PART 71 FEDERAL OPERATING PERMIT
STATEMENT OF BASIS

Morongo Casino Cogeneration Facility
Permit No. MO-ROP 10-01

1. Facility Information

a. Permittee

Morongo Casino Cogeneration Facility
11581 Potrero Rd.
Banning, CA 92220

b. Facility location

The Morongo Casino Cogeneration Facility (MCC) is located on the reservation of the Morongo Band of Mission Indians ("Morongo Reservation") in the city of Banning in Riverside County, CA.

c. Contact information

Facility Contact:	Michael Milhiser, Chief Administrative Officer (951) 755-5115
Responsible Official:	Robert Martin, Tribal Chairman (951) 755-5100

d. Description of operations, products

The facility is an 8.4 megawatt cogeneration facility consisting of four 4-stroke, lean-burn CAT G3520 natural gas-fired engines, and three 4-stroke CAT 3516 backup diesel-fired generators.

e. Permitting and/or construction history

MCC was constructed in 2004. EPA issued the initial title V permit for the facility on August 2, 2005. The permit limits the facility's potential to emit of NO_x and VOC to less than 18.7 tons per year of each pollutant.

f. Emission-generating units and activities

Table 1. Emission-generating units and activities

Emission Unit I.D. No.	Unit Description	Associated Control Equipment
EG-1	Caterpillar G3520 natural gas-fired generator	selective catalytic reduction (SCR) unit and oxidation catalyst
EG-2	Caterpillar G3520 natural gas-fired generator	selective catalytic reduction (SCR) unit and oxidation catalyst
EG-3	Caterpillar G3520 natural gas-fired generator	selective catalytic reduction (SCR) unit and oxidation catalyst
EG-4	Caterpillar G3520 natural gas-fired generator	selective catalytic reduction (SCR) unit and oxidation catalyst
EG-5	Caterpillar 3516B diesel-fired generator	n/a
EG-6	Caterpillar 3516B diesel-fired generator	n/a
EG-7	Caterpillar 3516B diesel-fired generator	n/a

Potential to Emit

The Morongo Reservation lies within Banning Pass, near the air quality planning boundary between Coachella Valley and the South Coast Air Basin ("South Coast"). Under the Clean Air Act, as amended in 1990 (CAA or "Act"), Coachella Valley was included as part of the "Southeast Desert Modified AQMA Area" and classified as "severe-17" nonattainment for the 1-hour ozone national ambient air quality standard (NAAQS). The South Coast Air Basin, the adjacent air planning area, was classified as "extreme" for the 1-hour ozone NAAQS. Under CAA §§ 182(d) and 182(e), the applicable New Source Review (NSR) "major source" threshold is 25 tons per year (tpy) of ozone precursors (i.e., VOC or NO_x) in "severe-17" ozone nonattainment areas and 10 tpy in "extreme" areas; thus, under the CAA, the applicable NSR major source threshold for ozone precursors is 25 tpy in Coachella Valley and 10 tpy in the South Coast. Until EPA approved the State of California's boundary change request, as described below, the Morongo Reservation was included in the Southeast Desert Modified AQMA Area by virtue of being included in Coachella Valley, and thus was subject to the NSR major source threshold for ozone precursors of 25 tpy.

On October 7, 2003, EPA approved the State of California's request to move the

boundary between the Southeast Desert Modified AQMA Area and the South Coast Air Basin eastward to the east end of Banning Pass, with the effect that the entire Morongo Reservation became newly part of the South Coast Air Basin. 68 Fed. Reg. 57820. From the standpoint of air permitting, the effect of the boundary change was to lower the applicable NSR major source threshold for ozone precursors within the Morongo Reservation from 25 tpy to 10 tpy, effective November 6, 2003, due to the differences in the ozone classifications of the two air quality planning areas.

