

United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

AIR QUALITY CONSTRUCTION PERMIT

Permit Number: MIN-SM-27139R0001-2016-01

Issue Date: **JUL 07 2016**

Effective Date: **AUG 08 2016**

In accordance with the provisions of the Clean Air Act and the Federal Minor New Source Review Program in Indian Country, 40 C.F.R. §§ 49.151 – 49.165,

Shakopee Mdewakanton Sioux Community of Minnesota

is authorized to construct and operate air emissions units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to construct in the following location:

**Mystic Lake Casino Hotel
2400 Mystic Lake Boulevard
Prior Lake, Minnesota 55372**

Mystic Lake Casino Hotel is located on reservation lands held by the United States government in trust for the Shakopee Mdewakanton Sioux Community of Minnesota.

All terms and conditions of the permit are enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act.



Edward Nam
Acting Director
Air and Radiation Division
U.S. EPA, Region 5

7/8/16

Date

Abbreviations and Acronyms

BTU	British Thermal Unit
CAA	Clean Air Act
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
EPA	U.S. Environmental Protection Agency
EU	Emission Unit
g	Gram
kW	Kilowatt
hr	Hour
lb	Pound
MMBTU	Millions of BTUs
NAAQS	National Ambient Air Quality Standards
NSPS	New Source Performance Standards
NO _x	Oxides of Nitrogen
NO ₂	Nitrogen Dioxide
NMHC	Non-methane Hydrocarbon
PM	Particulate Matter
PSD	Prevention of Significant Deterioration
SMSC	Shakopee Mdewakanton Sioux Community of Minnesota
Facility	Mystic Lake Casino Hotel
MVEC	Minnesota Valley Electric Cooperative

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SECTION I FACILITY DESCRIPTION

(A) General Source Information

Owner: Shakopee Mdewakanton Sioux Community of Minnesota
2330 Sioux Trail NW
Prior Lake, Scott County, Minnesota 55372

Facility: Mystic Lake Casino Hotel
2400 Mystic Lake Boulevard
Prior Lake, Scott County, Minnesota 55372

County: Scott

Reservation: Shakopee Mdewakanton Sioux Community of Minnesota

SIC Code: 7011, Hotels and Motels; 4911, Electric Generating Facilities;
7999, Amusement and Recreation Services

NAICS Code: 721120, Casino Hotel; 221112, Power Generation

This permit authorizes the construction of EU 119, a diesel-fired generator at the Shakopee Mdewakanton Sioux Community of Minnesota's Mystic Lake Casino Hotel facility. The permit establishes federally-enforceable nitrogen oxide (NO_x) emission limits for the diesel-fired fuel generator. The generator will provide emergency backup power and peak load management for the facility under contract with Minnesota Valley Electric Cooperative (MVEC). The load shed agreement will allow MVEC to switch demand as needed.

(B) Emission Unit Description

Emission Unit	Description	Manufacturer/ Model	Power Rating
EU 119	Diesel fired engine/ generator	Caterpillar 3516C	2000 kW

SECTION II UNIT-SPECIFIC REQUIREMENTS

(A) EU 119 Emissions Limitations and Standards

The Permittee shall comply with the following requirements:

- (1) Nitrogen Oxide Limitations and Requirements
 - (a) The Permittee shall limit NO_x emissions from EU 119 to no greater than 4.06 pounds per hour expressed as NO₂, averaged over the duration of the emission performance test.
 - (b) The Permittee shall limit NO_x emissions from EU 119 to no greater than 1.42 tons per year, expressed as NO₂, based on a 12 month rolling sum. Compliance with this limit shall be based on a 12-month rolling sum of monthly NO_x emissions.
- (2) Fuel Requirements
 - (a) The Permittee shall only use ultra-low sulfur diesel fuel with a maximum sulfur content of 0.0015% in EU 119.
 - (b) The Permittee shall limit EU 119's fuel usage to 97,650 gallons per year. Compliance with this limit shall be based on a 12-month rolling sum of monthly fuel usage.
- (3) Selective Catalytic Reduction (SCR) Requirements
 - (a) The Permittee shall operate the SCR at all times that the engine is in operation.
 - (b) The Permittee shall store and use diesel exhaust fluid (DEF) in accordance with the generator manufacturer and DEF manufacturer's guidelines.
 - (c) The Permittee shall immediately acknowledge any inducement warning lights and alarms upon discovery and perform follow up measures.
- (4) Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 C.F.R. Part 60, Subpart III)

Emission and Operational Limitations

 - (a) The Permittee shall obtain from the manufacturer of EU 119 a certification that generator emissions will be at or below the emission standards set forth for new non-emergency stationary internal combustion engines at 40 C.F.R. §§ 60.4201(a) and 60.4204(b). [40 C.F.R. § 60.4211(c)]

- (b) The Permittee shall operate and maintain EU 119 to achieve the emission standards as required in 40 C.F.R. § 60.4204 over the entire life of the engine. [40 C.F.R 60.4206]
- (c) To demonstrate compliance with the emission standards, the Permittee shall: [40 C.F.R. § 60.4211(a)]
 - (i) Operate and maintain stationary combustion engine EU 119 and control devices according to the manufacturer's written emission related instructions over the entire life of the engine.
 - (ii) Change only those emission related settings that are permitted by the manufacturer.
 - (iii) Meet the applicable requirements of 40 C.F.R. Parts 89, 94 and 1068 as they apply to EU 119.
- (5) Good Air Pollution Control Practices

At all times, including start-up, shut-down, and malfunction, the Permittee shall maintain and operate all sources, including associated air pollution control equipment regulated by this permit in a manner consistent with good air pollution control practices for minimizing emissions. This includes, but is not limited to, operating EU 119 and the selective catalytic reduction (SCR) system in accordance with the manufacturer's guidelines and following the instructions included in the owners' operations manual.

(B) Monitoring And Performance Testing [40 C.F.R. § 49.155(a)(3)]

- (1) Monitoring
 - (a) EU 119 shall be equipped with a fuel meter and runtime hour meter.
 - (b) The Permittee shall calculate NO_x emissions and fuel use to determine compliance with rolling monthly averages by the 15th day of each calendar month. For 12-month rolling sums, the Permittee shall add the current monthly total to the previous 11 months of data.
 - (c) Monthly NO_x emissions shall be calculated using the following equation:

$$NO_x = EF_{gal} \times F/2000$$

Where:

NO_x = Monthly NO_x emissions in tons/month

EF_{gal} = The NO_x emission factor in pounds per gallon

F = Monthly fuel usage in gallons

- (d) Should the fuel meter fail, the Permittee shall calculate F by multiplying the total monthly hours of operation by the maximum fuel usage rate of 139.5 gallons per hour.
 - (e) EU 119 shall be equipped with inducement warning lights and alarms.
- (2) Performance Testing
- (a) Initial Compliance Test. Within 180 days after the first day of operation, the Permittee shall conduct performance tests on EU 119 to determine compliance with the NO_x emission limits.
 - (b) Periodic Performance Tests. The Permittee shall conduct a NO_x performance test on EU 119 once every 5 years, starting 5 years after the initial compliance test (on or before the anniversary of the initial compliance test).
 - (c) Reference Test Methods. The Permittee shall test EU 119 for emissions of nitrogen compounds in accordance with the methods and procedures specified in Method 7E of 40 C.F.R. Part 60, Appendix A.
 - (d) Representative Testing Conditions. Performance tests shall be conducted under such conditions as the EPA shall specify to the facility operator based on representative performance of the affected facility. The Permittee shall make available to the EPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
 - (e) Operating Conditions for Performance Testing. All performance tests shall be conducted at worst-case operating (non-malfunction) conditions for all emission units for each air pollutant.
 - (f) Failure to Demonstrate Compliance. Upon the EPA's written notice that the facility has failed to demonstrate compliance with an applicable emission limit, unless an alternative schedule is given in an applicable requirement or compliance document, the Permittee shall:
 - (i) Conduct a retest within 30 days of receipt of the EPA written notice.
 - (ii) Submit to the EPA written notice of testing and submit a test plan for the retest.
 - (iii) Submit a complete report of the results of the retest within 45 days after completion.

