

# TECHNICAL SUPPORT DOCUMENT (TSD)

January 2020

## **I. GENERAL COMMENTS:**

### **A. Company Information**

1. Source Name: Mission Linen Supply
2. Source Address: 301 South Park Avenue, Tucson, AZ 85705

### **B. Background**

The activities and operations covered by this permit are emission sources that fall under the following industrial classification:

- Linen Supply and Industrial Laundering Operations  
SIC Codes 7213, 7218  
NAICS Codes 812331, 812332

Mission Linen Supply – Tucson is a large linen supply/industrial laundry. Goods processed at the Tucson plant include sheets, towels, table linens, healthcare items, industrial towels, garments, mats, and a number of other items. Goods are provided to customers on a rental basis. Clean goods are delivered to the customer at a frequency that varies from bi-weekly to daily depending on the delivery volumes. At the time that the clean goods are delivered, soiled items are also picked up and brought back to the plant where they are sorted, washed, dried and either pressed or folded before being sent back to the customer.

A permit application was submitted to permit the linen supply and industrial laundering operations after receiving information from industry sources that VOC and HAP emissions result from the washing and drying of soiled industrial towels. The applicant has requested limitations on their industrial shop towel laundering operations to remain a synthetic minor source of VOC and HAPs. In addition, the application includes a boiler and four commercial dryers subject to local performance standards for fossil-fuel fired industrial and commercial equipment that are fired with natural gas.

The facility is classified as a **Class III, Synthetic Minor Source** of volatile organic compounds (VOC) and hazardous air pollutants (HAPS). The facility is a true minor source of all other criteria pollutants.

### **C. Attainment Classification**

Mission Linen is located in a region that is designated attainment for all criteria pollutants.

## **II. SOURCE DESCRIPTION**

### **A. Process Description**

Approximately 7,600,000 pounds (clean dry weight) of textiles are washed annually. About 74,000 pounds of industrial towels make up this total.

Soiled goods are unloaded at the back of the plant by the delivery trucks when they return from deliveries at the end of the day. After unloading, the goods are sorted by wash classification. Washing is performed using a total of seven washer/extractors with capacities ranging from 100 pounds to 900 pounds of clean dry weight. After washing, some of the items are dried before going to finishing and some items, such as sheets and table linen, go directly to the ironers for pressing. Motel terry towels and industrial towels are always dried before being bagged and folded. After pressing and folding, clean goods are stored until they are delivered back to the customer.

The chemicals used for washing consist of LAE-surfactants, sodium hydroxide, chlorine bleach, hydrogen peroxide, laundry sour (fluorosilicate acid), anti-chlor (sodium thiosulfate), as well as fabric softeners, bacteriostats, etc.

While these chemicals do not contribute to VOC/HAP emissions from the washers and dryers, chemicals present on the soiled towels picked up from customers do. Mission Linen minimizes the impact of these chemicals on the operations by maintaining a policy of not picking up soiled industrial towels that are saturated with solvents. If the towels appear to be saturated to the point where they will not pass a paint filter test<sup>1</sup>, they are left with the customer. (<sup>1</sup> Ref. SW 846 – EPA Test Methods for Evaluating Solid Waste, Method 9095B)

The air polluting equipment and operations at Mission Linen Supply for which the air quality permit has been issued in accordance with PCC 17.11.090.B.3.a consists of the following:

- 7 industrial/commercial washers used to launder goods including industrial shop and/or printing towels
- 1 fossil fuel fired industrial boiler to provide heat for processes and operations at the facility
- 4 industrial/commercial dryers used for drying laundered goods

## **B. Operating Capacity and Schedule**

The plant is currently operating Monday through Friday, 4:00 am to 3:00 pm. There is some seasonality to the business so the operating schedule varies somewhat throughout the year. The plant operates year round, 52 weeks per year.

## **C. Air Pollution Control Equipment**

N/A

## **III. Regulatory History**

Mission Linen Supply previously operated under an individual permit initially obtained to install and operate a soil vapor remediation system which was renewed in 2014 to include the industrial laundering operations. The Control Officer later determined that the SVEU system could be permitted under a separate general permit. Mission Linen Supply currently maintains an authorization to operate (ATO) # 6230 issued by the Control Officer for the soil vapor remediation system located near the facility covered under the ADEQ GP for Soil Vapor Extraction Units.

## **IV. Emission Estimates**

The applicant has requested voluntary limits on the potential to emit VOC and HAP from their industrial laundering operations and associated equipment. No federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) or New Source Performance Standards (NSPS) emissions source category standards apply to these operations and there are no EPA established emission factors for this industry sector. While information on the emissions from these operations is limited, the applicant has provided information and PDEQ has verified that VOC's and HAP's can be emitted as a result of laundering and drying soiled industrial towels that contain entrained solvents. The applicant provided emission estimates using the most conservative emission factors found from their research. The factors submitted as a basis for estimating the emissions were developed by the Minnesota Pollution Control Agency as a result of emissions testing conducted at G & K Services Inc., Minneapolis, MN (October 22-24, 2003) using established EPA methods and was used to classify the sources potential to emit from these operations (See Table 1 below).

