PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

150 West Congress Street •Tucson, AZ 85701 •Phone: (520) 740-3340

AIR QUALITY OPERATING PERMIT

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

ISSUED TO

CITY OF TUCSON
THOMAS O. PRICE OPERATIONS CENTER
4004 S. PARK AVENUE
TUCSON, AZ 85714

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

THIS PERMIT ISSUED SUBJECT TO THE FOLLOWING **Conditions contained in Attachments "A", "B", "C", "D" and "E".**

PDEQ PERMIT NUMBER **#1845** PERMIT CLASS **II** EXPIRATION DATE **June 26, 2007**

PERMIT ISSUED THIS **TWENTY-SEVENTH** DAY OF **JUNE TWO THOUSAND AND TWO**

K Lawrence

SIGNATURE

Kathi Lawrence Environmental Planning Manager, PDEQ

TITLE

Revised February 2005

INTRODUCTION

The City of Tucson Operations Center is located at 4004 S Park Ave. The facility is called The Thomas O. Price Operations Center. It contains machine shops, vehicle maintenance and repair shops, carpentry and print shops, paint shops, fueling stations and administrative office areas, among other things. There is a Soil Vapor Extraction program ongoing to remove underground soil and groundwater contamination. The City of Tucson SunTran Bus System also has its maintenance and repair facility here. This permit was revised in January 2005 to permit two Solvent Vapor Extraction Units, (SVEUs).

A listing of possible units to require permitting would include two 5.5 MM BTU Natural Gas Fired Boilers, a 10,000 gallon Petroleum Liquid Storage Vessel for unleaded gasoline, the SVEUs and an Emergency Power Diesel Generator. The only units requiring a permit from the Pima County Department of Environmental Quality, (PDEQ) are the SVEUs and the 500 HP Emergency Generator Diesel Motor. The SVEUs are on two contiguous properties, across the street from each other and both require a permit based on uncontrolled potential to emit, (PTE). All other equipment at the facility has already been classified as insignificant equipment in the 2002 renewal.

The following emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted herein. The emission rates only apply to the generator. They were determined based on standard EPA AP-42 emission factors or emissions data provided by the engine manufacturer, the total brake horsepower of 500, and the maximum possible operating time of 8760 hours per year. The SVEUs effectively have zero emissions after pollution controls are applied.

Table 1. Listing of Potential Annual Emissions from 500 Hp Diesel
From AP-42

POLLUTANT	LB/HR	TPY
Nitrogen Dioxide (as NO_x)	15.5	67.89
Carbon Monoxide (CO)	3.34	14.63
Volatile Organic Compounds (VOC)	1.3	5.5
Particulate Matter (as PM_{10})	1.1	4.81
Sulfur Dioxide (as SO_x)	1.0	4.49
Total Hazardous Air Pollutants (HAPS)	Negligible	Negligible

The source consisting of a 500 HP Diesel Motor and SVEUs is classified as a Synthetic Minor Source, a Stationary Source, requiring a Class II Permit. The facility is a synthetic minor because of the SVEUs.

Permit Issued To: City of Tucson /Thomas O. Price Operations Center
Permit Number: 1845
Part A: GENERAL CONDITIONS

(References to A.R.S. are references to the Arizona Revised Statutes, references to A.A.C. are references to the Arizona Administrative Code, and references to PCC are references to Title 17 of the Pima County Code)

I. PERMIT EXPIRATION AND RENEWAL [A.R.S. § 49-480.A, PCC 17.12.160.C.2 & PCC 17.12.180.A.1]

A. This permit is valid for a period of five years from the date of issuance of the permit.

B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not greater than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [PCC 17.12.180.A.8.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. Need to halt or reduce activity not a defense. 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.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE [PCC 17.12.180.A.8.c & PCC 17.12.270]

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. The permit shall be reopened and revised under any of the following circumstances:

1. Additional applicable requirements under the Act become applicable to a major source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to PCC 17.12.280. Any permit reopening required pursuant to this paragraph shall comply with provisions in PCC 17.12.280 for permit renewal and shall reset the five-year permit term.

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be

incorporated into the Class I permit.

3. The control officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The control officer or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Part shall not result in the resetting of the five-year permit term.

IV. POSTING OF PERMIT [PCC 17.12.080]

A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:

1. Current permit number.

2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.

