

**PART 71 FEDERAL OPERATING PERMIT  
STATEMENT OF BASIS**

**Salt River Project  
Tri-Cities Landfill Energy Facility  
Permit No. SR-ROP 05-03**

**I. Facility Information**

A. Permittee

Salt River Project  
P.O. Box 52025, PAB 352  
Phoenix, AZ 85072-2025

B. Facility location

11630 Beeline Highway  
Scottsdale, AZ

On the reservation of Salt River Pima-Maricopa Indian Community

C. Contact information

Facility Contact: Barbara Sprungl, (602) 236-5374

Responsible Official: Larry Bottolfson, (602) 236-6230

D. Description of operations, products

This facility produces electricity by firing IC engines with landfill gas collected at the Tri-Cities Landfill and the Salt River Landfill.

E. Permitting and construction history

This action is a renewal of a Part 71 Operating Permit for Tri-Cities Landfill Energy Facility (“TCLEF”).

EPA issued initial permit, #SR-OP 00-02, on September 21, 2000. Tri-Cities Landfill Energy Facility has never been required to apply for an EPA-issued New Source Review (“NSR”) permit.

F. Emission-generating units and activities

As per permittee’s request, assigned emission unit identification numbers have been revised. The two IC engines venting to the thermal oxidizer, TO1, will now be identified as ENG4 and ENG5. The three engines venting to the atmosphere are ENG1, ENG2 and ENG3.

**Table 1 – TCLEF Emission Units**

<b>Emission Unit I.D. No.</b>	<b>Unit Description</b>	<b>Associated Control Equipment</b>
ENG1	Caterpillar G3516 LE internal combustion engine (800 kW, 9.01 MMBtu/hr)	none
ENG2	Caterpillar G3516 LE internal combustion engine (800 kW, 9.01 MMBtu/hr)	none
ENG3	Caterpillar G3516 LE internal combustion engine (800 kW, 9.01 MMBtu/hr)	none
ENG4	Caterpillar G3516 LE internal combustion engine (800 kW, 9.01 MMBtu/hr)	unit TO1: John Zinc ZTOF 10x40 thermal oxidizer
ENG5	Caterpillar G3516 LE internal combustion engine (800 kW, 9.01 MMBtu/hr)	

G. Potential to emit (in tons/year)

Potential to emit (“PTE”) means the maximum capacity to emit any air pollutant (Clean Air Act criteria pollutants or hazardous air pollutants) under its physical and operational design. Any physical or operational limitation on the maximum capacity of TCLEF to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, may be treated as part of its design if the limitation is enforceable by EPA. PTE is meant to be a worst case emissions calculation and is used in many cases to determine the applicability of federal requirements. Actual emissions are typically lower than PTE.

The Federal Clean Air Act (“CAA” or “Act”), 42 U.S.C. §§ 7401-7671q, regulates emissions from major stationary sources of air pollution. Pursuant to Part C of the CAA, the prevention of significant deterioration (“PSD”) requirements promulgated at 40 C.F.R. § 52.21 apply to major stationary sources emitting CAA pollutants for which the area is in attainment with the national ambient air quality standards (“NAAQS”). For power generation facilities like

TCLEF, the major source PSD threshold of any pollutant is 250 tons per year (“tpy”). Pursuant to Part D of the CAA, the major source thresholds are lower for sources in nonattainment new source review (“NNSR”) areas where one or more of the certain criteria pollutants are not in attainment with the NAAQS. The area where the facility is located is nonattainment for particulate matter (“PM-10”) and ozone. Under both the PSD or NNSR programs, in order to avoid major source status, a source can limit its emissions in a Federally enforceable permit such as a Title V permit to below the threshold levels. In the initial permit, TCLEF requested EPA to limit its PTE of carbon monoxide (“CO”) emissions, thereby making the facility non-major under either PSD or NNSR for all CAA-regulated pollutants. This permit maintains the Federally enforceable limit for annual CO emissions of 88.3 tpy established in the initial permit. This permit also maintains the short-term limit for CO is 20.2 lbs/hour from all engines at the facility on a combined basis. Based on these permit limits and other information included in the permit application, the PTE of each emission unit is presented in Table 2.

**Table 2 – Facility-wide Potential to Emit**

Unit	Pollutant (tons/year)					
	NO <sub>x</sub>	VOC	SO <sub>2</sub>	PM10	CO	HAP
ENG1	13.19	6.59	0.98	3.65	24.18	0.02
ENG2	13.19	6.59	0.98	3.65	24.18	0.02
ENG3	13.19	6.59	0.98	3.65	24.18	0.02
TO1 (ENG4 and ENG5)	34.33	0.80	1.96	7.29	15.7	0.04
<b>Total</b>	<b>73.90</b>	<b>20.58</b>	<b>4.90</b>	<b>18.23</b>	<b>88.3</b>	<b>0.09</b>

**II. Tribe Information**

A. General

The reservation of the Salt River Pima-Maricopa Indian Community is located in Maricopa County and borders the cities of Mesa, Tempe, Scottsdale, Fountain Hills and metropolitan Phoenix. The Community consists of 52,600 acres, comprised mostly of agricultural lands. The Community is comprised of two Indian tribes, the Onk Akimel Au-Authm (Pima) and the Xalchidom Pii-pash (Maricopa).