For comparison, PDEQ also reviewed fugitive air emissions estimates and data presented in a document from the EPA Office of Water, titled, “*Technical Development Document for Final Action Regarding Pretreatment Standards for the Industrial Laundries Point Source Category (Revised March 2000)*”. The EPA model provides a lower estimate of VOC and HAP emissions for the applicant when normalized to year round production and the estimated wastewater flows calculated from the Tucson facility using the maximum washer throughput. According to the study data from 7 industrial laundering facilities, the primary volatile and semivolatile organics emitted, that account for 80% of the emissions from the laundering operations, based on the worst case wastewater concentrations of organic species measured, in decreasing order are: n-Decane (60%), Acetone (7%), Pthalate (6%), Xylene (4.5%), tetrachloroethene (3%), and Toluene (3%). The emission factors submitted by the applicant (ref. G & K) provides estimates that are 17% greater for total VOC, and 116% greater for total HAP than the above referenced EPA published study.

PDEQ reviewed the emissions testing information and the proposed emission factors in the G & K permit and is in general agreement with the testing methodology and basis for their development. The emission factors appear to be representative of the ambient air emissions from a similar industrial laundering operation under actual conditions and provide more conservative estimates than the data published in the above referenced EPA study. PDEQ concurs with the applicants proposed annual throughput limitations of 3,000,000 lb of soiled shop towels and 100,000 lb of soiled print towels to limit the facilities emissions to a significant margin below the major source thresholds of 100 tons per year VOC and 25 tons per year of combined HAPs, while allowing the applicant flexibility to expand its industrial towel laundering operations if needs require.

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 reflect the maximum allowable emissions rate of pollutants from the regulated sources under the limits and standards provided in the permit (Controlled PTE) as represented in the most recent application for permit on file with the Control Officer. They are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of the permit. Attachment 1 contains a list of the applicable emission rates used in the development of the permit.

**Controlled Potential to Emit (Tons/yr)**

<b>Emission Sources</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>NO<sub>x</sub></b>	<b>SO<sub>2</sub></b>	<b>CO</b>	<b>VOC</b>	<b>HAPs Total</b>	<b>HAP Single</b>
Shop Towel Laundering (Limited to 3,000,000 soiled pounds/yr)	-	-	-	-	-	23.64	9.57	4.16 Xylene
Printer Towel Laundering (Limited to 100,000 soiled pounds/yr)	-	-	-	-	-	6.06	0.73	0.45 Toluene
<b>Industrial Laundering</b>	-	-	-	-	-	<b>29.70</b>	<b>10.30</b>	<b>4.16 Xylene</b>
Boiler Combustion (27.8 MMBtu/hr)	0.91	0.91	11.93	0.07	10.03	0.66	0.23	.23
Dryer Combustion (6.245 MMBtu/hr)	0.20	0.20	2.68	0.02	2.25	0.15	0.05	.05
<b>Combustion</b>	<b>1.11</b>	<b>1.11</b>	<b>14.61</b>	<b>0.09</b>	<b>12.29</b>	<b>0.80</b>	<b>0.28</b>	<b>.28</b>
<b>Total Facility-Wide</b>	<b>1.11</b>	<b>1.11</b>	<b>14.61</b>	<b>0.09</b>	<b>12.29</b>	<b>30.50</b>	<b>10.58</b>	<b>4.16 Xylene</b>

<sup>1</sup> PTE for Industrial Laundering based on permit limit of 3,000,000 lbs/year of soiled shop towels and 100,000 lbs/year of soiled printer towels laundered using emission factors from Table 1 below. The Combustion emissions are based on the maximum rated capacity of the natural gas fired units operating 8760 hours.

**Industrial Towel Laundering Emission Factors<sup>1</sup>**

Pollutant	Washing (lbs/1000lbs of soiled towels)		Drying (lbs/1000lbs of soiled towels)		Laundered Combined (lbs/1000lbs of soiled towels)	
	Print Towels	Shop Towels	Print Towels	Shop Towels	Print Towels	Shop Towels
<b>VOC</b>	113.89	10.56	7.4	5.2	<b>121.29</b>	<b>15.76</b>
<b>HAP – Total</b>	14.42	6.21	0.18	0.17	<b>14.6</b>	<b>6.38</b>
HAP – Xylene	4.24	2.77	0.08	0.0	4.32	2.77
HAP – Toluene	8.91	1.55	0.06	0.12	8.97	1.67
HAP - 1,1,2,2,tetrachloroethane	0.0	1.48	0.0	0.0	0.0	1.48
HAP - Trichloroethylene	0.25	0.24	0.0	0.0	0.25	0.24
HAP - Methanol	0.30	0.07	0.04	0.05	0.34	0.11
HAP - Ethyl Benzene	0.72	0.09	0.0	0.0	0.72	0.09
HAP - Benzene	0.0	0.01	0.0	0.0	0.0	0.01

<sup>1</sup> From G & K Services – Minneapolis Industrial Permit # 05300966-003

**V. APPLICABLE REQUIREMENTS**

The facility is not subject to any federal rules or performance standards for source categories in 40 CFR Part 60, NSPS or 40 CFR Part 63, NESHAP. The following requirements from Title 17 of the Pima County Code are applicable to the source:

**40 CFR, Part 60 Standards of Performance for New Stationary Sources**

Appendix A            Test Methods

**Pima County Code Title 17, Chapter 17.11 – General Provisions for Permits**

**Article I –                    General Provisions**  
 17.11.010                    Statutory Authority  
 17.11.020                    Planning, Constructing, or Operating Without a Permit

**Article II –                    General Provisions for Stationary Source Permits**  
 17.11.060                    Permit Display or Posting  
 17.11.120                    Material permit condition  
 17.11.160                    Test methods and procedures  
 17.11.190                    Permits containing synthetic emission limitations and standards  
 17.11.210                    Performance tests

**Pima County Code Title 17, Chapter 17.13 – Permits and Permit Revisions for Class II and III Permits**

**Article I –                    General Provisions**  
 17.13.010                    Application processing procedures  
 17.13.020                    Permit contents

**Article II –                    Permit Revisions, Renewals and Transfers for Class II and III Permits**  
 17.13.100                    Facility changes that require a permit revision  
 17.13.110                    Procedures for certain changes that do not require a permit revision  
 17.13.120                    Administrative amendments for Class II and Class III permits  
 17.13.130                    Minor revisions  
 17.13.140                    Significant revisions  
 17.13.150                    Reopening, revocation, or termination

**Article III –                    Emissions for Class II and Class III Sources**  
 17.13.180                    Annual Emissions inventory questionnaire  
 17.13.190                    Excess emissions reporting requirements

**Article V – Fees for Class II and Class III Sources**  
17.13.240 Fees related to Class II and Class III permits

**Pima County Code Title 17, Chapter 17.14 – Activity Permits**

**Article I – General Provisions**  
17.14.040 Fugitive Dust activity Permits  
17.14.060 Asbestos NESHAP activity permits  
17.14.080 Open burning 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 III – Emissions from Existing and Nonpoint Sources**  
17.16.055 General  
17.16.070 Fugitive dust emissions standards for motor vehicle operation  
17.16.080 Vacant lots and open spaces  
17.16.090 Roads and streets  
17.16.100 Particulate materials  
17.16.110 Storage piles

**Article IV – New and Existing Stationary Source Performance Standards**  
17.16.130 Applicability  
17.16.165 Standards of performance for fossil-fuel fired industrial and commercial equipment  
17.16.400 Organic Solvents and other organic materials  
17.16.430 Standards of performance for unclassified sources

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

**Article I – General Provisions**  
17.20.010 Source sampling, monitoring and testing  
17.20.040 Concealment of emissions

**Pima County Code Title 17, Chapter 17.24 – Emissions Source Recordkeeping and Reporting**

**Article II – Recordkeeping Requirements**  
17.24.020 Recordkeeping for compliance determination

## **VI. Permit Changes and Applicability Determinations**

### **A. Permit and Permit Summary:**

The facility previously maintained an individual permit for the operation of a soil remediation system and their industrial laundering operations. Following a revision application in 2018, PDEQ made a determination to permit the soil remediation system under a separate ADEQ general permit (ATO # 6230), while concurrently severing the previous conditions in the individual permit pertaining to the SVEU system. The facility submitted a complete renewal application on February 27, 2019 to renew the individual permit for the industrial laundering operations to maintain the voluntarily proposed limits for laundering shop towels in order to allow flexibility in their operations while maintaining the facility below the major source thresholds of VOC and HAP.

### **B. § 1: General Provisions**

Attachment 3 of the permit contains the general provisions (§ 1 of the permit) that apply to all Class II and III air quality permits and Permittees in Pima County and comprises permit Conditions 1 through 25 of the permit).

### **C. § 2: Definitions**

Attachment 3 of the permit contains applicable definitions (§ 2 of the permit).

### **D. § 3: Permit Applicability**

This permit Section provides the permit applicability, classification, and outline of the permitted sources and sections to help organize the permit. Attachment 2 of this TSD contains the detailed applicability provisions which apply to permitted sources at the facility.

### **E. § 4: Facility Wide Operations:**

This section of the permit includes facility wide provisions that apply to the facility and to all sources of air contaminants to include the following: facility-wide limits when designated as such in the permit equipment list and for other permitted sources as applicable, general control requirements, including operation and maintenance requirements; general materials handling requirements; the gaseous and odorous materials standard; opacity standards; visibility limiting standards; and fugitive dust requirements.

This section prescribes general requirements for conducting periodic monitoring of operation throughputs, operating hours, or other parameters, if indicated as an operating limitation in the equipment list; it requires maintenance of documents and records of opacity checks for equipment and operations if prescribed in the permit; it requires documentation of investigations or corrective actions taken for observed instances of non-compliance with the standards; and it requires maintenance of records of activity permits that may be required to be obtained by the Permittee or Permittee's subcontractors at the facility.

This section does not require that periodic monthly monitoring of the general facility wide standards is required by the Permittee, unless otherwise required by the permit, since good modern practices generally prevent emissions in excess of these standards. The Control Officer reserves the right to request by letter or compliance action that the Permittee conduct periodic monitoring of any of these standards for the facility or any operation if the Control Officer has reasonable cause to believe the Permittee may be in violation of these standards until such time that the Permittee has demonstrated to the Control Officer compliance with these provisions.

**F. § 5: Industrial Laundering Operations:**

This section of the permit contains the industrial laundering voluntary limits of the weight of soiled printer and shop towels laundered at the facility in order to keep the facility below the major source thresholds for VOC and HAP. The facility is required weigh the amounts of printer and shop towels processed daily, and keep records of the monthly, and 12-consecutive month total to verify the facility is operating below the proposed limits.

**G. § 6: Fossil-Fuel Fired Industrial and Commercial Equipment**

This section of the permit contains provisions applicable to small boilers subject to PCC 17.16.165 requiring the operation of the boiler only using the prescribed fuels, and maintain the units to comply with Title 17 opacity standards.

**VII. Periodic Monitoring.**

This is a Class II permit and does not include a semiannual summary report of required monitoring or annual compliance certifications. The permit requires the facility to maintain the permit required monitoring records on site. However, as a result of a compliance action or upon request, the Control Officer may require the Permittee to conduct additional monitoring and reporting to demonstrate compliance with the standards if there is reasonable cause to believe the Permittee may be in violation of the facility wide standards.

**VII. Insignificant Activities.**

The insignificant activities defined in PCC and as determined by the Control Officer for the facility are listed in Attachment 2 and Table 1 of this TSD.

**VIII. Impact to Ambient Air Quality**

Not a major source so no impact studies have been required.

**IX. Control Technology Determination**

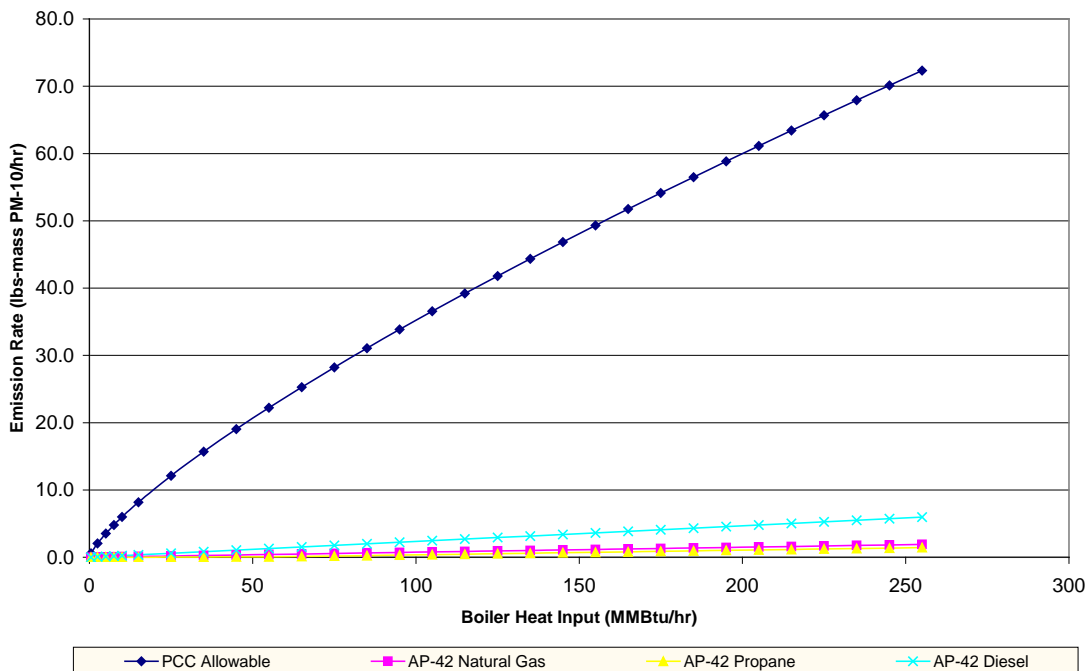
No control technologies have been required by Title 17 of the PCC and the source has not been subject to RACT, BACT or LAER.

**X. Exclusion of PCC Particulate Matter Discharge Rate Standards**

The applicable PCC rules for the maximum particulate discharge rates are not normally included for Class II and III area source permits as explained below.

