PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR PROGRAM

33 North Stone Avenue, Suite 730 ▪ Tucson, AZ 85701. ▪ Phone: (520) 740-3340

AIR QUALITY OPERATING PERMIT

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

ISSUED TO

INA ROAD WASTEWATER RECLAMATION FACILITY
7101 NORTH CASA GRANDE HIGHWAY
TUCSON, AZ 85743

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 Parts "A", "B", "C", and "D".**

PERMIT NUMBER **1903** PERMIT CLASS **I**

ISSUED: **SEPTEMBER 12, 2005** REVISED: **DECEMBER 16, 2008** EXPIRES: **SEPTEMBER 11, 2010**

SIGNATURE

Teresa Sobolewski Air Program Manager, PDEQ
TITLE

INTRODUCTION

The Ina Road Wastewater Reclamation Facility provides preliminary, primary and secondary treatment of wastewaters collected from the Tucson Metropolitan Area. The facility consists of the headworks, primary sedimentation, aeration, secondary sedimentation, chlorination and dechlorination systems. The facility has been undergoing an expansion construction over the last few years, to increase the capacity from 25 Million Gallons per Day to 37.5 Million Gallons per Day. The expansion consists of adding parallel independent primary treatment, secondary treatment and disinfection lines to the existing facility.

The facility provides preliminary, primary and secondary treatment of wastewaters collected from the Tucson Metropolitan area. The facility consists of the headworks, primary sedimentation, aeration, secondary sedimentation, chlorination and dechlorination systems. The existing treatment process uses a High Purity Oxygen - Activated Sludge process (HPOAS) for secondary treatment. The new parallel line, when it becomes operational will also provide secondary treatment by activated sludge but will also include a nitrification - denitrification process. Each Treatment Train will have its own chlorination contact tank for the fluids, but the dechlorination process will combine the two streams. Fluids are sent either to the City of Tucson as gray water for irrigation, or to the Santa Cruz River. Solids are shipped offsite as fertilizer for local agriculture, or incineration where necessary.

Electric power for the facility is provided by seven 1000 Hp engines that are fueled by Digester gas generated from the treatment process. The engines burn natural gas or propane gas when there is not sufficient Digester gas, although this is not preferred due to the relative higher cost of pipeline natural gas. Normally, five engines are sufficient to meet the power demand, but it is possible to run all seven at the same time.

There are several smaller engines that are standby and emergency power sources, less than 100 Hp each and an emergency flare, which are all classified as Insignificant Activities.

The following Table shows the Potential to Emit of the various criteria pollutants for this facility, with all engines and processes operating 24 hours per day, 365 days per year, with no controls.

Potential to Emit (tons per year)					
Nitrogen Oxides	Carbon Monoxide	Volatile Organic Compounds	Sulfur Dioxide	Particulate Matter (as PM_{10})	Hazardous Air Pollutants
576.58	2241.75	27.49	113.10	2.28	11.64

This is a **Class I Permit**. Based upon emissions, Ina Road Wastewater Reclamation Facility is an existing **Major Source** of nitrogen oxides and carbon monoxide, and a minor source of the other criteria pollutants. It is also an area source for HAPs.

All terms and conditions of this permit are federally enforceable by the Administrator of the United States Environmental Protection Agency (U.S.EPA). This permit cites only the current state rules.

Air Quality Permit #1903
Ina Road Wastewater Reclamation Facility
7101 N. Casa Grande Highway,
Marana, Arizona

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Permit Issued To:
Ina Road Wastewater Reclamation Facility

Permit Number: 1903

PART A: GENERAL PROVISIONS

(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, and 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 and 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. and 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 and shall affect only those parts of the permit for which cause to reopen exists. 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. and 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. and 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. and 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
[PCC 17.28.065A.R.S. §49-480.B, and 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. The notification shall be sent to the following address:

      PDEQ 150 W. Congress St. Tucson AZ, 85701

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. and 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, and 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.

Part B: SPECIFIC CONDITIONS
Air Quality Permit #1903
Ina Road Wastewater Reclamation Facility

Note: This Part B contains equipment specific requirements for the operations of the Ina Road Wastewater Reclamation Facility located at 7101 N. Casa Grande Highway, Marana AZ.