B. In the event that the equipment is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.

C. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT [PCC 17.12.180.A.9 & PCC 17.12.510]

Permittee shall pay fees to the control officer pursuant to A.R.S. § 49-480.D and PCC 17.12.510.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE [PCC 17.12.320]

A. When requested by the control officer, the Permittee shall complete and submit an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the control officer makes the request and provides the inventory form each year, whichever occurs later, and shall include emission information for the previous calendar year.

B. The questionnaire shall be on a form provided by or approved by the control officer and shall include the information required by PCC 17.12.320.

VII. COMPLIANCE CERTIFICATION [PCC 17.12.180.A.5 & PCC 17.12.210.A.2]

Permittee shall submit to the control officer a compliance certification that describes the compliance status of the source with respect to each permit condition. Certifications shall be submitted as specified in Part "B" of this permit.

A. The compliance certification shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;

2. Compliance status of each applicable requirement;

3. Whether compliance was continuous or intermittent;

4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;

5. A progress report on all outstanding compliance schedules submitted pursuant to PCC 17.12.180.A.5.d.

B. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator.

The address for the EPA administrator is:

EPA Region 9 Enforcement Office, 75 Hawthorne St (Air-5), San Francisco, CA 94105

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [PCC 17.12.210.A.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required by this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [PCC 17.12.210.A.4]

The Permittee shall allow the control officer or the authorized representative of the control officer upon presentation of proper credentials to:

A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD [PCC 17.12.160.C.4]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. AFFIRMATIVE DEFENSES FOR EXCESS EMISSIONS DUE TO MALFUNCTIONS, STARTUP, AND SHUTDOWN [A.R.S. §49-480.B & A.A.C. 18-2-310]

A. Applicability. This permit condition establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

1. Promulgated pursuant to Sections 111 or 112 of the Act,

2. Promulgated pursuant to Titles IV or VI of the Clean Air Act,

3. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. E.P.A.,

4. Contained in PCC 17.16.280.F, or

5. Included in a permit to meet the requirements of PCC 17.16.590.A.5.

B. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of XIII.B of this Part and has demonstrated all of the following:

1. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the operator;

2. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

3. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that the measures were impracticable;

4. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

5. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

6. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

7. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in PCC Chapter 17.08 that could be attributed to the emitting source;

8. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;

9. All emissions monitoring systems were kept in operation if at all practicable; and

10. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.

C. Affirmative Defense for Startup and Shutdown

1. Except as provided in XI.C.2, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of XIII.B of this Part and has demonstrated all of the following:

   a. The excess emissions could not have been prevented through careful and prudent planning and design;

b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

f. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in PCC Chapter 17.08 that could be attributed to the emitting source;

g. All emissions monitoring systems were kept in operation if at all practicable; and

h. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.

2. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to XI.B.

D. Affirmative Defense for Malfunctions During Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to XI.B.

E. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under XI.B or C, the owner or operator of the source shall demonstrate, through submission of the data and information required by this Section and XII.B, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

XII. RECORD KEEPING REQUIREMENTS [PCC 17.12.180.A.4]

A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;

2. The date(s) analyses were performed;

3. The name of the company or entity that performed the analyses;

4. A description of the analytical techniques or methods used;

5. The results of such analyses; and

6. The operating conditions as existing at the time of sampling or measurement.

B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIII. REPORTING REQUIREMENTS [PCC 17.12.180.A.5.a]

The Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

A. Compliance certifications pursuant to Part "A", Section VII of this permit.

B. Excess Emissions Reporting Requirements [A.R.S. §49-480.B & A.A.C. 18-2-310.01]

1. The owner or operator of any source shall report to the control officer any emissions in excess of the limits established by this permit. The report shall be in two parts as specified below:

a. Notification by telephone or facsimile within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions that includes all available information from XIII.B.2.

The number to call to report excess emissions is **520-740-3340**.

b. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under XIII.B.1.a.

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

a. The identity of each stack or other emission point where the excess emissions occurred;

b. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

c. The time and duration or expected duration of the excess emissions;

d. The identity of the equipment from which the excess emissions emanated;

e. The nature and cause of the emissions;

f. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;

g. The steps that were or are being taken to limit the excess emissions; and

h. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

3. In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to XIII.B.1 and 2.

C. Permit Deviations (Other Than Excess Emissions) Reporting Requirements. The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. For the purposes of this condition, "promptly report" shall mean that the Permittee submitted the report to the control officer by certified mail or hand-delivery within two working days of the of time the deviation was discovered.

D. Reporting requirements listed in Part "B" of this permit.

XIV. DUTY TO PROVIDE INFORMATION [PCC 17.12.160.G & PCC 17.12.180.A.8.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, for Class I sources, shall furnish an additional copy of such records directly to the Administrator 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.

XV. PERMIT AMENDMENT OR REVISION [PCC 17.12.240, PCC 17.12.250 & PCC 17.12.260]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

A. Administrative Permit Amendment (PCC 17.12.240.);

B. Minor Permit Revision (PCC 17.12.250.);

C. Significant Permit Revision (PCC 17.12.260.).

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT PERMIT REVISION [PCC 17.12.230]

A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.

4. The changes satisfy all requirements for a minor permit revision under PCC 17.12.250.

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.

C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the control officer and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Each

notification shall include:

1. When the proposed change will occur.

2. A description of each such change.

3. Any change in emissions of regulated air pollutants.

4. The pollutants emitted subject to the emissions trade, if any.

5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.

6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.

7. Any permit term or condition that is no longer applicable as a result of the change.

XVII. TESTING REQUIREMENTS [PCC 17.12.050]

A. Operational Conditions During Testing

Tests shall be conducted while the unit is operating at full load under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the control officer, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in PCC 17.04.340.A.) shall not constitute representative operational conditions unless otherwise specified in the applicable requirement.

B. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the control officer, in accordance with PCC 17.12.050.B. and the Arizona Testing Manual. This test plan must include the following:

1. test duration;

2. test location(s);

3. test method(s); and

4. source operation and other parameters that may affect test results.

C. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;

2. Safe sampling platforms;

3. Safe access to sampling platforms; and

4. Utilities for sampling and testing equipment.

D. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the control officer's approval, be determined using the arithmetic mean of the other two runs.

E. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the control officer within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and PCC 17.12.050.A.

F. Cessation of Testing After the First Run Has Started

If the control officer or the control officer's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation that demonstrates good cause must be submitted.

XVIII. PROPERTY RIGHTS [PCC 17.12.180.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XIX. SEVERABILITY CLAUSE [PCC 17.12.180.A.7]

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.

XX. PERMIT SHIELD [PCC 17.12.310]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Part "C" of this permit. The permit shield shall not apply to any change made pursuant to Section XV.B of this Part and Section XVI of this Part.

XXI. ACCIDENT PREVENTION REQUIREMENTS UNDER THE CLEAN AIR ACT (CAA Section

112(r))

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit a risk management plan (RMP) by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the semiannual compliance certification as required by 40 CFR Part 70 and Part "B" of this permit.

City of Tucson
Thomas O. Price Operations Center
Air Quality Permit Number 1845

Summary of Permit Requirements

Emission Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/ Recordkeeping	Reporting	Testing Frequency/Methods
Diesel fired emergency power generator	PM, NOx, CO, VOC	No controls installed	$E \leq 1.02\ Q^{0.769}$ lb/hr Opacity $\leq$ 40% for >10 seconds. First 10 min. exempt. Opacity $\leq$ 60% for cold or loaded engines. $\leq$ 1.0 lb SO_x/MM BTU Input Sulfur content of fuel oil limited to <0.9%	Visible emissions check. Monitor and record sulfur content in each load of fuel purchased. Retain all records for five years.	Report when sulfur content > 0.8 % Prompt reporting of deviations from permit requirements. Annual compliance certification. Emissions inventory report when requested. The Permittee shall submit quarterly summary reports during periods in which a permit deviation occurs.	Testing to determine compliance with the mass emission limit for PM is not necessary unless requested by the Control Officer. EPA Test Method 9 or Test Method 22 shall be used to monitor compliance with the opacity standard. ASTM Method D-129-91, or equivalent, for sulfur content of liquid fuels.
Solvent Vapor Extraction Units	VOCs HAPs & PM_{10}	Use of thermal oxidizer at all times according to manufacturer's specifications. No dilution air to be added to gas stream. Temperature recording device w/ accuracy of +/- 5 ^oF. Temperature $\geq$ 1400 ^oF Install & maintain flow meter at exhaust of oxidizer. Treatment of fuel contaminated sites only. Secure all vapor extraction wells upon project completion.	$E \leq 3.59\ Q^{0.62}$ lb/hr Opacity $\leq$ 40%. (20% after April 23, 2006) Natural gas, propane or electric energy only to fuel oxidizer. No visible emissions beyond property boundary line. Limit odors so as not to cause air pollution. Use of abatement equipment to limit air pollution to adjoining property Destruction efficiency $\geq$ 90% when VOC concentration is > 500 ppmv No discharging into the atmosphere at any time	Samples of gas from SVEUs as stated in permit. Visible emissions check & recording when using natural gas. When using natural gas, demonstrate that only natural gas was fired Concentrations of VOC & benzene using appropriate EPA method. Recordkeeping using table in Part E. Retain records for five years.	Written reports prior to commencement & operation Written reports of all sampling tests. Prompt reporting of deviations from permit requirements. Annual compliance certification. Emissions inventory report when requested. The Permittee shall submit semiannual summary reports during periods in which a permit deviation occurs.	Testing to determine compliance with the mass emission limit for PM is not necessary unless requested by the Control Officer. EPA Test Method 9 or Test Method 22 shall be used to monitor compliance with the opacity standard. Conduct a complete vapor analysis incl full range GRO & halogenated hydrocarbon using appropriate EPA method.