- For particulate matter sources, the calculated maximum particulate matter discharge rate, as provided in Title 17, yields maximum rates that far exceed the emissions expected from most typical area sources. For example a 200 ton/hour process source, which is typical for an average construction aggregate screening operation, would be limited to a maximum discharge rate of 40.4 lbs/hour or 177 tons/year. This limit far exceeds estimated emissions from typical sources and the source is far more likely to exceed opacity and visibility limiting standards well before reaching this limit.
- With regard to fuel burning equipment, PCC 17.16.165.C limits the emissions of particulate matter from commercial and industrial fossil-fuel fired equipment (including but not limited to boilers). This limit is not normally included in permits because allowable emissions are consistently over an entire order of magnitude higher than EPA AP-42 estimated potential emissions. The chart below, illustrates the point.

Comparison of Emissions of PM-10 for Boilers: PCC Allowable vs AP-42 Estimated



Comparative Chart of Allowable Particulate Emissions Under Pima County Code, Title 17, and Estimated Potential Emissions based on EPA AP-42 Estimates for External Combustion Sources. Allowable emissions are consistently over ten times estimated potential emissions. Therefore, it is not necessary to include the standard in the permit explicitly, but by reference in this TSD and the applicable regulations in Attachment 1 of the permit.



**Attachment 1**  
**Emission Factors & PTE**

## Emission Factors

### Industrial Laundering:

#### 1) Shop Towel Laundering Emissions per 3,000,000 soiled pounds laundered per year (8760 hours)

PM2.5:	0.0 lb/hr	
PM10:	0.0 lb/hr	
CO:	0.0 lb/hr:	
NOx:	0.0 lb/hr:	
SOx:	0.0 lb/hr	
VOC:	5.40 lb/hr	Per G & K Services EF – 15.76 lbs/1000lbs
HAPs	2.18 lb/hr	Per G & K Services EF – 6.38 lbs/1000lbs

#### 2) Printer Towel Laundering Emissions per 100,000 soiled pounds laundered per year (8760 hours)

PM2.5:	0.0 lb/hr	
PM10:	0.0 lb/hr	
CO:	0.0 lb/hr:	
NOx:	0.0 lb/hr:	
SOx:	0.0 lb/hr	
VOC:	1.38 lb/hr	Per G & K Services EF – 121.29 lbs/1000lbs
HAPs	0.12 lb/hr	Per G & K Services EF – 14.60 lbs/1000lbs

#### 3) Combustion Emissions

Based on 34.045 MMBtu/hr of fuel burning equipment capacity and AP-42 factors for natural gas fired equipment (8760 hrs)

PM2.5	0.25	lb/hr	Per AP-42
PM10:	0.25	lb/hr	Per AP-42
CO:	2.81	lb/hr	Per AP-42
NOx:	3.34	lb/hr	Per AP-42
SOx:	0.02	lb/hr	Per AP-42
VOC	0.18	lb/hr	Per AP-42
HAPs	2.42	lb/hr	Per AP-42

### Potential to Emit Pollutants (Tons/year)

Source	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	NO <sub>x</sub>	SO <sub>2</sub>	VOCs	HAPs
Industrial Towel Laundering (Shop and Printer Towels)	-	-	-	-	-	29.70	10.30
Combustion Emissions	1.11	1.11	12.29	14.61	0.09	0.80	0.28
<b>Total</b>	<b>1.11</b>	<b>1.11</b>	<b>14.61</b>	<b>14.61</b>	<b>0.09</b>	<b>30.50</b>	<b>10.58</b>

Current Operating Capacity and Schedule: Not Limited

The current facility operating hours are 4:00 am to 3:00 pm M-F, 52 weeks per year ~ 2860 hours

## **ATTACHMENT 2: SOURCE APPLICABILITY**

*(Unless otherwise noted, references are to Title 17 of the Pima County Code (PCC), Arizona Revised Statutes (ARS), Arizona Administrative Code (AAC.), or the Pima County State Implementation Plan (SIP). Underlined text are hyperlinked Conditions within this attachment, or to external websites containing the referenced provision.)*

### **1. Permitted Facility Sources**

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

a. § 4: Facility-Wide Operations: **[Federally and Locally Enforceable Conditions]**

Except as provided in Condition 3 of this attachment, the Conditions apply to the facility and all sources of air contaminants at the facility. Contains facility-wide limits, and standards for general control, operation and maintenance, general materials handling, gaseous and odorous materials, opacity (optical density), and visibility limitations. In addition, it contains provisions for maintenance of monitoring records to demonstrate compliance with the general provisions, facility-wide limits, visible emissions (VE) determinations and opacity checks when prescribed by the permit, and any required activity permits, and if required any necessary and reasonable precautions to control fugitive dust.

