

**DOCKETED**

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<b>Project Title:</b>	Sequoia Data Center
<b>TN #:</b>	236832
<b>Document Title:</b>	SBGF - Revised Emmissions Table with BAAQMD Offset Screening Calculation
<b>Description:</b>	N/A
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**Table 1**  
**Emergency Generator NO<sub>x</sub> Emissions**  
**Sequoia Back-up Power Facility**  
**Santa Clara, CA**

	NO <sub>x</sub> Emission Factors (g/kW-hr)		Engine Rating
	Uncontrolled (Tier 2)	Controlled (Tier 4)	kW
Emission Factor <sup>1</sup>	5.37	0.67	2,250

Input	Units	Value
		Full Buildout
Number of Generators	#	54
<b>Maximum Emissions</b>		
Annual Testing Hours <sup>2</sup>	hr/year/ generator	50
Generator Operating Hours - Emergency Operation <sup>2</sup>	hr/year	100
<b>NO<sub>x</sub> Potential To Emit - Testing &amp; Maintenance<sup>3</sup></b>	<b>tons/year</b>	<b>12</b>
<b>NO<sub>x</sub> Emissions - Testing, Maintenance &amp; Emergency Operation<sup>4</sup></b>	<b>tons/year</b>	<b>27</b>

**Notes**

1. Uncontrolled (Tier 2) engine emission factor is assumed from USEPA's Engine Family Certification data for Large Non-road Compression-Ignition (NRCI) Engines - engine family group number KMDDL95.4GTR. Controlled (Tier 4) emission factors assume each generator is equipped with a Miratech Selective Catalytic Reduction/Diesel Oxidation Catalyst/Diesel Particulate Filter system and are provided by the equipment manufacturer.
2. Generator operating hours assume 50 hours for testing and maintenance, and 100 hours for emergency operation.
3. Potential to Emit testing & maintenance emissions are the maximum potential emissions based on expected permitted activities and assume annual operation will effectively consist of 50 individual 1-hour operating periods, each consisting of 15 minutes of uncontrolled (Tier 2) emissions and 45 minutes of controlled (Tier 4) emissions.
4. NO<sub>x</sub> emissions from testing, maintenance and emergency operation assume the same activity for the 50 hours of annual testing and maintenance and 100 hours of emergency operation consisting of 15 minutes of uncontrolled (Tier 2) emissions and 2 hours, 45 minutes of controlled (Tier 4) emissions for every 3 hours of operation.

**Abbreviations:**

g - grams	kW - kilowatt	NO <sub>x</sub> - nitrogen oxides
hr - hour	lb - pounds	

**References:**

USEPA. 2019. Large Engine Certification Data for Model Year 2015. Available at:  
<https://www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment>