

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

**Salt River Pima-Maricopa Indian Community  
Tri-Cities Landfill  
Permit No. SR-OP 05-04**

**1. Facility Information**

a. Permittee

Salt River Pima-Maricopa Indian Community – Tri-Cities Landfill (TCL)  
10,005 East Osborn Rd.  
Scottsdale, AZ 85256

b. Facility location

10,005 East Osborn Rd.  
Scottsdale, AZ

c. Contact information

Facility Contact: Bobby Ramirez, (480) 850-8045

Responsible Official: Joni M. Ramos (480) 850-8000

d. Description of operations, products

The facility is a closed, municipal solid waste solid waste treatment and disposal facility.

e. Permitting and construction history

The facility is a closed landfill that accepted residential and commercial wastes from 1972 until October 9, 1993, and has not previously required a permit from EPA.

f. Emission-generating units and activities

<b>Emission Unit I.D. No</b>	<b>Unit Description</b>	<b>Associated Control Equipment</b>
FL-1	Landfill Gas Flare	n/a
LF-1	Landfill Gas Surface Emissions	open candlestick flare (FL-1)

g. Potential to emit (in tons/year)

Potential to emit (PTE) means the maximum capacity to emit any air pollutant (criteria or HAPs) under its physical and operational design. Any physical or operational limitation on the maximum capacity of TCL 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, though not all, cases to determine the applicability of federal requirements. Actual emissions may be much lower than PTE. The potential to emit presented below was calculated by TCL in its permit application.

<b>Unit</b>	<b>Pollutant</b>					
	<b>NO<sub>x</sub></b>	<b>VOC</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>CO</b>	<b>HAP</b>
FL-1	3	0	1	1	9	0
LF-1	0	12	0	0	0	4
<b>Total</b>	<b>3</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>4</b>

**2. Tribe Information**

a. General

The reservation of the Salt River Pima-Maricopa Indian Community is located in Maricopa County, AZ 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 an area currently designated as nonattainment for PM<sub>10</sub> and ozone, and attainment or unclassifiable for CO, NO<sub>2</sub>, SO<sub>2</sub> and lead.

**3. Applicable Requirements**

- a. 40 C.F.R. Part 62, Subpart GGG, Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction Prior to May 30, 1991 and Have Not Been Modified or Reconstructed Since May 30, 1991.

Subpart GGG applies to landfills that are located in a State or portion of Indian country that does not have an EPA-approved State or Tribal plan to implement and enforce EPA's landfill Emission Guidelines codified in 40 C.F.R. Part 60, Subpart Cc. Since there is no EPA-approved Tribal plan for the Salt River Pima-Maricopa Indian Community, Subpart GGG fills the regulatory gap by applying the emission standards, procedures, test methods, monitoring, reporting, and recordkeeping requirements of the Subpart WWWW (discussed below) to landfills in the area.

The Federal Plan requires landfill owners and operators to submit a report identifying the landfill design capacity. Large landfills with a design capacity of 2.5 million megagrams and 2.5 million cubic meters or more of waste were required to submit a nonmethane organic compounds ("NMOC") emission rate report within 150 days of publication of Subpart GGG in the Federal Register. Landfills with this design capacity and which emit NMOC at a rate of 50 megagrams per year or more are required to install a gas collection and control system within 30 months after the NMOC emission rate report first shows emissions of 50 megagrams per year or more. The TCL emission rate exceeds these design capacity and emission rate thresholds, and has installed a landfill gas collection and control system.

- b. 40 C.F.R. Part 60, Subpart WWWW Standards of Performance for Municipal Solid Waste Landfills

The provisions of Subpart WWWW apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. TCL was constructed prior to this date. However, the Subpart GGG Requirements for Municipal Solid Waste Landfills described above incorporates the emission standards, procedures, test methods, monitoring, reporting, and recordkeeping requirements of Subpart WWWW.