I. APPLICABILITY:

Affected Emission Source: **Class I Stationary Source; Major Source for NOx, CO.**

This is an existing major source based upon emissions from seven 1000 hp engines fueled by natural gas, propane and digester gas generated from the treatment process that provide electric power for the facility.

II. EMISSION LIMITS AND STANDARDS

A. Standards of Performance for the facility

1. The Permittee shall install, operate, and maintain air pollution control equipment or use good modern practices to minimize gaseous or odorous materials from being emitted in such quantities or concentrations as to cause air pollution. [PCC 17.16.030][SIP Rule 344.A][PCC 17.16.430.D]

2. Materials including solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizers and manure shall be processed, stored, used and transported in such manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. [PCC 17.16.430.F]
[Locally Enforceable Condition]

3. No person shall allow hydrogen sulfide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more. [PCC 17.16.430.H]
[Locally Enforceable Condition]

B. Standards of Performance for Stationary Rotating Equipment

1. Particulate Emissions

The maximum allowable emission discharge rate (in terms of mass per unit time) and mass concentration (in terms of mass per unit volume of gas) for an air pollutant shall be determined by the following equation:

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

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour
Q = the heat input in million Btu per hour. [SIP Rule 332][PCC 17.16.340.C.1]

2. The total heat input of all operating fuel burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted. [PCC 17.16.340.B]

[Locally Enforceable Condition]

3. The actual values shall be calculated from the applicable equations and rounded off to two decimal places. [PCC 17.16.340.D]

[Locally Enforceable Condition]

4. No person shall cause, allow or permit to be emitted into the atmosphere from any rotating machinery, smoke for any period greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [PCC 17.16.340.E]

[Locally Enforceable Condition]

5. The Permittee shall not use high sulfur fuel oil in any Stationary Rotating Machinery. [PCC 17.16.340.H]

[Locally Enforceable Condition]

6. When low sulfur oil is fired, Stationary Rotating Machinery installations shall burn fuel which limits the emission of sulfur dioxide to 1.0 pound per million Btu heat input. [PCC 17.16.340.F]

[Locally Enforceable Condition]

7. The Permittee shall only use Natural Gas, Commercial Propane or Digester gas in the seven Waukesha Model Stationary Rotating engines [PCC 17.12.220.B]

C. General Particulate Matter Standards for the Facility

1. Opacity Standards

a. No person shall cause, allow or permit the effluent from a single emission point, multiple emission point, or fugitive emissions source to have an average optical density equal to or greater than 40 percent opacity, subject to the following provisions:

(i) Opacities (optical densities) of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.

(ii) The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.

[SIP Rule 321.A]

b. The Permittee shall not cause or permit the effluent from any fugitive emissions source to have an average optical density greater than 20%, as measured in accordance with the Arizona Testing Manual, Reference Method 9. [PCC 17.16.050.B]

[Locally Enforceable Condition]

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

[Locally Enforceable Condition]

2. Visibility Limiting Standard [PCC 17.16.050.D]

[Locally 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 that 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.

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

[Locally Enforceable Conditions]

A. Odor and Hydrogen Sulfide Control

The Permittee shall perform weekly checks of the air pollution control equipment or use of good modern practices to control odors or hydrogen sulfide.

B. Stationary Rotating Equipment

1. The Permittee shall monitor the hours of operation for each engine listed in this Part 'D' Equipment List.

2. The Permittee shall observe the emission points at least once each day when the internal combustion engines are operating. If the observer sees a plume that, on an instantaneous basis, appears to exceed 40%, then the Permittee shall, if practicable, take a six-minute Method 9 observation of the plume. If the

emissions are 40% or more, this shall be recorded and reported as an excess emission and a permit deviation.

3. The Permittee shall determine the sulfur content from each digester at least once during each quarter.

C. Particulate Matter Monitoring

The Permittee shall observe the no-point emission sources at least once each day. If the observer sees a plume that, on an instantaneous basis, appears to exceed 20% or the plume is crossing property boundaries, then the Permittee shall, if practicable, take a six-minute Method 9 observation of the plume. If the emissions are 20% or more, this shall be recorded and reported as an excess emission and a permit deviation.