Part B: SPECIFIC CONDITIONS
Air Quality Control Permit No. 1845
For
City of Tucson /Thomas O. Price Operations Center

Note: This Part B contains equipment specific requirements for the operation of the City of Tucson /Thomas O. Price Operations Center located at 4004 South Park Avenue, Tucson.

I. APPLICABILITY

A. Affected Emission Source or Process:

The affected emission sources are the SVEUs (to be operated at all times with an oxidizer) and an emergency generator. This is an existing synthetic minor source based upon limitations on the SVEUs. The diesel fired stationary rotating machine is used for emergency power generation, similar to those used for water pumps in firefighting, etc. There are no operational limitations on the engines in this category.

B. Affected Emission Source Classification: **Class II Synthetic Minor Stationary Source for VOCs.**

II. EMISSION LIMITS / STANDARDS

A. Standards of Performance for Stationary Rotating Machinery

1. Emissions of particulate matter shall not exceed: [PCC 17.16.340.C]

$$E = 1.02Q^{0.769}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.
Q = the heat input in million Btu per hour.

2. Opacity Standard [SIP Rule 321 and PCC 17.16.340.E]

a. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than ten consecutive seconds that exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. **[Federally Enforceable Condition]**

b. The maximum allowable average opacity for cold (i.e., within 10 consecutive minutes of startup) or loaded (i.e., being accelerated under load) diesel engines shall not exceed 60%. **[Federally Enforceable Condition]**

3. Sulfur dioxide (SO_2) emissions shall not exceed 1.0 pounds per million Btu heat input

when low sulfur oil is fired. [PCC 17.16.340.F]

4. The Permittee shall burn only low sulfur oil in the applicable diesel generator pursuant to 17.16.340.H.

5. The sum of the rated brake horsepower of all emergency power generators operated under this permit shall not exceed the total stated for such engines in Part D. of this Part without first making a permit change or permit revision pursuant to 17.12.230, 17.12.250, or 17.12.260.

B. Solvent Vapor Extraction Unit (SVEU) Standards

1. 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]

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

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.
Q = the heat input in million Btu per hour.

2. The Permittee shall not allow the opacity of any plume or effluent to be greater than 40%. [SIP Rule 321][PCC 17.16.040.A]
[Federally Enforceable Condition]

a. After April 23, 2006, except as otherwise provided in this permit relating to specific types of sources, the opacity of any plume or effluent from an existing, stationary, point source shall not exceed 20%. [PCC 17.16.130.B.3]

3. Visibility Limiting Standard [SIP Rule 343][PCC 17.16.050.D]
[Federally Enforceable Condition]

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.

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 shall not apply to the generation of airborne particulate matter from

undisturbed land.

