A. Shop Towel Throughput Limit**

The Permittee shall limit the soiled weight of shop towels laundered at the facility not to exceed 3,000,000 lb. per year, calculated as 12 month rolling total.

[PCC 17.12.185.B.1.b &amp; PCC.17.12.190.B]

**[Federally Enforceable Condition]****B. Printer Towel Throughput Limit**

The Permittee shall limit the soiled weight of printer towels laundered at the facility not to exceed 100,000 lb. per year, calculated as a 12 month rolling total.

[PCC 17.12.185.B.1.b &amp; PCC 17.12.190.B]

**[Federally Enforceable Condition]****C. Process Weight Determination**

The Permittee shall install, calibrate, maintain, and operate weighing devices if not already installed which can be used to determine daily the soiled weight of shop towels and printer towels laundered. The weighing devices shall have an accuracy of  $\pm$  five percent over their operating range.

[PCC 17.12.190.B &amp; PCC 17.12.350.A.3.c]

**[Material Permit Condition]****II. Monitoring Requirements****A. Industrial Towel Throughput**

[PCC 17.12.185.A.3]

The Permittee shall monitor the amounts of soiled shop towels and printer towels laundered at the facility by weighing the amounts of each separately prior laundering.

**B. Process Weight Determination**

The Permittee shall ensure that the weighing device used to monitor the amount of towels processed is regularly maintained and calibrated according to the manufacturer's specifications.

**III. Recordkeeping Requirements**

[PCC 17.12.185.A.4]

**A. Industrial Towels**

1. The Permittee shall record the following information:

- a. The weight of shop towels and printer towels laundered at the facility each day.
- b. The weight of shop towels and printer towels laundered at the facility each month.

- c. The twelve-month rolling total weight of shop towels and printer towels laundered at the facility. The twelve month rolling total weight of shop towels and printer towels processed shall be calculated by adding the current month's weight to the sum of the previous eleven consecutive months' totals. The information shall be recorded by the eleventh day of the following month.

**B. Process Weight Determination**

The Permittee shall keep all records of maintenance and calibration for the weighing devices used to monitor the amounts of shop and printer towels laundered at the facility.

**C. Onsite Records**

All records shall be retained on-site by the Permittee for at least five years from the date of generation and shall be made available for review upon the Control Officer's request.

**IV. Reporting Requirements**

[PCC 17.12.185.A.5]

**Excess Emissions**

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this Section in accordance with section I.B of the Additional Permit Conditions. [PCC 17.12.185.A.5 & PCC 17.12.040]

**V. Testing Requirements**

[PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

None Required.

**Section 3****Fossil-Fuel Fired Industrial and Commercial Equipment**

The provisions of this Section are applicable to the existing affected fossil-fuel fired industrial and commercial equipment (boilers and dryers) identified in Table II of Attachment 2. All provisions of this Section that are federally enforceable or material permit conditions are specifically indicated as such.

**I. Emission Limitations and Standards**

[PCC 17.12.185.A.2]

**A. Opacity Standard**

The Permittee shall not cause or permit the effluent from any boiler or dryer to have an average optical density equal to or greater than twenty percent (20%) opacity. [PCC 17.16.040.A]

**B. Fuel Limitation**

The Permittee shall burn only natural gas in the affected boiler(s) and dryer(s).

**[Material Permit Condition]****II. Monitoring Requirements****Opacity Monitoring**

A demonstration to show compliance with the emission limitation for opacity in I.A of this Section shall not be required since the percent of opacity of visible emissions while combusting natural gas is inherently low. The Permittee shall operate and maintain the boiler and dryers at all times – including periods of startup, shutdown, and malfunction – in a manner consistent with good air pollution control practices and consistent with manufacturer’s guidelines. [PCC 17.12.185.A.3]

**III. Recordkeeping Requirements**

[PCC 17.12.185.A.4]

**A. Opacity Checks**

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).

**B. Onsite Records**

All records shall be retained on-site by the Permittee for at least five years from the date of generation and shall be made available for review upon the Control Officer’s request.

**IV. Reporting Requirements**

[PCC 17.12.185.A.5]

**Excess Emissions**

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this Section in accordance with section I.B of the Additional Permit Conditions. [PCC 17.12.185.A.5 & PCC 17.12.040]

**V. Testing Requirements**

[PCC 17.12.045, PCC 17.12.050 &amp; PCC 17.20.010]

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 facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed.

**A. Opacity**

When required, the Permittee shall perform EPA Reference Method 9, Appendix A in 40 CFR 60 visible emissions observations on the boilers and heaters to demonstrate compliance with the opacity standard.

**B. Fuel Limitation**

When required the Permittee need only demonstrate that pipeline quality natural gas was fired exclusively since the sulfur content of pipeline quality natural gas is regulated by the Federal Energy Regulatory Commission. [PCC 17.12.185.A.3 & PCC 17.20.010]

**C. Alternative Test Method**

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. [PCC 17.12.045.D]

**Section 4****Facility Wide Operations**

The provisions of this Section are applicable to facility wide operations and all sources of air contaminants operating at the facility. All provisions of this Section are locally enforceable unless otherwise noted.

**I. Emission Limitations and Standards**

[PCC 17.12.185.A.2]

**A. Air Pollution Control**

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 17.16.020.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]
3. 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 owner or operator thereof to a degree that will adequately reduce or eliminate the discharge of air pollution to adjoining property. [PCC 17.16.020.B]

**B. Odor Limiting Standards**

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

**C. Opacity Limit**

Except as otherwise specified in this section, the opacity of all plumes and effluents from all point and non-point sources shall not exceed 20% as determined by EPA Reference Method 9, Appendix A 40 CFR 60. [PCC 17.16.050.B & PCC 17.16.130.B.1]

**D. Visibility Limiting Standard**

[PCC 17.16.050]

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. 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. This provision 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. This provision shall not apply to the generation of airborne particulate matter from undisturbed land.

E. Concealment

[PCC 17.20.040]

No person shall construct, install, erect, use, replace, modify, or operate an emission source so as to conceal an emission which would otherwise be a violation of a control standard established herein. Concealment shall include:

1. The use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere;
2. Operating in a piecemeal fashion to avoid compliance with a standard that would otherwise apply to the source on the basis of its size; and
3. Operating in a manner, under conditions, or during such times that emissions cannot be observed.

**II. Monitoring Requirements**

[PCC 17.12.185.A.3]

A. Odor

Monitoring for gaseous or odorous materials at the facility to determine compliance with the standard in I.B of this Section is not normally necessary as the use of good modern practices prevents the emission of gaseous or odorous materials in such quantities or concentrations as to cause air pollution. The Control Officer may ask the Permittee to monitor and control gaseous or odorous emissions if the Control Officer has reasonable cause to believe a violation of a standard has occurred.

B. Visible Emissions (VE)

1. The Permittee shall not be required to conduct periodic VE checks to demonstrate compliance with I.C and I.D of this Section unless the Control Officer has reason to believe that a violation of a standard has occurred or that reasonably necessary and feasible precautions to control the generation of airborne particulate matter are not being taken. At the request of the Control Officer, the Permittee shall conduct and record periodic VE checks, while the facility is in operation, from all point and nonpoint sources.
2. If the Permittee observes a plume at any time that, on an instantaneous basis, appears to exceed 20 percent opacity, or observes a plume crossing property boundaries, the Permittee shall, if practicable, conduct a VE opacity determination in accordance with EPA Reference Method 9. If the results exceed the applicable opacity limit, or the emissions cross the property boundary, this shall be recorded and reported as an excess emission.

**III. Recordkeeping Requirements**

[PCC 17.12.185.A.3 &amp; 4]

**A. Visible Emissions (VE)**

The Permittee shall maintain records of periodic VE checks in II.B of this Section (if required) and any VE opacity determinations. Records shall include at a minimum:

- a. The date and time of the monitoring,
- b. The name of the person conducting the monitoring,
- c. The particular piece of equipment or area being monitored; and,
- d. The results of the monitoring to include whether excessive emissions were observed. If excessive emissions were observed, the record shall include the corrective action taken and the results of the required follow-up VE opacity determination.