Controlling NMOC emissions involves drilling collection wells into the landfill and routing the gas to a suitable energy recovery system or combustion device. A combustion device that controls landfill gas emissions may be a flare or a device which utilizes the energy content of the gas, such as an internal combustion engine. TCL has installed such a landfill gas collection and control system. Subpart WWWW requires that the collected landfill gas be vented to a control device at all times.

Some of the landfill gas collected by TCL is routed to a candlestick flare at the facility that is operated continuously. Pursuant to Subpart WWW, the flaring activity is regulated under the Standards of Performance for New Stationary Sources General Provisions, 40 C.F.R. Part 60 Subpart A. Among other requirements, those provisions require that the flare be operating at all times that gases are being vented to the flare.

In addition, a portion of the collected landfill gas is piped to the Tri-Cities Landfill Energy Facility, a facility under separate ownership that is located on a contiguous property and has a Part 71 permit issued by EPA Region 9. The Energy Facility combusts the landfill gas it receives from TCL in five internal combustion engines and an enclosed flare (thermal oxidizer). EPA considers the each of the engines and the thermal oxidizer to be an “enclosed combustion device” for Subpart WWW regulatory purposes. Enclosed combustion devices must meet reduce NMOC by 98% or reduce the NMOC outlet emissions to 20 parts per million.

In such cases where landfill gas is combusted for electricity generation by a separate stationary source, EPA has determined that landfill owners and/or operators cannot avoid liability for compliance with Subpart WWW, regardless of the specifics of their contractual relationship with the source that is receiving the landfill gas. The landfill owners and/or operators are ultimately responsible for compliance with the control requirements of Subpart WWW, along with the associated testing, monitoring, record-keeping, and reporting requirements in the regulation. Therefore the TCL Part 71 permit incorporates all applicable requirements from Subpart WWW, including the 98 weight percent NMOC reduction (or 20 ppm outlet concentration) emission limit and associated performance testing that apply to the engines and thermal oxidizer at the Energy Facility. TCL has the responsibility to ensure compliance with the Subpart WWW requirements at both its facility and at the Energy Facility.

c. 40 C.F.R. Part 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

TCL is subject to Subpart AAAA because it accepted waste after November 8, 1987, has a design capacity greater than 2.5 million megagrams (“Mg”), and an annual uncontrolled NMOC emission rate that exceeds 50 Mg. This regulation requires landfill operators to continuously monitor control devices to ensure compliance with the operating conditions for landfill gas control systems. Subpart AAAA also adds reporting requirements to ensure that any deviations will be corrected in a timely fashion. Finally, the regulation requires municipal solid waste landfills to prepare and implement a plan to control toxic air emissions during startup, shutdown, and malfunction of their landfill gas collection and control systems and to report when this plan is not followed.

d. Incorporation of Applicable Requirements into Part 71 Permit

<b>Applicable Requirement</b>	<b>Condition &amp; Page in Permit</b>	<b>Description/Notes</b>
40 C.F.R. 60, NSPS, Subpart A (General Provisions)		
40 C.F.R. 60.4(a)	II.D.1., page 16	submit reports to EPA Regional office
40 C.F.R. 60.7(a)	II.D.2., page 16	notification of reconstruction or modification
40 C.F.R. 60.7(b)	II.D.3., page 16	records of startup, shutdown, malfunction
40 C.F.R. 60.7(f)	II.D.4., page 16	maintain monitoring records
40 C.F.R. 60.9	II.D.5., page 16	availability of information
40 C.F.R. 60.11(a)	II.D.6., page 17	compliance with non-opacity standards
40 C.F.R. 60.11(d)	II.D.7., page 16	good practice to minimize emissions
40 C.F.R. 60.11(g)	II.D.8., page 16	credible evidence
40 C.F.R. 60.12 & 63.4(b)	II.D.9., page 16	circumvention
40 C.F.R. 60.18 & 63.11(b)	II.A.2., page 5	requirements for flares
40 C.F.R. 60.19	II.D.10., page 17	general notification and reporting
40 C.F.R. 63, NESHAP, Subpart A (General Provisions)		
40 C.F.R. 63.9	II.D.11., page 17	notification requirements
40 C.F.R. 63.6(e)(3)(iii)]	II.D.12, pages 17-18	SSM recordkeeping
40 C.F.R. 63.6(e)(3)(iv)]	II.D.13, page 18	SSM deviation reporting
40 C.F.R. 63.10(d)(5)	II.C.6., page 16	periodic startup, shutdown and malfunction reports
40 C.F.R. 63.10(d)(5)	II.C.6., page 16	reporting actions not consistent with the SSM Plan