4. 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. [SIP Rule 344][PCC 17.16.430.D]
[Federally Enforceable Condition]

5. 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]

6. The Permittee is not authorized to use the thermal or the catalytic oxidizers when the volatile organic compounds (VOCs) inlet concentrations are greater than manufacturer recommended limits cited in order to guarantee minimum destruction efficiencies of 90%. This limit is not applicable when the inlet VOCs concentration is less than or equal to 500 ppmv. [PCC 17.16.430.G]

7. The Permittee is not allowed to directly discharge into the atmosphere at any time. [PCC 17.12.180.A.2]

C. Fuel Limitation

The Permittee shall use **only** natural gas, propane, or electric energy to fuel the oxidizer burners. [PCC 17.12.180.A.2 & 17.12.220.B]
[Federally Enforceable Condition]
[Material Permit Condition]

D. Operational Limitations

The Permittee shall operate the following air pollution control at all times that vapor extraction is employed. Controls shall be fully operational upon startup of the SVEUs.
[Material Permit Condition]

1. The Permittee shall operate the Thermal Oxidizers, (TO) as follows:
[Material Permit Condition][PCC 17.12.180.A.2]

a. The thermal oxidizers shall be used to remove VOCs from the gases exiting the SVEUs only when the inlet concentration is less than the manufacturer recommended maximum VOCs concentration for the thermal oxidizer which assures a destruction efficiency of at least 90%. This limit is not applicable when the inlet VOCs concentration is less than or equal to 500 ppmv.

b. The thermal oxidizers shall be installed, maintained, and operated in accordance

with the manufacturer's specifications.

c. Temperature-recording devices with an accuracy of ±5 degrees Fahrenheit (^{o}F) shall be installed and maintained to measure and record the process temperature of the thermal oxidizers.

d. The process temperature of the thermal oxidizers shall be equal to or greater than 1400 ^{o}F.

e. A flow meter shall be installed and maintained at the exhaust of each thermal oxidizer to measure and display the total flow rate.

f. No dilution air shall be added to the gas stream downstream of the flow meter required by paragraph (e) of this subsection.

E General Conditions **[Material Permit Conditions]**[PCC 17.12.180.A.2]

1 Permittee shall use these SVE systems to treat only motor fuel contaminated sites.

2. No Resources Conservation Recovery Act (RCRA) hazardous waste is to be processed without first obtaining a RCRA permit and a revision to this permit.

3. Upon project completion, all vapor extraction wells shall be secured with locking caps to prevent access.

III. MONITORING REQUIREMENTS [PCC 17.12.180.A.3]

A. Stationary Rotating Machinery

1. The Permittee shall record daily the sulfur content and lower heating value of the fuel being fired in the machine, for each day the machine is operated, unless the Permittee is in continuous compliance with II.D of this Part B, in which case these records need not be kept. [PCC 17.16.340.I]

2. The Permittee shall conduct a Visible Emissions Check of the Emergency Generator at least once each calendar month. For the purposes of this Permit, a Visible Emissions Check is a verification that abnormal emissions are not present at the diesel motor exhaust stack during normal operations. The Visible Emissions Check shall be conducted by a person who is familiar with the EPA Test Method 9 procedures (but does not need to be Method 9 certified). If abnormally high emissions are observed during the Visible Emissions Check, the permittee shall determine the cause of the abnormal emissions and take corrective action to reduce the emissions to a normal operating level, which does not exceed 40% opacity.

B. Solvent Vapor Extraction Units (SVEUs)

VOCs and Benzene Inlet and Outlet Concentrations

1. At each location at which the SVEUs are operated, the Permittee shall take representative grab samples of the gas entering and exiting the SVEUs. The samples shall be taken as listed below:

   a. Upon startup, representative grab samples shall be taken biweekly for the first six weeks, then monthly for the following six months, and quarterly thereafter.

2. When using natural gas, the Permittee shall observe the exhaust stack of the SVEUs at least once each week for evidence of abnormal emissions.

3. Permittee shall determine the concentrations of VOCs and benzene in the inlet and outlet gas samples by using EPA Reference Method 8015 and 8021. EPA Reference Method 8015 shall be used for gasoline range organics and EPA Reference Method 8021 for benzene.

IV RECORDKEEPING REQUIREMENTS [PCC 17.12.180.A.4]

A. Stationary Rotating Machinery

1. The Permittee shall maintain records as required in XII of Part A.

2. The Permittee shall maintain an operation log for each engine showing:

   a. the type of fuel burned in the equipment; [PCC 17.16.010.C.]

   b. the maximum sulfur content in percent by weight for each load of fuel purchased;

   c. the dates that fuel was purchased or delivered;

   d. the basis for the determination of the sulfur content

   e. For each Visible Emission Check required in Condition III.A.2, above, the Permittee shall record the date and time of the check, the name of the person making the check, the results of the check, and the type of corrective action taken (if required).

   f. the records for each month shall be recorded within five working days after the end of the month.