[PCC 17.16.010., PCC 17.16.020 thru 050, PCC 17.16.230.D, PCC 17.16.400.A, & PCC 17.16.430.F]

b. § 5: Industrial Laundering Operations [PCC 17.16.430]

The Conditions apply to the Industrial Laundering Operations to include voluntary throughput limitations to keep the source a minor source of VOC and HAP.

c. § 6: Fossil-Fuel Fired Industrial and Commercial Equipment

This section of the permit applies to fossil-fuel fired industrial and commercial installations identified in the equipment list 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.

[PCC 17.16.165]

d. Additional Ancillary Sources and Operations **[Federally and Locally Enforceable Conditions]**

See Attachment 2A of this TSD for the specific applicability for any applicable additional ancillary sources or operations listed in the permit equipment list.

i. When added to the facility and indicated in the equipment list, the Permittee shall follow the applicable terms and Conditions contained in a separate air quality general permit (GP) issued by the Control Officer or the Director and in accordance with Title 17 of the PCC for such sources as provided in an Attachment to the permit. This shall afford the Control Officer the ability to streamline the permitting and revision process for Permittees that may desire to install and operate such sources and facilities within a defined source class, having identical requirements and Conditions, and for the purpose of accommodating rule changes, and maintenance of emission inventories for such sources within Pima County.

ii. Notwithstanding such additional ancillary sources that may be covered under this permit, the Permittee shall only be subject to the fees under Condition 8 of the permit and only be required to submit facility changes and applications to revise or renew the permit in accordance with Condition 1 of the permit.

iii. The specific terms and Conditions contained in the GP's issued by the Control Officer as listed below are hereby incorporated into the permit and shall apply to such emission sources should the Permittee desire to add such a source to the facility in the future and when indicated in the equipment list in Attachment 2 of the permit.

- (a) General Air Quality Permit for  
*Perchloroethylene Dry Cleaners, PDEQ Permit # 6099, Issued June 12, 2015;*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
  - (b) General Air Quality Permit for  
*Human and Animal Crematories, PDEQ Permit #6085, Issued May 13, 2015;*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
  - (c) General Air Quality Permit for  
*Gasoline Dispensing Facilities, PDEQ Permit # 6096, Issued October 17, 2020*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
  - (d) General Air Quality Permit for  
*Non-Metallic Material Handling Facilities, PDEQ Permit #6210, Issued April 24, 2017*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
  - (e) General Air Quality Permit for  
*Plating, Anodizing & Polishing Facilities, PDEQ Permit #6144, Issued December 3, 2015*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
  - (f) General Air Quality Permit for  
*Fuel Burning Equipment, PDEQ Permit # 6205, Issued January 5, 2017*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
  - (g) General Air Quality Permit for  
*Soil Vapor Extraction Units (SVEU), AZDEQ Permit #102, Issued June 24, 2016*  
Download links: [Permit](#) || [Application](#) || [Technical Support Document](#):
- iv. Should any of the incorporated GP provisions in Condition 1.d.iii of this attachment be changed as a result of a renewal or reopening of a GP, the Permittee has been granted a permit shield in accordance with PCC 17.11.080 for compliance with such terms and Conditions until such time as the Permittee renews this permit. The Control Officer shall provide notice to the Permittee of any resulting changes and if the Permittee is required to revise the permit per Conditions 14.a.ii or iii of the permit.
  - v. For each ancillary source identified in the equipment list in Attachment 2 of the permit, the Permittee shall follow the specific Conditions in the above listed GP's that apply to such sources. The applicable referenced permit sections and Conditions for such sources shall be provided as an Attachment to the permit.
  - vi. Any GP Condition requiring compliance with facility-wide and general provisions of the GP shall be construed to require compliance with the permit provisions in § 1: General Provisions and § 4: Facility-Wide Operations.
  - vii. Any GP Condition with throughput or operating hour limitations shall be additionally restricted or limited to those operating limitations provided as operating limitations in the equipment list in Attachment 2 of the permit.
  - viii. Condition 29 of the permit (shall apply to any specific Condition(s) in a GP that are in conflict with any provision in the permit.

## 2. Portable Sources

[PCC 17.11.100 & 110]

**[Locally Enforceable Conditions]**

### a. Portable Sources Requiring a Permit

The Permittee shall comply with the following:

[PCC 17.11.100 & 110]

- i. Permitted portable sources transferred from one location to another shall be required to submit a notice to the Control Officer, and if applicable, the Director as described in Condition 9.b.iv of the permit. The Permittee shall submit such notices to the address provided in Condition 11 of the permit.
- ii. A portable source that requires a permit pursuant to PCC 17.11.090 that will operate for the duration of its permit in Pima County shall obtain a permit from the Control Officer. Should such source desire to locate and operate outside the County, the Permittee shall comply with Condition 3 of the permit.
- iii. Portable sources covered under a separate permit and transferred to a facility covered under the permit must comply with the applicable limit in Condition 36.b of the permit in addition to any Conditions in a permit issued to such portable source. Following a review of the transfer notice required by Condition 9.b.iv of the permit, the Control Officer may require the Permittee to submit a significant permit revision as specified in Condition 14.a.iii of the permit prior to operation of the relocated portable source.