40 C.F.R. 60, NSPS, Subpart WWW		
40 C.F.R. 60.752(b)	II.A.1 & 2., page 5	collection of landfill gas
40 C.F.R. 60.753(b)	II.B.3, page 5	operate collection system with negative pressure
40 C.F.R. 60.753(c)	II.B.4, page 6	temperature, nitrogen and oxygen levels
40 C.F.R. 60.753(c)(1)	II.B.5, page 6	nitrogen test method
40 C.F.R. 60.753(c)(2)	II.B.6, page 6	oxygen test method
40 C.F.R. 60.753(e) & (f)	II.B.1 & 2., page 5	operational standards for collection and control systems
40 C.F.R. 60.755(e)	II.C.1., page 6	times when WWW provisions apply
40 C.F.R. 60.755(c)	II.C.2., page 6	determination of compliance with surface methane operational standard
40 C.F.R. 60.755(c)	II.C.3., page 7	cover integrity monitoring
40 C.F.R. 60.756(a)	II.E.1., pages 7-8	active gas collection system monitoring
40 C.F.R. 60.758(a)	II.F.1., page 8	recordkeeping
40 C.F.R. 60.758(b)(1)	II.F.2., page 8-9	recordkeeping
40 C.F.R. 60.758(b)(2)	II.F.3., page 9	recordkeeping
40 C.F.R. 60.758(b)(4)	II.F.4., page 9	recordkeeping
40 C.F.R. 60.757(f)	II.C.5., pages 14-5	annual reports
40 C.F.R. 63, NESHAP, Subpart AAAA		
40 C.F.R. 63.1960	II.D.1., page 7	startup, shutdown, and malfunction plan
40 C.F.R. 63.1955(c); 40 C.F.R. 63.1965(a), (b), and (c)	II.E.2., page 8	deviation reporting

#### 4. Periodic Monitoring

NSPS Subpart WWW requires that facilities that route landfill gas to enclosed combustion devices comply with an NMOC emission limit of 98 weight percent NMOC reduction or an outlet NMOC concentration of less than 20 parts per million. Since the Tri-Cities Landfill pipes a portion of the landfill gas it collects to the contiguous Tri-Cities Landfill Energy Facility, where the gas is combusted in internal combustion engines and a thermal oxidizer, the Tri-Cities Landfill must demonstrate compliance with this limit. Subpart WWW requires an initial performance test within 180 days of startup to determine compliance with this limit, but no additional testing beyond this one-time test is required by the regulation. Since Subpart WWW does not require on-going testing, EPA has determined that additional testing is necessary in order to assure compliance with the NMOC limit. This is consistent with Part 71, which requires that when an underlying applicable requirement does not require periodic testing or monitoring, title V permits must contain “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit” (40 C.F.R. 71.6(a)(3)(i)(B)). Therefore EPA has added an annual performance testing requirement to the permit (condition II.E.3. on page 8) which we believe satisfies the timeliness, reliability, and representativeness requirements of Part 71.

## **5. 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.

## **6. 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 (61 Fed. Reg. 34202), 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. These regulations were updated on February 19, 1999 (64 Fed. Reg. 8247) to incorporate EPA's approach for issuing Federal operating permits to stationary sources in Indian country.

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 FR 7253, February 12, 1998) (also known as the Tribal Authority Rule). See 40 C.F.R. § 49.4. 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.

## **7. 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 (TCL) 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.