B. Local air quality and attainment status

This facility is located in the area of the Salt River Pima-Maricopa Indian Community which is currently designated as nonattainment for PM-10 and ozone, and attainment or unclassifiable for CO, nitrogen dioxide (“NO<sub>2</sub>”), sulfur dioxide (“SO<sub>2</sub>”) and lead.

### **III. Applicable Requirements**

TCLEF is currently not subject to any existing applicable Federal CAA programs, such as PSD, new source performance standards (“NSPS”), national emission standards for hazardous air pollutants (“NESHAP”), or the acid rain program under Title IV of the CAA.

### **IV. Non-applicable Requirements**

TCLEF is an electricity-generating facility which uses landfill gas from the Tri-Cities Landfill and Salt River Landfill as a fuel to run a series of engines. The initial Part 71 permit issued to TCLEF by EPA Region 9 in 2000 contained applicable requirements from 40 C.F.R. Part 60, Subpart WWW. Specifically, the permit contained a nonmethane organic compound (“NMOC”) emission limit (“reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume”) set forth at 40 C.F.R. 60.752(b)(2)(iii)(B), including a requirement to perform the associated performance testing. The NMOC limit applied to engines and an enclosed flare (thermal oxidizer) at TCLEF that combusted landfill gas from the adjacent Tri-Cities Landfill, which is owned by the Salt River Pima-Maricopa Indian Community. At the time that TCLEF was permitted, the Tri-Cities landfill, which sends landfill gas or NMOC to TCLEF for flaring, had not yet applied to EPA Region 9 for a Part 71 permit.

EPA has determined that, in such cases where landfill gas is combusted for electricity generation by a separate stationary source, the landfill owners and/or operators are ultimately responsible for compliance with the requirements of Subpart WWW. This responsibility includes the emission control requirements along with the associated testing, monitoring, record-keeping, and reporting requirements set forth in the regulations. Therefore, EPA has deleted the NMOC limit and testing conditions, Conditions II.A.3, and II.C.3 through II.C.5, from the TCLEF renewal permit. To ensure compliance with the Subpart WWW requirements, the Part 71 permit EPA Region 9 issued to the Tri-Cities Landfill on May 25, 2006 incorporated all applicable requirements from Subpart WWW, including the 98 percent weight NMOC reduction (or 20 ppm outlet concentration) emission limit and associated performance testing that apply to the engines and thermal oxidizer at TCLEF. EPA anticipates that the Tri-Cities Landfill will coordinate with TCLEF to ensure compliance with all requirements of Subpart WWW. EPA also intends to incorporate Subpart WWW requirements in the Part 71 permit for Salt River Landfill once it is issued shortly.

**V. Emission Unit Testing and Monitoring**

A The applicant has demonstrated through performance testing that its CO emissions in the past five years have been consistently less than the CO emission limits included in the initial Part 71 permit by a significant margin. Therefore, the applicant requested a reduction in the frequency of its required annual testing. EPA Region 9 has reviewed the applicant’s request and test results from the first permit term, and agrees that such a change is justified.

Therefore EPA has revised the testing frequency in the permit. TCLEF will be required to conduct CO performance tests on each of the three engines, ENG1, ENG2, and ENG3, venting to the atmosphere, and the thermal oxidizer, TO1, three times during the permit term, in the first, third and fifth years.

B In addition, in order to assure compliance with the CO emission limits for the IC engines and thermal oxidizer, the permit requires quarterly use of portable CO analyzers. The permit requires the applicant to take corrective action if individual exhaust CO concentrations of emission units ENG1, ENG2, ENG3 and TO1 exceed 145 ppmv @ 15% O<sub>2</sub> (Since ENG4 and ENG5 vent to TO1, it is not necessary to monitor CO concentrations at those emission units).

Table 3 summarizes the CO monitoring and testing requirements in the permit.