IV. RECORDKEEPING REQUIREMENTS

[PCC 17.12.180.A.3 and 4]

[Locally Enforceable Conditions]

A. Odor and Hydrogen Sulfide Control

Then Permittee shall maintain records of all weekly odor and hydrogen sulfide control inspections. The inspection record shall include the date, the identification of air pollution control equipment or good modern practices being checked, the name of the person making the check, and the results of the check (i.e., any indications of any operation or maintenance required or identification of emissions, and, if so, what corrective action was taken).

B. Stationary Rotating Equipment

1. The owner or operator of any stationary or portable source of air pollution which burns any material, except natural gas shall keep complete records of the materials used as fuel including the total hours for which that material was used.

[PCC 17.16.010.C]

2. a. The owner or operator of any stationary rotating equipment subject to the provisions of PCC Section 17.16.340 shall record daily the sulfur content and lower heating value of the fuel being fired in the machines.

[PCC 17.16.340.I]

Part B.III.B.3 shall satisfy the requirement for recording the daily sulfur content in IV.B.2.a above unless the Control Officer has reason to believe that a standard is being violated. The Permittee is also not required to record the lower heating value when using digester gas unless the Control Officer has reasonable cause to believe that the heating value of digester gas would violate the Particulate Matter Standard in Part B.II.B.1.

b. Use of Pipeline Quality Natural Gas and Commercial Propane makes it unnecessary to daily record the sulfur content and lower heating value when these are **exclusively** being used as fuel.
[PCC 17.16.340.I] [PCC 17.16.010]

c. The Permittee shall record the results of III.B.3 in a log containing the date of the check, the person making the check, and the sulfur content of the digester gas. If the sulfur content is greater than the limit in V.A.1 the Permittee shall include in the log entry any corrective action taken and report to the Control Officer according the requirements in Part A.XIII.B. [PCC 17.12.180.A.3. and 4]

3. The Permittee shall record the Hours of Operation for each Engine listed in this Part 'D' Equipment List. The totals for each month shall be recorded within five working days after the end of the month and shall be recorded as follows:

The Permittee shall keep rolling monthly totals of the engine-hours of operation for each generator for the most recent 12-consecutive month period. These shall be kept by adding the totals from III.B.1 above to the record of the previous 11 consecutive months.

4. The Permittee shall record all observations made under Opacity Monitoring described in Part 'B' Section III.B. If no visible emissions are observed, the record shall reflect this.

C. Particulate Matter Monitoring

The Permittee shall record all observations made under Opacity Monitoring described in Part 'B' III.C. If no visible emissions are observed, the record shall reflect this.

D. General

Records shall be kept in accordance with the Record Keeping Requirements described in Part "A" Section XII of this Permit.

V. REPORTING REQUIREMENTS **[Locally Enforceable Conditions]**

A. Stationary Rotating Equipment

1. The Permittee shall report to the Control Officer any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8 percent.
[PCC 17.16.340.J]

2. If the Permittee proposes to use any other fuel than natural gas, propane or digester gas, for each of the engines listed in Part "D", an application for a significant permit revision must be submitted in accordance with Part "A" Section XV.C. [PCC 17.12.250.A.6]

B. General

1. Permit Deviations Reporting

The Permittee shall promptly report excess emissions and deviations from permit requirements in accordance with the requirements outlined in Part 'A' Section XIII.C of this permit.

2. Semiannual Summary Reports of Required Monitoring. [PCC 17.12.180.A.5.a]

The Permittee is required to submit semiannual reports of required monitoring including excess emissions or permit deviations that have occurred during the reporting period. Summary reports, shall be due on January 31st (covering the period July 1st through December 31st) and July 31st (covering the period January 1st through June 30th) of each year. The first summary reports due after permit issuance may not cover a six-month period. All instances of excess emissions and deviations from permit requirements shall be clearly identified in such reports.