**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 copies of all reports required by the permit. [PCC 17.12.185.4.b]

**C. Recordkeeping for Compliance Determinations**

The Permittee shall retain a copy of the permit onsite including all required monitoring records and support information. 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. [PCC 17.12.080 & PCC 17.24.020.A]

**IV. Reporting Requirements**

[PCC 17.12.185.A.5]

**A. Excess Emissions**

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit in accordance with I.B of the Additional Permit Conditions. [PCC 17.12.185.A.5 & PCC 17.12.040]

**B. Emissions Inventory Reporting**

[PCC 17.12.320]

The Permittee shall complete and submit to the Control Officer, when requested, an annual emissions inventory questionnaire pursuant to PCC.17.12.320 of the Pima County Code.

**V. Facility Changes****Revision Notification**

When applicable, the Permittee shall submit the proper notification and follow the required permit revision procedures pursuant to PCC 17.12.240, PCC 17.12.255.B or PCC 17.12.260.

**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.

**Opacity**

When required, the Permittee shall perform EPA Reference Method 9, Appendix A in 40 CFR 60 visible emissions observations to demonstrate compliance with the opacity standard.

## Additional Permit Requirements

### **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 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 from 17.12.040.B. The number to report excess emissions is **520-724-7400**. The facsimile number is **520-838-7432**.
  - 2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under I.B.1 above. **Send to PDEQ 33 N. Stone Avenue, Suite 700, Tucson, Arizona 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 17.12.520. [PCC 17.12.185.A.8 & PCC 17.12.520]

### **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

### Applicable Regulations

#### Code of Federal Regulations

##### Chapter 40 Part 60:

Appendix A-4 Method 9 – Visual determination of the opacity of emissions from stationary sources

#### Pima County Code Title 17, Chapter 17.12:

- 17.12.010 Statutory authority
- 17.12.020 Planning, constructing, or operating without a permit
- 17.12.040 Reporting requirements
- 17.12.045 Test methods and procedures
- 17.12.050 Performance tests
- 17.12.080 Permit Display or Posting
- 17.12.165 Permit application processing procedures for Class II and Class III permits
- 17.12.185 Permit contents for Class II and Class III permits
- 17.12.190 Permits containing synthetic emission limitations and standards
- 17.12.235 Facility changes that require a permit revision
- 17.12.240 Procedures for certain changes that do not require a permit revision Class II or Class III
- 17.12.255 Minor Permit Revision
- 17.12.260 Significant Permit Revision
- 17.12.350 Material Permit Condition
- 17.12.520 Fees related to Class II and Class III permits

#### Pima County Code Title 17, Chapter 17.16:

- 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
- 17.12.040 Standards and applicability (Includes NESHAP)
- 17.16.050 Visibility limiting standard
- 17.16.130 Applicability
- 17.16.165 Standards of performance for fossil-fuel fired industrial and commercial equipment
- 17.16.430 Standards of performance for unclassified sources

#### Pima County Code Title 17, Chapter 17.20:

- 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

**Attachment 2: Equipment List**

**Table I Multiphase Extraction and Alternate Soil Vapor Extraction System with APC**

Type of Equipment	Description	Manufacturer	Model	Serial/Part No.	Max Rated Capacity	Primary Use
MPE (Fuels Used: None)	Multiphase Extraction System	N/A	N/A	N/A	1000 ACFM LRP Blower	Liquid & Vapor Extraction
SVE (Fuels Used: None)	Soil Vapor Extraction System	Geotech	N/A	86090006M	95 ICFM	Soil Vapor Extraction
<b>Exhaust Stream #2 APC: Requirement: Route exhaust through 3 GAC units followed by PIZB in series prior to discharge</b>						
GAC (Fuels Used: None)	3, 2000 lb GAC units	US Filter or Equivalent	VSC-2000	N/A	150 scfm	Removal of VOCs & HAPs
PIZB (Fuel Used: None)	500 lb Permanganate-Impregnated Zeolite Bead Unit	Hydrosil	HS600 or equivalent	N/A	150 scfm	Removal of Vinyl Chloride
<b>Exhaust Stream #1 APC requirement: Route exhaust through VPC prior to discharge</b>						
VPC (Fuels Used: None)	Vapor Phase Carbon (GAC) Unit	US Filter or Equivalent	VSC-200	N/A	200 scfm	Removal of VOC's & HAPs