Prior to the issuance of MCC's Part 71 permit, the NSR threshold was increased back to 25 tpy for the South Coast Air Basin through the planning process for the 8-hour ozone NAAQS. In an April 30, 2004 rulemaking, EPA designated the South Coast Air Basin as "severe-17," which has a 25 tpy NSR threshold.[1] Moreover, the 1-hour ozone standard for the South Coast Air Basin, along with the 1-hour ozone standards for the rest of the nation, was revoked on June 15, 2005; therefore the 10 tpy threshold ceased to apply to sources on the Morongo Reservation. 40 C.F.R. § 50.9(b); *see also* 69 Fed. Reg. 23951 (April 30, 2004).

Thus, when EPA issued the initial Part 71 permit to the Facility in late 2005, the NO_x and VOC major source threshold that applied in the ozone nonattainment area where the plant is located was 25 tpy under the 8-hour ozone NAAQS. At that time, MCC agreed to avoid major source status and nonattainment NSR permitting by taking federally enforceable limits on its potential to emit (PTE) of NO_x and VOC to stay below the 25 tpy threshold.

However, the new 8-hour ozone standards were challenged, and on August 29, 2007, the U.S. Court of Appeals for the District of Columbia Circuit vacated the provisions of EPA's Phase I implementation rule that waived obligations under the revoked 1-hour ozone standard for NSR, among other provisions. *See* South Coast Air Quality Management District, et al., v. EPA, 472 F.3d 882 (D.C. Cir. 2006), *rehearing denied*, 489 F.3d 1245 (clarifying that the vacature was limited to the issues on which the court granted the petitions for review). The effect of the court's ruling was to restore NSR applicability thresholds and emission offsets to the classifications previously in effect for areas designated nonattainment for the 1-hour ozone standard. In the case of the Morongo Reservation, the effect was to restore the 10 tpy major source threshold for ozone precursors.

In the wake of the court's ruling, MCC became an existing major source because, at 18.7 tpy, its PTE for ozone precursors exceeds the applicable major source threshold of 10 tpy. MCC is not immediately affected by the restoration of the 10 tpy major source threshold, but, because MCC is now considered an existing major source, any modification that results in an increase in emissions of ozone precursors from any "discrete operation, unit,

[1] Subsequently, effective June 4, 2010, with the exception of Indian country pertaining to the Morongo and Pechanga Tribes, EPA reclassified the South Coast Air Basin to "extreme" under the 8-hour ozone NAAQS standard, which would again lower the NSR threshold to 10 tpy. *See* 75 Fed. Reg. 24409 (May 5, 2010). EPA deferred reclassification of Indian country pertaining to the Morongo Tribe, as it had requested a boundary change to be included back in the Coachella Valley, which was reclassified as of May 5, 2010, to "severe-15," with a regulatory threshold of 25 tpy.

or other pollutant emitting activity" would be considered a "major" modification and thereby subject to a "lowest achievable emission rate" (LAER) control technology requirement and offsets, among other NSR requirements, as required for all major sources in "extreme" ozone nonattainment areas. *See* CAA § 182(e)(2). EPA has retained the plant-wide federally enforceable limits of 18.7 tpy for each of the pollutants that were established in the initial title V permit as limits to the source's PTE. Table 2 shows MCC's actual NO_x and VOC emissions in 2009.

Table 2. MCC's 2009 Actual NO_x and VOC Emissions (in tons/year)

Unit	**NO_x**	**VOC**
EG-1	1.7	1.6
EG-2	1.6	1.6
EG-3	2.1	2.1
EG-4	1.7	1.6
EG-5	0.3	0
EG-6	0.4	0
EG-7	0.3	0
TOTAL	**8.1**	**6.9**

Table 3 shows MCC's PTE for various pollutants, including the enforceable annual caps for NO_x and VOC that were established in the initial title V permit.