3. Compliance Certification Reporting

The Permittee shall submit an annual Compliance Certification Report to the Control Officer and to EPA Region IX. The Compliance Certification Report is due on July 31st of each year. The first report due after permit issuance may not cover a full 12-month period. (See Part "A", Section VII for detailed information on this report). [PCC 17.12.210.A.2]

4. Emissions Inventory Reporting [PCC 17.12.320]

Every source subject to a permit requirement shall complete and submit an annual emissions inventory questionnaire when requested by the control officer. (See Part "A", Section VI for additional information on this report).

VI. TESTING REQUIREMENTS **[Locally Enforceable Conditions]**

A. Opacity and Visible Emissions Testing

EPA Test Method 9 shall be used to monitor compliance with the opacity standard in Part "B" Section II.C.1 [PCC 17.20.010]

B. Particulate Matter Testing

Not required. The control officer may require the Permittee to quantify its particulate matter emissions if the control officer has reasonable cause to believe a violation of a standard has been committed. [PCC 17.20.010]

C. Hydrogen Sulfide Testing

Not required. The control officer may require the Permittee to test for hydrogen sulfide emissions if the control officer has reasonable cause to believe a violation of a standard has been committed. [PCC 17.20.010]

D. Performance Testing [PCC 17.20.070 & PCC 17.12.050]

Permittee shall conduct one performance test at least once per 5-yr permit term on each of the seven engines listed in Part D of this permit using solely digester gas to fuel the engines. These performance tests shall be completed no later than six months prior to permit expiration. Each set of performance tests shall include all of the pollutants listed in Section VI.D.1 of this section.

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

   i. Nitrogen Oxides. EPA Reference Method 20.

   ii. Carbon Monoxide. EPA Reference Method 10.

   iii. Volatile Organic Content (Hydrocarbons) EPA Reference Method 25.

   iv. Sulfur Dioxides. EPA Reference Method 6.

E. Performance Testing [PCC 17.20.070 & PCC 17.12.050]

Within 365 days of issuance of this first five-year permit, the Permittee shall carry out a performance test to establish the base emissions of formaldehyde from the current permitted seven engines. For the duration of the test, the engines shall be fueled by digester gas alone. The Permittee shall submit to the Control Officer for approval of the test method/s to be used before carrying out any testing.

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

Part C: APPLICABLE REGULATIONS
Air Quality Permit #1903
Ina Road Wastewater Reclamation Facility

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 SIP

Rule 321 - Emissions-Discharge Opacity Limiting Standards
Rule 332 - Compilation of Mass Rates and Concentrations
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 Title 17

17.12.050 - Performance Tests (Section A)
17.16.010 - Local Rules and Standards (Section B)
17.16.030 - Odor Limiting Standards
17.16.050 - Visibility Limiting Standard (Sections B, D)
17.16.340 - Standards of Performance for Stationary Rotating Machinery (Sections B, C, D, E, F, H)
17.16.430 - Standards of Performance for Unclassified Sources (Sections D, F, G, H, I)
17.20.010 - Source Sampling, Monitoring, and Testing (Section A)
17.20.070 - Testing Frequencies (Section A)

Part D: EQUIPMENT LIST
Air Quality Permit #1903
Ina Road Wastewater Reclamation Facility

Seven (7) Waukesha Model L7042G 1000 HP Generator Engines:

1. ID Code 14GEN698 Serial No. 299209
2. ID Code 14GEN699 Serial No. 299548
3. ID Code 14GEN700 Serial No. 299178
4. ID Code 14GEN701 Serial No. 298603
5. ID Code 14GEN702 Serial No. 299179
6. ID Code 14GEN703 Serial No. 299208
7. ID Code 14GEN704 Serial No. 299547

All the above engines were installed in 1977.

EQUIPMENT & PROCESSES IDENTIFIED AS INSIGNIFICANT

The following have been classified as insignificant activities because they do not meet permit thresholds or their potential to emit (PTE) is not significant enough.

Three small engines used in the lab, the well engine building and the compressor.

1. ID Code 01GEN000; Serial No: C800 492370; HP: 25; Make: Onan; Model #: 15ORSC-7R

2. ID Code 14CMP659; Serial No: 30T 538437; HP: 16; Make: Kohler Model #: K341

One emergency flare used to flare off any excess digester gas generated at the facility.

ID Code: 11FLR115; Serial No. (Not Available); OSCCO Model #: 222, 300 cfm