

Statement of Basis  
Air Pollution Control  
Title V Permit to Operate for  
Treasure Island Resort and Casino  
Permit No. V-PI-2704900084-2012-13

The purpose of this document is to set forth the legal and factual basis for permit conditions, including references to applicable provisions of the Clean Air Act (CAA or Act) and implementing regulations. This document also gives the derivation of conditions as required by 40 C.F.R. § 71.11(b).

1. GENERAL INFORMATION

i. Applicant and Stationary Source Information

Owner/Operator	Facility (SIC Code: 7011, 4911)
NRG Reliability Solutions LLC 17685 Juniper Path, Suite 301 Lakeville, Minnesota 55044	Treasure Island Resort and Casino 5734 Sturgeon Lake Road Red Wing, Minnesota 55066

Responsible Official	Facility Contact
Phillip Kairis Vice President 17685 Juniper Path, Suite 301 Lakeville, Minnesota 55044 (651) 341-2244	Julie Miller Environmental Specialist 17685 Juniper Path, Suite 301 Lakeville, Minnesota 55044 (612) 564-1962

ii. Facility Description

Treasure Island Resort & Casino is a hotel and casino located on the banks of the Mississippi River on the Prairie Island Indian Community in Red Wing, Minnesota. NRG Reliability Solutions, LLC owns and operates four diesel-fired backup generators. The engines, used for peak load management and backup power for Treasure Island Resort & Casino, are installed to the northeast of the casino at the Prairie Island Wastewater Treatment Facility. The total generation capacity is 7.3 megawatts. Electricity generated is not sold for distribution.

iii. Area Classification

Prairie Island Indian Community is located in Goodhue County, Minnesota. Goodhue County is designated attainment for all national ambient air quality standards.

The diesel-fired generators are located on the Prairie Island Indian Community's reservation on lands held in trust by the federal government. Since the generators are

located in Indian Country, EPA is primarily responsible for issuing and enforcing any air quality permits for the source.

The facility is located in the State of Minnesota. The State of Wisconsin and the Shakopee Mdewakanton Sioux Community are within 50 miles of the source. Minnesota, Wisconsin, Prairie Island Indian Community and Shakopee Mdewakanton Sioux Community are affected states, as defined at 40 C.F.R. § 71.2. Pursuant to 40 C.F.R. § 71.8(a) and (d), notification of this draft permit will be provided to each affected state.

iv. Title V Applicability

The source does not emit or have the potential to emit more than 100 tons per year or more of any pollutant subject to regulation. The source is not a major source under CAA section 112 because the source does not emit or have the potential to emit more than 10 tons per year of any single hazardous air pollutant nor more than 25 tons per year of any combination of hazardous air pollutants. The source is not a major source as defined in CAA Title I Part D since it is not located in a nonattainment area or in an ozone transport region. Therefore, the facility is not a major source as defined at 40 C.F.R. § 71.2.

EPA issued a prevention of significant deterioration (PSD) permit to the facility on December 20, 2000. The PSD permit authorized the construction of EU-01 through EU-04. As a result, the facility is required to obtain a Part 71 permit as required by Section 502(a) of the CAA. Pursuant to 40 C.F.R. § 71.3(c)(2), all requirements applicable to emissions units that cause the source to be subject to the part 71 program will be included in the permit.

v. Description of Permit Action

On October 12, 2016, EPA received a significant permit modification application requesting a revision to the carbon monoxide (CO) testing frequency required by 40 C.F.R. Part 63, Subpart ZZZZ from once every 8,760 hours or 3 years, whichever comes first, to once every 8,760 hours or 5 years, whichever comes first.

Revising the testing interval cannot be processed as an administrative amendment because the revision does not meet any of the criteria given in 40 C.F.R. § 71.7(d)(1). Specifically, this revision does not:

- Correct typographical errors;
- Identify a change in the name, address, or phone number of any person identified in the permit, or provide a similar minor administrative change at the source;
- Require more frequent monitoring or reporting by the permittee;
- Allow for a change in ownership or operational control of a source;

- Incorporate any other type of change that has been determined to be similar to any type of change that is similar to those already listed; or
- Incorporate into the permit the requirements from preconstruction review permits authorized under an EPA-approved program.

Revising the testing interval cannot be processed under the minor permit modification procedures since the revision does not meet all of the criteria given in 40 C.F.R. § 71.7(e)(1)(i)(A). 40 C.F.R. § 71.7(e)(1)(i)(A)(2) allows the minor permit modification process to be used only for those permit modifications that do not involve significant changes to existing monitoring in the permit. However, this revision would constitute a significant change to existing monitoring. Changing the testing interval from once every 3 years to once every 5 years would make the CO testing requirement less stringent due to potentially lengthening the time between subsequent performance tests.

Pursuant to 40 C.F.R. § 71.7(e)(3)(i), this revision will be processed as a significant permit modification since this modification does not qualify as a minor permit modification or an administrative amendment. Significant permit modification procedures are required for significant changes in existing monitoring.

vi. Permit History

On November 26, 2012, EPA issued a Title V permit renewal, permit number V-PI-2704900084-2012-10. The permit expires on December 26, 2017.