Table 3. MCC's Facility-wide PTE (in tons/year)

Pollutant					
NO_x	**VOC**	**SO_2**	**PM_{10}**	**CO**	**HAP**
18.7	18.7	1.08	3.62	39.75	5.92

2. Tribe Information

a. General

The Morongo Reservation covers more than 32,000 acres in southern California, west of Palm Springs and east of Los Angeles. Total population on the Reservation is approximately 1,100, of which over 500 are tribal members. The Tribe runs a casino, and has significant wetlands on the upper acreage of the Reservation.

b. Local air quality and attainment status

The Morongo Reservation is part of the South Coast Air Basin, which is currently designated as attainment or unclassifiable for CO, NO_2, SO_2, and lead, and nonattainment for 8-hour and 1-hour ozone, PM_{10}, and $PM_{2.5}$. The area is classified as extreme for both 8-hour and 1-hour ozone, and serious for PM_{10} and CO.

3. Applicable Requirements

a. NESHAP 40 CFR Part 61, Subpart M - Demolition or Renovation Activity

Based on MCC's application, the facility is not currently engaged in the activities regulated under this provision. If MCC conducts any demolition or renovation activity, the permittee must assure that the project is in compliance with the federal rules governing asbestos including the requirement to conduct an inspection for the presence of asbestos. Including this term in the permit minimizes the need to reopen the permit if MCC ever conducts any demolition or renovation activity.

b. Table 4. Incorporation of Applicable Requirements into Part 71 Permit

Requirement	Condition/ Section	Permit Condition	Description/Notes
Stratospheric Ozone Protection	40 CFR Part 82	III.D	Requirements for treatment of class I and II substances
Asbestos NESHAP	40 CFR Part 61, Subpart M	III.E	Requirements for demolition and renovation at facilities containing asbestos

c. Inapplicable Requirements

i. Compliance Assurance Monitoring

The CAM regulations, codified in 40 CFR Part 64, apply to title V sources with large emission units that rely on add-on control devices to comply with applicable requirements. The underlying principle, as stated in the preamble, is "to assure that the control measures, once installed or otherwise employed, are properly operated and maintained so that they do not deteriorate to the point where the owner or operator fails to remain in compliance with applicable requirements." 62 Fed. Reg. 54902 (Oct. 22, 1997)

CAM applies to emission units at major sources that are subject to an emission limit or standard, use a control device to achieve compliance with the limit, and have potential pre-control emissions equal to or greater

than the major source threshold.

MCC operates SCR on its four natural gas-fired engines. The CAM regulations contain an exemption for "an emissions cap that meets the requirements specified in 40 CFR § 70.4(b)(12) or 40 CFR § 71.6(a)(13)(iii) of this chapter." While this exemption does not explicitly reference an emission cap included pursuant to 40 CFR § 71.6(b), as is the case here, the provision evidences that the CAM rule was not designed to ensure compliance with emission caps. This is because an emission cap requires a source to quantify emissions in a repeatable and reproducible manner, whereas the CAM regulations do not provide for quantifying emissions. Instead, CAM requires an owner or operator of a source to monitor the operation of a control device to maintain a reasonable assurance of compliance with an emission limit or standard, and to respond to excursions with corrective action and reporting.

While the permit does contain short term limits for NO_x and VOC emissions in Conditions II.A.1 and II.A.2, these are contained in the permit merely to support the cap established pursuant to 40 C.F.R. § 71.6(b). More importantly, the CAM requirements, by their explicit terms, only apply to "applicable requirements," and the definition of "applicable requirement" does not include conditions established pursuant to 40 CFR § 71.6(b). See 40 CFR § 71.2. As a result, these short term emission limits, along with the cap, are not subject to the CAM requirements. Therefore, CAM does not apply to the engines and/or the SCR system, and hence the permit does not contain any CAM requirements.

ii. National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ)

Subpart ZZZZ establishes emission and operating limitations for hazardous air pollutants (HAPs) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area HAP sources. Even though MCC's seven engines meet the definition of "existing stationary RICE" as defined in Subpart ZZZZ, the specific type of RICE used by MCC (spark ignition 4 stroke lean burn and compression ignition stationary RICE) are specifically listed as not being subject to Subpart ZZZZ. *See* 40 CFR § 63.6590(b)(3). Therefore, the permit does not contain any NESHAP Subpart ZZZZ requirements.

iii. Standards of Performance for New Stationary Sources (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60, Subpart IIII)