3. The Permittee shall record the results of the opacity monitoring as described in Part 'B' Section III.A.2.

B. Solvent Vapor Extraction Units (SVEUs) [PCC 17.12.180.A.4]

1. The following information shall be recorded on a separate sheet for each SVEU in the tabular format as represented in Part E:

   a. Date of sampling;
   b. Type of Air Pollution Control in use (Thermal or Catalytic Oxidizer);
   c. The name of company or entity that performed the sampling;
   d. Site elevation (ft AMSL);
   e. The concentration of VOCs in inlet gas sample (ppm_V);
   f. The concentration of VOCs in outlet gas sample (ppm_V);
   g. The VOCs destruction efficiency for SVEUs;
   h. The concentration of benzene in the outlet gas, C6H6 (ppm_v);
   i. The flow rate at process blower inlet, $Q_{process}$ (scfm); and
   j. The exhaust gas temperature, T_{exit} (^oF).

2. The Permittee shall record the results of Part B.III.B.2 in a log containing the date of the check, the person making the check, the specific stack observed, and whether abnormal emissions were observed. If abnormal emissions were observed, the Permittee shall include in the log entry any corrective action taken.

3. The Permittee may demonstrate that only commercially available pipeline quality natural gas fuel was fired by making available to the Control Officer for his inspection, documentation, such as invoices or statements from the fuel supplier, showing that commercial natural gas was purchased for use in the equipment. [PCC 17.12.220.B]

4. The permittee shall display the name, address and phone number of a contact person at the site of the SVEUs in a manner as to be clearly visible and accessible.

C. Records For The Facility [PCC 17.12.180.A.4]

1. 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.

2. Location of Records. Permittee shall retain all records relating to this permit, and a copy of the permit at the permit site. The Permittee shall comply with the permit posting requirements of Part A, Section IV. All records shall be maintained in accordance with the requirements of Section XII. of Part A.

IV. REPORTING REQUIREMENTS [PCC 17.12.180.A.5. and 17.12.180.E.3.d]

A. Stationary Rotating Machinery

The Permittee shall report any daily period during which the sulfur content of the fuel being fired in the generator is greater than 0.8 percent. [PCC 17.16.340.J

B. Solvent Vapor Extraction Units (SVEUs)

1. A written report of the result of the testing required in Part B.V.D shall have been submitted to the Director prior to commencement of construction and operation.

2. A written report of the results of all sampling tests required in Part B.III.B shall be submitted to the Control Officer in accordance with Section XIII.D of Part "A". 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 E.

C. Excess Emissions and Permit Deviation Reporting.

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this Part within 24 hours of the time the Permittee first learned of the excess emissions occurrence. The Permittee shall report other deviations from permit requirements in this Part within two working days of the time the deviation occurred. (See Part "A", Section XI for detailed information on these two reports).

D. Semiannual Summary Reports of Required Monitoring.

The Permittee shall submit a semiannual summary report of all required monitoring to the Control officer only if permit deviations have occurred during the reporting period. Summary reports, when required, shall contain the reports of all permit deviations that have occurred during the reporting period. Semiannual reports of required monitoring shall be due on January 31st and July 31st of each year and shall cover the period July 1st through December 31st and January 1st through June 30th, respectively. The first semiannual report might not cover a full six-month period. [PCC 17.12.180.A.5.a]

E. Compliance Certification Reporting: [PCC 17.12.210.A.2]

The Permittee shall submit an annual compliance certification to the Control Officer pursuant to Part A, Section VII. The compliance certification report shall be due on January 31st of each year, and shall cover the previous calendar year. The first Annual Compliance Certification might not cover a full calendar year, but shall cover the time period from the Date of Issuance of this permit to December 31st of the same year.

F. Emissions Inventory Reporting: [PCC 17.12.320]

Every source subject to a permit requirement shall complete and submit to the control officer, when requested, an annual emissions inventory questionnaire pursuant to 17.12.320 of the Pima County Code. (See Section VI of Part A of this permit)

V. TESTING REQUIREMENTS [A.R.S. §49-480.B and PCC 17.12.180.A.3.a]

For purposes of District enforcement, 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 limits in Part B of this permit, the Permittee shall contact the control officer for testing requirements.

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

1. Particulate Matter. EPA Reference Method 5 shall be used to monitor compliance with II.A.1 & II.B.1 of this Part when Mass Emission Testing is required by the Control Officer.