On February 25, 2013, EPA issued a Title V administrative amendment, permit number V-PI-2704900084-2012-11.

On March 6, 2014, EPA issued a Title V minor permit modification, permit number V-PI-2704900084-2012-12.

2. EMISSIONS UNITS AND SOURCE EMISSIONS

i. Emissions Units at the Source

The facility includes the following emissions units:

- EU-01, serial number 7RN01901, is a 2,563 horsepower Caterpillar 3516B diesel-fired generator installed May 25, 2001. EU-01 combusts ultra-low sulfur diesel and has a maximum design heat input of 16.76 MMBTU/hr. CO emissions from EU-01 are controlled by diesel oxidation catalyst CE-01, installed April 9, 2014.

EU-01 is subject to 40 C.F.R. Part 63, Subpart ZZZZ.

- EU-02, serial number 7RN01825, is a 2,563 horsepower Caterpillar 3516B diesel-fired generator installed May 25, 2001. EU-02 combusts ultra-low sulfur diesel and has a maximum design heat input of 16.76 MMBTU/hr. CO emissions from EU-02 are controlled by diesel oxidation catalyst CE-02, installed April 9, 2014.

EU-02 is subject to 40 C.F.R. Part 63, Subpart ZZZZ.

- EU-03, Serial Number 7RN01827, is a 2,563 horsepower Caterpillar 3516B diesel-fired generator installed May 25, 2001. EU-03 combusts ultra-low sulfur diesel and has a maximum design heat input of 16.76 MMBTU/hr. CO emissions from EU-03 are controlled by diesel oxidation catalyst CE-03, installed April 9, 2014.

EU-03 is subject to 40 C.F.R. Part 63, Subpart ZZZZ.

- EU-04, serial number 7RN01824, is a 2,563 horsepower Caterpillar 3516B diesel-fired generator installed May 25, 2001. EU-04 combusts ultra-low sulfur diesel and has a maximum design heat input of 16.76 MMBTU/hr. CO emissions from EU-04 is controlled by diesel oxidation catalyst CE-04, installed April 9, 2014.

EU-04 is subject to 40 C.F.R. Part 63, Subpart ZZZZ.

The facility also consists of the following insignificant activities:

- Access road pursuant to 40 C.F.R. § 71.5(c)(11)(ii)(A).
- Two 75-gallon diesel-fuel day tanks pursuant to 40 C.F.R. § 71.5(c)(11)(ii)(A).

ii. Emissions Units Being Added or Removed from the Permit

There are no emissions units being added or removed from the permit.

iii. Previously Unpermitted Emission Units Added to the Permit

There are no unpermitted emission units being added to the permit.

iv. Potential Emissions

Emission Unit	VOC tpy	NOx tpy	CO tpy	PM tpy	PM10 tpy	SO <sub>2</sub> tpy	Total HAPs tpy
EU-01	0.32	10.30	0.84	0.24	0.20	0.25	0.01
EU-02	0.32	10.30	0.84	0.24	0.20	0.25	0.01
EU-03	0.32	10.30	0.84	0.24	0.20	0.25	0.01
EU-04	0.32	10.30	0.84	0.24	0.20	0.25	0.01
<b>TOTAL</b>	<b>1.28</b>	<b>41.20</b>	<b>3.36</b>	<b>0.96</b>	<b>0.80</b>	<b>1.00</b>	<b>0.04</b>

The potential to emit for EU-01 through EU-04 is based on 550 hours of operation per year.

3. APPLICABLE REQUIREMENTS

i. PSD Permit

Modified PSD permit number PSD-PI-2704900084-2012-02 was issued on December 26, 2012. All applicable requirements from this PSD permit have been incorporated into the Title V permit.

ii. Restrictions on Potential To Emit

PSD permit number PSD-PI-2704900084-2012-02 restricts the operation of each generator to no more than 550 hours per year based on a 12-month rolling sum. This requirement has been incorporated into the Title V permit.

iii. 40 C.F.R. Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)

Pursuant to 40 C.F.R. § 63.6585, a source is subject to the RICE MACT if it operates a stationary reciprocating internal combustion engine (RICE) at an area source of HAP emissions. The facility is an area source for HAP emissions because it has the potential to emit less than 10 tons per year of any single HAP and less than 25 tons per year of total HAPs. EU-01, EU-02, EU-03, and EU-04 are existing, non-emergency, non-black start compression ignition (CI) RICE as defined at 40 C.F.R. §§ 63.6590 and 63.6675.