(C) Recordkeeping and Reporting [40 C.F.R. § 49.155(a)(4)]

(1) Recordkeeping

- (a) The permittee shall maintain at the Tribal Government office a file of all records required by this permit. The Permittee shall retain all records required in this permit for at least 5 years. [40 C.F.R. § 49.155(a)(4)(ii)]
- (b) The Permittee shall retain all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. The Permittee shall also maintain the following records of the monitoring required by this permit:
 - (i) Monthly and annual fuel usage for EU 119;
 - (ii) Fuel supplier certification for emissions unit EU 119. The Permittee shall obtain and maintain a fuel supplier certification for each shipment of fuel oil, certifying that the sulfur content does not exceed 0.0015% by weight;
 - (iii) Hours of operation for emissions unit EU 119;
 - (iv) Monthly and annual NO_x emissions from EU 119;
 - (v) Performance test data and results including:
 - a. Sampling dates and the times of sampling or measurement
 - b. The operating conditions that existed at the time of sampling or measurement
 - c. The date analyses were performed
 - d. The location where samples were taken
 - e. The entity that performed the sampling and analysis
 - f. The analytical techniques or methods used, and
 - g. The results of the analysis
 - (vi) Reports of excess emissions;
 - (vii) Calibration and maintenance records, original strip chart, or computer-based recordings;
 - (viii) Standard operation and maintenance procedures for each emission unit;

- (ix) The date and amount of DEF, in gallons, provided to EU 119; and
- (x) For inducement warning lights and alarms:
 - a. The date, time, and description any inducement warning lights or alarms were observed;
 - b. The date, time, and description of follow-up actions taken to resolve inducement warning lights or alarms; and
 - c. The result of any follow-up actions taken to address the inducement warning lights or alarms.

(2) Reporting

- (a) Testing Notification. The Permittee shall submit notification of the proposed test date to EPA at least 30 days prior to the planned test date. The Permittee may submit the testing notification at the same time the test protocol is submitted. If there is a delay in conducting the scheduled performance test, the Permittee shall notify EPA as soon as possible, either by providing 7 days prior notice of the rescheduled date of the performance test or by arranging a rescheduled test date with EPA by mutual agreement.
- (b) Test Protocol. The Permittee shall submit a test protocol to the EPA at least 30 days prior to testing. The test protocol shall contain, at a minimum, the following information:
 - (i) Name and address of the facility
 - (ii) Emissions units to be tested
 - (iii) Proposed operating conditions for each emissions unit to be tested
 - (iv) Air pollution control equipment for each emission unit to be tested
 - (v) Pollutants to be measured
 - (vi) Proposed analytical techniques and test methods
 - (vii) Emission points and sampling locations, and
 - (viii) Expected date of the test, if known

- (c) Test Reports. No later than 45 days following the completion of the initial or periodic performance tests required in Sections II(B)(2)(a) and (b) of this permit, the Permittee shall submit to EPA a written report of the test results obtained from the performance tests.
- (d) Deviation Reporting. The Permittee shall promptly report to EPA any deviation from any permit requirements, including those attributable to upset conditions, the probable cause of such deviation, and any corrective actions or preventative measures taken. "Promptly" shall mean within 30 business days of the deviation. [40 C.F.R. § 49.155(a)(5)]
- (e) The Permittee shall submit reports of monitoring required by this permit annually, by March 1st of the following year, including the type and frequency of monitoring and a summary of results obtained by monitoring. [40 C.F.R. § 49.155(a)(5)(i)]

SECTION III GENERAL PERMIT REQUIREMENTS

(A) Definitions

Terms and conditions in this permit have the meaning assigned to them in 40 C.F.R. § 49.152 unless other regulations or statutes are referenced or applicable.