**Attachment 2(Continued): Equipment List**

**Table II Linen Supply and Industrial Laundering Facility Equipment**

Type of Equipment	MFR	Model	Serial Number/ Unique ID	Maximum Rated Capacity	Fuels Used	Date of MFR	Date Installed
Boiler	E. Keeler Co.	D-K-9-7	14226	27, 300 CFH	Nat. Gas	1965	1982
Washer #1	ELLIS	Z472T	1614	900 lbs	N/A	11-2005	11-2005
Washer #2	ELLIS	Z472T	1610	900 lbs	N/A	11-2005	11-2005
Washer #3	ELLIS	Z472AN	1615	900 lbs	N/A	11-2005	11-2005
Washer #4	WASHTECH	T2W-7115T5	7100-0043	250 lbs	N/A	11-2012	12-2012
Washer #5	JENSEN	LTH125HP211215RNNSA	008550	125 lbs	N/A	10-2002	10-2002
Washer #6	ELLIS	Z472J	1061	900 lbs	N/A	07-2000	08-2010
Washer #8	ELLIS	Z472G	658	675 lbs	N/A	08-1996	08-1996
Dryer #1	CLM	400 GLA	51002	450 lbs 1.95 MMBTU/hr	Nat. Gas	11-2005	11-2005
Dryer #2	CLM	400 GLA	51003	450 lbs 1.95 MMBTU/hr	Nat. Gas	11-2005	11-2005
Dryer #3	CLM	400 GLA	51004	450 lbs 1.95 MMBTU/hr	Nat. Gas	11-2005	11-2005
Dryer #4	Speed Queen	ST170NRQF6G1W01	0611010065	170 lbs 0.395 MMBTU/hr	Nat. Gas	06-2001	12-2001



**Attachment 4: MPE/SVE Recordkeeping Format for Analytical Data from Exhaust Stream #2**

Monitoring Period	Sample Date	Analytical Testing Company	Flowrate (scfm)	Operation Time (hours)	TCE (VSP-3) [ppmv]	TCE (VSP-8) [ppmv]	TCE Removed from Subsurface (lbs)	TCE Removed by GAC (lbs)	Control Efficiency %	PCE (VSP-3) [ppmv]	PCE (VSP-8) [ppmv]	PCE Removed from Subsurface (lbs)	PCE Removed by GAC (lbs)	Control Efficiency %
Permit Emission Limits (ppmv)						15.0					34.9			

(Form Continued Below)

Cis-1,2 Dichloroethene (VSP-3) [ppmv]	Cis-1,2 Dichloroethene (VSP-8) [ppmv]	DCE Removed from Subsurface (lbs)	DCE Removed by GAC (lbs)	Control Efficiency %	Vinyl Chloride (VSP-3) [ppmv]	Vinyl Chloride (VSP-8) [ppmv]	VC Removed from Subsurface (lbs)	VC Removed by GAC (lbs)	Control Efficiency %	Ethylbenzene (VSP-3) [ppmv]	Ethylbenzene (VSP-8) [ppmv]	EB Removed from Subsurface (lbs)	EB Removed by GAC (lbs)	Control Efficiency %
	210					0.7				0.95				

(Form Continued On Next Page)

**Attachment 4 (Continued): MPE/SVE Recordkeeping Format for Analytical Data from Exhaust Stream #2**

<b>Total Xylenes (VSP-3)</b> [ppmv]	<b>Total Xylenes (VSP-8)</b> [ppmv]	<b>TX Removed from Subsurface (lbs)</b>	<b>TX Removed by GAC (lbs)</b>	<b>Control Efficiency</b> %	<b>Volatile Fuel Hydrocarbons (VSP-3)</b> [ppmv]	<b>Volatile Fuel Hydrocarbons (VSP-8)</b> [ppmv]	<b>Total VOC's Removed from Subsurface (lbs)</b>	<b>Total VOC's Removed by GAC (lbs)</b>	<b>Control Efficiency</b> %
	1.7					99			

(Form Continued From Previous Page)