### b. Portable Sources Not Requiring a Permit

- i. Portable sources, including transportable non-road engines, located or stored at the facility, that are not required to be permitted in accordance with Title 17 of the PCC, and that have a potential to emit in excess of the insignificant activity levels in Table 1 of this attachment, may be required to demonstrate their status as a portable source upon request by the Control Officer. The Permittee shall maintain records for such sources documenting when the portable source was moved to its current location from a previous location or storage area. The Permittee may use the sample Portable Source Location log in Attachment 3 of this TSD for purposes of documenting the status of such portable sources. For the purpose of this provision, the Control Officer has determined that sources that can be moved by hand or have a combined potential to emit (PTE), without controls, less than 10% of the major source threshold to be insignificant activities not requiring the maintenance of a portable source location log. [17.04.340.A (114.j & 129), PCC 17.13.110.C.2]
- ii. The owner or operator of any portable source of air pollution which burns any material, except natural gas, shall keep complete records of the materials used as fuel. [PCC17.16.010]
- iii. The owner or operator of any portable source which incinerates any material shall keep complete records of all materials incinerated. [PCC 17.16.010]

## 3. Exempt Sources

### a. Agricultural Equipment

The Specific Conditions contained in the air quality permit shall not apply to agricultural equipment used in normal farm operations, unless their operation without a permit would result in a violation of the Act. [PCC 17.12.090.C.3]

**[Locally Enforceable Condition]**

### b. Motor Vehicles

The Specific Conditions contained in the air quality permit shall not apply to emissions from motor vehicles. *Motor Vehicles* herein means any self-propelled vehicle designed for transporting persons or property on public highways.

c. Mobile Sources

Except as provided in PCC Chapter 17.16 § 450, 460, 470, and 480 which applies to off-road machinery, heater planer units, roadway and site cleaning machinery, and asphalt or tar kettles, the Conditions contained in the air quality permit shall not apply to mobile sources.

**4. Insignificant Activities**

For the purpose of the permit, equipment or operations in Table 1 of this attachment below have been determined by the Control Officer, because of their size or production rate, to be de-minimus emission sources and or insignificant activities in accordance with PCC 17.04.340.A.114. For other insignificant activities the Permittee shall keep a log of insignificant activities per Condition 14.b.i of the permit.

**Table 1: Insignificant Activities**

Description	Maximum Rated Capacity	Fuels Used or Materials Affected
1) Landscaping, building maintenance, or janitorial services.		
2) The following Gasoline and Volatile Organic liquid (VOL) Storage Tanks: <ul style="list-style-type: none"> <li>- All gasoline storage tanks less than 250 gallons capacity provided they otherwise comply with <u>40 CFR 59. Subpart F</u> ,</li> <li>- Gasoline storage tanks greater than 250 gallons and less than 10,000 gallons with a throughput less than 1000 gallons per month, provided such tanks are equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions in accordance with <u>PCC 17.16.230.B</u></li> <li>- Gasoline storage tanks less than 10,000 gallons capacity provided they are not otherwise required to meet <u>NESHAP Subpart 6C</u>.</li> <li>- All volatile organic liquid (VOL) tanks less than 10,000 gallons provided they comply with Condition 38.a of the permit.</li> </ul>	$V \leq 10,000$ gal.	Gasoline or VOL
3) Petroleum liquids storage tanks and VOL storage tanks with the following volume (V) capacities and stored liquid vapor pressure ranges, provided that petroleum liquid storage vessels maintain a file of the each type of petroleum liquid stored, dates of storage, and the typical reid vapor pressure of each type of petroleum liquid stored, and for those petroleum liquids storage tanks > 40,000 gallons the average monthly storage temperature and true vapor pressure is determined and recorded. Statements from the fuel supplier showing the fuels delivered to such vessels shall be acceptable.		
Cutoff for monitoring per PCC 17.16.230.E.2 and/or NSPS Subpart Kb: <ul style="list-style-type: none"> <li>a) Petroleum Liquids with a max. true vapor pressure &lt; 0.50 psia ( 3.5 kPa) under actual storage conditions.</li> <li>b) VOL with a max true vapor pressure &lt; 2.17 psia (15 kPa) under actual storage conditions</li> <li>c) VOL with a max true vapor pressures &lt; 0.5 psia (3.5 kPa) under actual storage conditions</li> </ul>	All sizes  $V > 10K$ gal. $V < 40K$ gal.  $V > 40K$ gal.	Petroleum liquid  VOL  VOL
4) Diesel, Fuel Oil, or Jet A storage tanks		
5) Batch mixers.		
6) 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.		
7) 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. Including the following: Facility-Wide small commercial abrasive blasting cabinets provided they are equipped and maintained with filtration control devices. For the purpose of this activity, small cabinets are defined to be cabinets not designed to allow persons inside the cabinet while in use.		
8) Powder coating operations		