(B) Submittals

- (1) Unless otherwise directed by EPA or this permit, the Permittee shall submit a copy of all test plans, reports, certifications, notifications, and other information pertaining to compliance with this permit to:

Air Enforcement and Compliance
Assurance Branch (AE-17J)
Air and Radiation Division
EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

- (2) The Permittee shall submit permit applications, applications for permit amendments, and other applicable permit information, which includes but is not limited to applications and information regarding installation of control equipment, replacement of an emissions unit, and requests for changes that contravene permit terms to:

Air Permits Section
Air Programs Branch (AR-18J)
EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

(C) Severability [40 C.F.R. § 49.155(a)(6)]

The terms and conditions in this permit are distinct and severable. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit. If any term or condition in this permit is held invalid, such invalidity shall not affect the validity or application of other terms or conditions.

(D) Compliance with Permit Requirements [40 C.F.R. § 49.155(a)(7)(i)]

The Permittee shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the source. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the Clean Air Act and is grounds for enforcement action and for a permit termination or revocation.

(E) Prohibition on Violation of National Ambient Air Quality Standards and Prevention of Significant Deterioration Increments [40 C.F.R. § 49.155(a)(7)(ii)]

The permitted source shall not cause or contribute to a violation of a National Ambient Air Quality Standard or, in an attainment area, shall not cause or contribute to a Prevention of Significant Deterioration increment violation.

(F) Need to Halt or Reduce Activity Not a Defense [40 C.F.R. § 49.155(a)(7)(iii)]

It is not a defense for the 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.

(G) Permit Revision, Reopening, Revocation and Reissuance, or Termination [40 C.F.R. § 49.155(a)(7)(iv)]

This 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.

(H) Property Rights [40 C.F.R. § 49.155(a)(7)(v)]

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

(I) Duty to Provide Information [40 C.F.R. § 49.155(a)(7)(vi)]

The Permittee shall furnish to the EPA, within a reasonable time, any information that EPA may request in writing to determine whether cause for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. For any such information claimed to be confidential, the Permittee must also submit a claim of confidentiality in accordance with 40 C.F.R. Part 2, Subpart B.

(J) Entry and Inspection [40 C.F.R. § 49.155(a)(7)(vii)]

Upon presentation of proper credentials, the Permittee shall allow a representative of the EPA to:

- (1) Enter upon the 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;
- (2) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- (3) Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;

- (4) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- (5) Record any inspection by use of written, electronic, magnetic and photographic media.

(K) Permit Invalidation [40 C.F.R. §§ 49.155(a)(1)(i), (b)]

This permit becomes invalid if the Permittee does not commence construction within 18 months after the effective date of this permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The reviewing authority may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project. The Permittee must commence construction of each phase within 18 months of the projected and approved commencement date.

(L) Construction Without a Permit

If the Permittee constructs or operates any source or modification not in accordance with the terms of any approval to construct, the Permittee shall be subject to appropriate enforcement actions.

(M) Construction Approval

- (1) Nothing in this permit shall alter the requirement for the Permittee to obtain a construction permit before commencement of construction or modification of an emission unit.
- (2) Approval for construction or installation shall not relieve the Permittee of the responsibility to comply fully with the applicable provisions of any other requirements of federal law or regulation, including Title V of the CAA.
- (3) The Permittee is responsible for submitting a timely application for a federal Title V operation permit to authorize continued operation of the subject emission units.

(N) Circumvention

The Permittee shall not build, erect, install, or use any article, machine, equipment, or process, the use of which conceals any emission which would otherwise constitute a violation of an applicable standard.