EU-01, EU-02, EU-03, and EU-04 are currently permitted as non-emergency, non-black start CI stationary reciprocating internal combustion engines (RICE) >500 HP that are not limited use stationary RICE. Pursuant to 40 C.F.R. § 63.6615 and 40 C.F.R. Part 63, Subpart ZZZZ Table 3 entry 4, the permit requires a CO performance test once every 8,760 hours or 3 years, whichever comes first. The application includes the number of hours of operation for EU-01 through EU-04 as recorded since January 2013. For any given consecutive 12-month period, the number of hours

of operation for EU-01 through EU-04, separately, has not exceeded 100 hours of operation. As defined in 40 C.F.R. § 63.6675, limited use stationary RICE means any stationary RICE that operates less than 100 hours per year. Given the information included in the permit application, EU-01, EU-02, EU-03, and EU-04 would meet the definition of limited use stationary RICE. 40 C.F.R. Part 63, Subpart ZZZZ Table 3 entry 5 allows subsequent CO performance tests every 8,760 hours or 5 years, whichever comes first.

The following provisions from 40 C.F.R. Part 63, Subpart ZZZZ are being included in the permit:

- 40 C.F.R. § 63.6585
- 40 C.F.R. § 63.6590
- 40 C.F.R. § 63.6595
- 40 C.F.R. § 63.6603
- 40 C.F.R. § 63.6604
- 40 C.F.R. § 63.6605
- 40 C.F.R. § 63.6612
- 40 C.F.R. § 63.6615
- 40 C.F.R. § 63.6620
- 40 C.F.R. § 63.6625
- 40 C.F.R. § 63.6630
- 40 C.F.R. § 63.6640
- 40 C.F.R. § 63.6645
- 40 C.F.R. § 63.6650
- 40 C.F.R. § 63.6655
- 40 C.F.R. § 63.6660
- 40 C.F.R. § 63.6665
- 40 C.F.R. § 63.6675
- Table 2d, entry 3
- Table 3, entry 4 and 5
- Table 4, entries 1 and 3
- Table 5, entry 3 and 4
- Table 7, entry 1
- Table 8

#### 4. NONAPPLICABILITY DETERMINATIONS

There are no nonapplicability determinations included in the permit.

#### 5. MONITORING REQUIREMENTS

##### i. Monitoring Required by Applicable Requirements

Pursuant to 40 C.F.R. § 71.6(a)(3)(i)(A), all applicable monitoring requirements have been included in the permit. This includes all monitoring and testing required by PSD permit PSD-PI-2704900084-2012-02. This also includes all monitoring and testing required by 40 C.F.R Part 63, Subpart ZZZZ.

This permit action incorporates additional 40 C.F.R. Part 63, Subpart ZZZZ testing requirements applicable to limited use stationary RICE. Pursuant to 40 C.F.R. § 63.6615 and 40 C.F.R. Part 63, Subpart ZZZZ Table 3 Entry 5, a CO performance test shall be conducted every 8,760 hours or 5 years, whichever comes first.

ii. Periodic Monitoring Requirements Created in this Permit

There are no periodic monitoring requirements that have been created pursuant to 40 C.F.R. § 71.6(a)(3)(i)(B).

iii. Sufficiency Monitoring Requirements Created in this Permit

There are no sufficiency monitoring requirements that have been created pursuant to 40 C.F.R. § 71.6(c)(1).

iv. Compliance Assurance Monitoring (CAM)

Pursuant to 40 C.F.R. § 64.2(a)(2), EU-01 through EU-04 are not subject to CAM for NO<sub>x</sub>. NO<sub>x</sub> emission limits have been established in PSD permit PSD-PI-2704900084-2012-02. However, EU-01 through EU-04 do not use a control device to achieve compliance with this emission limitation.

Pursuant to 40 C.F.R. § 64.2(b)(1)(i), EU-01 through EU-04 are not subject to CAM for CO since the CO emission limitations are established in the RICE MACT.

EU-01 through EU-04 are not subject to any other pollutant-specific emission limitations.

v. Streamlined Monitoring and Testing Requirements

There are no streamlined monitoring or testing requirements included in the permit.

6. CHANGES BETWEEN THE PREVIOUS PERMIT AND DRAFT PERMIT

All changes to permit terms and conditions requested in the application are included below. Where appropriate, additions to the permit are presented in **bold** and deletions are presented using ~~strikethrough~~.

Revision 1

Condition 2.0(B)(7) is being revised to allow limited use stationary RICE CO performance tests to be conducted once every 8,760 hours or 5 years, whichever comes first. The permit will still require stationary RICE that are not limited use stationary RICE to conduct the CO performance test once every 8,760 hours or 3 years, whichever comes first.

Condition 2.0(B)(7) reads as follows:

7. The Permittee shall conduct a CO performance tests ~~every 8,760 hours or 3 years, whichever comes first.~~ **according to the following schedules** [40 C.F.R. § 63.6615, ~~Table 3 to 40 C.F.R. Part 63 Subpart ZZZZ~~]:
  - i. **For each non-emergency, non-black start CI stationary RICE >500 HP that is not a limited use stationary RICE, the Permittee shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first. [40 C.F.R. Part 63, Subpart ZZZZ Table 3 Entry 4]**
  - ii. **For each non-emergency, non-black start CI stationary RICE that is a limited use stationary RICE, the Permittee shall conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first. [40 C.F.R. Part 63, Subpart ZZZZ Table 3 Entry 5]**