2. EPA Test Method 9 shall be used to monitor compliance with II.A.2 & II.B.2 of this Part and when an opacity test is required by the Control Officer.

3. 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.

C. The sulfur content of the fuel shall be determined using ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method), or equivalent ASTM method applicable to determining the sulfur content of liquid fuels.

D. Prior to start-up or moving to a new site, the Permittee shall conduct a complete vapor analysis including full range GRO and halogenated hydrocarbons. The Permittee shall meet the requirements described in Section XVII of Part A. The Department may deem it necessary to conduct a subsequent performance test based on site/operation inspection and excess emissions. The performance test shall be conducted and data reduced (as required by PCC 17.12.050) in accordance with the following test methods:

EPA Reference Method 8015 for full range of GRO shall be used to determine the concentration of VOCs,

EPA Reference Method 8021 shall be used to determine the concentration of benzene.

EPA Reference Method 8260 shall be used to determine the concentration of halogenated compounds. [PCC 17.12.180.A.3]

Part C: APPLICABLE REGULATIONS
Air Quality Control Permit No. 1845
For
City of Tucson / Thomas O. Price Operations Center

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

Pima County State Implementation Plan:

Rule 321.	Emissions-Discharge: Opacity Limiting Standards Standards and Applicability {Includes NESHAPS}
Rule 343	Visibility Limiting Standard
Rule 344	Odor Limiting Standards

Compliance with the terms contained in this permit shall be deemed compliance with the following non-federally applicable requirements in effect on the date of permit issuance:

Pima County Code (PCC) Title 17, Chapter 17.16:

17.12.180	Permit Contents
17.12.210	Compliance Plan; Certification
17.12.220	Permits Containing Voluntarily Accepted Emission Limitations and Standards
17.12.320	Annual Emissions Inventory Questionnaire
17.16.010	Local Rules and Standards; Applicability of more than one Standard
17.16.030	Odor Limiting Standards
17.16.040	Standards and Applicability (Includes NESHAP)
17.16.050	Visibility Limiting Standard
17.16.130	Stationary Source Performance Standards; Applicability
17.16.340	Standards of performance for Stationary Rotating Machinery.
17.16.430	Standards of Performance for Unclassified Sources
17.20.010	Source Sampling, Monitoring, and Testing

Part D: EQUIPMENT LIST
Air Quality Control Permit No. 1845
For
City of Tucson / Thomas O. Price Operations Center

EQUIPMENT TYPE	EQUIPMENT NAME	MODEL	SERIAL NUMBER	MAXIMUM RATED CAPACITY	PRIMARY USE	FUEL TYPE
Generator	Caterpillar	3406	47R05963	500 Hp	Emergency Power	Diesel
Solvent Vapor Extraction Unit	Solleco, Inc	500 TCAT	C1154	600 cfm (500cfm process blower & 100 cfm from combustion blower)	Soil Vapor extraction	Natural Gas/ Electric Power
Solvent Vapor Extraction Unit	Paragon	ET-150	618 (Property # X101332)	150 scfm	Soil Vapor extraction	Natural Gas/ Electric Power

Part E: RECORDKEEPING TABLE
Air Quality Control Permit No. 1845
For
City of Tucson / Thomas O. Price Operations Center

Date	Type of Air Pollution Control in Use	Name of Testing Company	Elevation (ft. AMSL)	$VOCs_{INLET}$ Conc. (ppmV)	$VOCs_{OUTLET}$ Conc. (ppmV)	VOCs Destruction Efficiency (%)	Benzene Conc. (ppmV)	Flow Rate @ Process Blower ($Q_{process}$, scfm or acfm)	Temp. @ Exhaust Rate (T_{exit}, ^{o}F)

Where:

Qprocess = **flowrate at the exit of process blower (acfm or scfm value; only one is required)**
T_{exit} = **stack gas exit temperature.**
VOCsINLET = **concentration of volatile organic compounds in the inlet gas (from EPA Method 8015)**
VOCsOUTLET = **concentration of volatile organic compounds in the outlet gas (from EPA Method 8015)**
Benzene = **concentration of benzene in the exhaust gas (from EPA Method 8021).**
Destruction Efficiency (%) = $\frac{(VOCs_{INLET} - VOCs_{OUTLET}) * 100}{(VOCsINLET)}$