Subpart IIII applies to operators of compression ignition (i.e., oil-fired)

internal combustion engines that commence construction, modify, or reconstruct after July 11, 2005. MCC operates three diesel-fired backup engines. As noted above, MCC was constructed in 2004. The engines have not been modified or reconstructed since then. Therefore, NSPS Subpart IIII does not apply to MCC's oil-fired engines.

iv. Standards of Performance for New Stationary Sources (NSPS) for Stationary Spark Ignition Internal Combustion Engines (40 CFR Part 60, Subpart JJJJ)

Subpart JJJJ applies to operators of spark ignition internal combustion engines (i.e., gasoline or natural gas-fired) that commence construction, modify, or reconstruct after June 12, 2006. MCC operates four natural gas-fired engines. As noted above, MCC was constructed in 2004. The engines have not been modified or reconstructed since then. Therefore, NSPS Subpart JJJJ does not apply to MCC's natural gas-fired engines.

v. Chemical Accident Prevention Program (40 CFR Part 68)

The Chemical Accident Prevention Program requires sources that use or store regulated substances above a certain threshold to develop plans to prevent accidental releases. Based on MCC's application, and the fact that MCC uses urea (which is not a regulated substance under Part 68) in its SCR systems instead of ammonia, MCC currently has no regulated substances above the threshold quantities and is not subject to the requirement to develop and submit a risk management plan. Therefore, this requirement has not been included in the permit. However, MCC has an ongoing responsibility to submit a risk management plan if a substance is listed that is present at the facility in quantities over the threshold amount.

4. Monitoring

The permit includes monitoring provisions to assure compliance with the short term and annual emission limits that will limit MCC's NO_x and VOC PTE. EPA is not proposing any changes to the monitoring conditions that were included in the initial permit. Demonstrating compliance with the annual NO_x limit through the use of the equation in Condition II.C.1. is expected to also demonstrate compliance with the annual VOC limit of 18.7 tons per year since VOC emission factors for the natural gas-fired engines and No. 2 fuel oil fired engines are equal to or less than the NO_x emission factors listed in the equation.

In order to determine compliance with the short-term NO_x emission limit for the gas-fired engines, the permit requires annual performance testing. Regular use of a portable NO_x analyzer is also required to determine if the engines might be exceeding the emission limit. The analyzer monitoring requires MCC to take corrective action if the NO_x concentration exceeds 12.0 ppmv @15% O2, a conservative equivalent (assuming worst

case operating scenario) of the NO_x mass emission limit for the gas-fired engines (0.15 grams per brake horsepower-hour) in condition II.A.1.

This monitoring is important to assure that the facility complies with its annual emission caps in order for it to not trigger New Source Review permitting requirements.

Table 5. Monitoring in the title V permit

Requirement	**Permit Condition #**	**Monitoring Description**	**Monitoring Condition #**
NO_x and VOC facility-wide limits	II.A.3.	rolling 12-month emission calculation	II.C.1.
NO_x and VOC short term limits	II.A.1 and II.A.2	portable NO_x analyzer (quarterly)	II.C.2. through II.C.4.
		annual performance testing	II.C.5.

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 Clean Air Act requires that EPA promulgate, administer, and enforce a Federal operating permits program when a State does not submit an approvable program within the time frame set by title V or does not adequately administer and enforce an EPA-approved program. On July 1, 1996, EPA adopted regulations codified at 40 CFR Part 71 setting forth the procedures and terms under which the Agency would administer a Federal operating permits program. 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 located in Indian country. 64 Fed. Reg. 8247.

As described in 40 CFR 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, EPA believes it is generally appropriate that EPA administers and enforces a Part 71 Federal operating permits program for stationary

sources until Tribes receive approval to administer their own operating permits programs.

MCC is located within the boundaries of the Morongo Reservation. Consequently, jurisdiction over the source lies with the Morongo Tribe and with EPA. Because the Tribe does not have an approved Part 70 program, EPA is issuing the permit under its Part 71 authority.