**Table 3 – Monitoring Requirements**

<b>Requirement</b>	<b>Emission Limit Condition</b>	<b>Monitoring Added to Part 71 Permit</b>		<b>Monitoring Condition</b>
CO: 20.2 lb/hr facility-wide	II.A.1	source test, three times per permit term	145 ppmv, portable analyzer	II.C.1,2
CO: 88.3 tons/yr facility-wide	II.A.2	source test, three times per permit term		II.C.1,2

**VI. Use of All Credible Evidence**

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the

underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

## **VII. EPA Authority**

Title V of the CAA requires that EPA promulgate, administer, and enforce a Federal operating permits program when a State, local, or Tribal agency does not submit an approvable program within the time frame set by Title V or does not adequately administer and enforce its EPA-approved program. On July 1, 1996, EPA adopted regulations codified at 40 C.F.R. Part 71 setting forth the procedures and terms under which the Agency would administer a Federal operating permits program. See 61 Fed. Reg. 34202. These regulations were updated on February 19, 1999 to incorporate EPA's approach for issuing Federal operating permits to covered stationary sources in Indian country. See 64 Fed. Reg. 8247.

As described in 40 C.F.R. § 71.4(a), EPA will implement a Part 71 program in areas where a State, local, or Tribal agency has not developed an approved Part 70 program. Unlike States, Indian Tribes are not required to develop operating permits programs, though EPA encourages Tribes to do so. See, e.g., Indian Tribes: Air Quality Planning and Management, 63 Fed. Reg. 7253 (Feb. 12, 1998) (also known as the Tribal Authority Rule). Therefore, within Indian country, it is appropriate that EPA administer and enforce a Part 71 Federal operating permits program for stationary sources until Tribes receive approval to administer their own operating permits programs. As the Salt River Pima-Maricopa Indian Community has not received approval from EPA to operate a Title V permits program, it is appropriate for EPA to issue this Part 71 permit.

## **VIII. Endangered Species Act**

Pursuant to Section 7 of the Endangered Species Act (ESA), 16 U.S.C. § 1536, and its implementing regulations at 50 C.F.R. Part 402, EPA is required to ensure that any action authorized, funded, or carried out by EPA is not likely to jeopardize the continued existence of any Federally-listed endangered species or threatened species or result in the destruction or adverse modification of such species' designated critical habitat. The Title V permit EPA is issuing to Salt River Pima-Maricopa Indian Community for the Tri-Cities Landfill Energy Facility does not authorize the construction of new emission units, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. Therefore, EPA has concluded that the issuance of this permit will have no effect on listed species or their critical habitat.

## **IX. Public Participation**

### **A. Public Notice**

As described in 40 C.F.R. § 71.11(a)(5), all Part 71 draft operating permits shall be publicly noticed and made available for public comment. The public notice of permit actions and public comment period is described in 40 C.F.R. § 71(d).

There is a 30-day public comment period for actions pertaining to a draft permit. Public notice will be given for this draft permit by mailing a copy of the notice to the permit applicant, the Gila River Indian Community, the affected state (Arizona), local air pollution control agencies, emergency planning agencies, local government, land use agencies, federal and local land use agencies. A copy of the notice will also be provided to all persons who have submitted a written request to be included on the mailing list. Public notice will also be published in the Arizona Republic and the Au-Authm Action News.

#### B. Opportunity for Comment

Members of the public may review a copy of the draft permit prepared by EPA, this statement of basis for the draft permit, the application, and all supporting materials submitted by the source at the address listed in section IX.E, below. Copies of the draft permit and statement of basis can also be obtained from EPA's website (<http://www.epa.gov/region09/air/permit/r9-permits-issued.html>), or by contacting Manny Aquitania at the EPA address or phone number listed in section IX.E, below. All documents will be available for review at the EPA Region IX office indicated in section IX.E, below, during regular business hours.

If you believe that any condition of the draft permit is inappropriate, you must raise all reasonably ascertainable issues and submit all arguments supporting your position during the 30-day public comment period. Any supporting documents must be included in full and may not be incorporated by reference, unless they are already part of the administrative record for this permit or consist of tribal, state or federal statutes or regulations, or other generally available referenced materials.

All comments received during the public comment period and all comments made during any public hearing will be considered in arriving at a final decision on the permit. The final permit is a public record that can be obtained by request. A statement of reasons for changes made to the draft permits and responses to comments received will be sent to all persons who commented on the draft permit.

#### C. Opportunity to Request a Hearing

A person may submit a written request for a public hearing to Manny Aquitania, at the address listed in section IX.E, below, by stating the nature of the issues to

be raised at the public hearing. EPA shall hold a public hearing if EPA finds, on the basis of requests, a significant amount of public interest in this draft permit. If a public hearing is held, EPA will provide public notice of the hearing and any person may submit oral or written statements and data concerning the draft permit.

D. Mailing List

If you would like to be added to our mailing list to be informed of future actions on this or other Clean Air Act permits issued in Indian Country, please send your name and address to Manny Aquitania at the address listed below.

E. Contact Information

Manny Aquitania (AIR-3)  
U.S. Environmental Protection Agency, Region IX  
75 Hawthorne St.  
San Francisco, CA 94105  
Phone: (415) 972-3977  
E-mail: [aquitania.manny@epa.gov](mailto:aquitania.manny@epa.gov)