**Table 1: Insignificant Activities (Continued)**

Description	Maximum Rated Capacity	Fuels Used																		
<p>9) 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.</p> <p><b>Note:</b> Portable or temporary internal combustion engines (ICE) or non-road engines that operate, or are planned for operation, at a fixed location for more than 12 months shall be subject to stationary source permitting requirements. Portable ICE used or located at a facility, may be required to keep records as provided in <u>Condition 2.b</u> of this Attachment to document when the ICE is transferred to or from the facility, or alternate locations at the facility, and/or storage areas in order to establish that the unit is not subject to stationary permitting requirements.</p> <p>Portable ICE that are used to replace a stationary ICE at a fixed location and intended to perform the same or similar function shall include the time period of both engines to determine the consecutive time period for purposes of stationary ICE permitting.</p> <p>Notwithstanding the stationary ICE permitting requirement, a portable ICE shall not be required to meet the NSPS or NESHAP ICE standards for stationary sources when used as an emergency replacement or as a standby unit, while the facility effects repairs, or while ordering a replacement unit, unless the Permittee intends for the replacement portable ICE to be permanent.</p> <p>Portable ICE used to replace a stationary permitted ICE shall be limited by the same run hour limits (if any) applicable to the replaced unit at that facility location. The balance of the permitted allowable run hours allotted to the stationary ICE shall continue to accrue with the operation of the replacement unit. When used for this specific purpose, the permittee shall be required to keep records of the run hours and emissions of the portable ICE for emission inventory purposes.</p>																				
<p>10) Lab equipment used exclusively for chemical and physical analyses.</p>																				
<p>11) Trivial activities as provided in <u>PCC 17.04.340.a.237 a through xx</u>.</p>																				
<p>12) The Control Officer has deemed the following portable sources located at a facility and having a combined capacity less than the amount in its FBE class, as listed below, to be an insignificant activity per <u>Condition 2.b</u> of this attachment, and not requiring documentation to demonstrate their portable source status:</p> <p style="text-align: center;"><b><u>Fuel Burning Equipment (FBE) Class</u></b></p> <table border="1" data-bbox="511 1115 1382 1350"> <tbody> <tr> <td data-bbox="511 1115 1003 1157">Diesel Fired Engines <sup>1</sup></td> <td data-bbox="1003 1115 1203 1157">75 hp</td> <td data-bbox="1203 1115 1382 1157"></td> </tr> <tr> <td data-bbox="511 1157 1003 1199">Gasoline Fired Engines <sup>1</sup></td> <td data-bbox="1003 1157 1203 1199">215 hp</td> <td data-bbox="1203 1157 1382 1199"></td> </tr> <tr> <td data-bbox="511 1199 1003 1241">Natural Gas Fired Engines <sup>2</sup></td> <td data-bbox="1003 1199 1203 1241">80 hp</td> <td data-bbox="1203 1199 1382 1241"></td> </tr> <tr> <td data-bbox="511 1241 1003 1283">Natural Gas Fired Fuel Burning Equipment <sup>2</sup></td> <td data-bbox="1003 1241 1203 1283">23 MMBtu/hr</td> <td data-bbox="1203 1241 1382 1283"></td> </tr> <tr> <td data-bbox="511 1283 1003 1325">LPG Fired Fuel Burning Equipment <sup>2</sup></td> <td data-bbox="1003 1283 1203 1325">15 MMBtu/hr</td> <td data-bbox="1203 1283 1382 1325"></td> </tr> <tr> <td data-bbox="511 1325 1003 1350">Diesel Fired Fuel Burning Equipment <sup>2</sup></td> <td data-bbox="1003 1325 1203 1350">4.5 MMBtu/hr</td> <td data-bbox="1203 1325 1382 1350"></td> </tr> </tbody> </table> <p><sup>1</sup> Does not include non-road engines in or on a piece of equipment that is self-propelled or engines that serve a dual purpose by both propelling itself and performing another function; or is intended to be propelled while performing its function (examples: engine powered equipment used on utility vehicles, garden tractors, off-highway mobile cranes and bulldozers; or engines that can be moved by hand such as lawnmowers, string trimmers et. al.).</p> <p><sup>2</sup> Does not include sources that are by definition insignificant or trivial activities per Title 17 of the PCC.</p>	Diesel Fired Engines <sup>1</sup>	75 hp		Gasoline Fired Engines <sup>1</sup>	215 hp		Natural Gas Fired Engines <sup>2</sup>	80 hp		Natural Gas Fired Fuel Burning Equipment <sup>2</sup>	23 MMBtu/hr		LPG Fired Fuel Burning Equipment <sup>2</sup>	15 MMBtu/hr		Diesel Fired Fuel Burning Equipment <sup>2</sup>	4.5 MMBtu/hr			
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**Attachment 2A**  
Source Applicability for  
Additional ancillary sources (if installed)