

TECHNICAL SUPPORT DOCUMENT

TECHNICAL INFORMATION PRESENTED IN REVIEW OF AN
APPLICATION FOR A PART 70 OPERATING PERMIT

for

NEVADA COGENERATION ASSOCIATES #1

Part 70 Operating Permit Number: 360
SIC Code 4931: Electric Cogeneration



Clark County
Department of Air Quality and Environmental Management
Permitting Section

March, 2012

EXECUTIVE SUMMARY

Nevada Cogeneration Associates #1 (NCA #1) is a major source for NO_x, CO and NH₃ and a minor source for PM₁₀, SO_x, VOC, and HAP. The source is under SIC 4931: Electric Cogeneration (NAICS 221112: Fossil Fuel Electric Power Generation) and is located in the Apex Industrial Park (next to Georgia Pacific gypsum wallboard production facility) Apex, NV (T18S, R63E, Section 34) in the Garnet Valley hydrographic area 216. Garnet Valley is classified as attainment for all criteria pollutants.

The NCA #1 is an 85 MW topping cycle cogeneration plant; operating three natural gas-fired GE Turbine Generator Packages with GE LM-2500 gas turbines that exhaust into heat recovery steam generators (HRSG) equipped each with a 77 MMBtu/hr supplemental duct burner. Additionally, a nominal 29.74 MW steam turbine generator is operated to produce electrical power. The potential emissions for the source are shown in Table 1:

Table 1: Maximum Source PTE (tons per year)

PM ₁₀	NO _x	CO	SO _x	VOC	HAP	NH ₃
67.24	168.26	145.42	9.30	26.76	6.41	83.48

The Clark County Department of Air Quality and Environmental Management (DAQEM) has delegated authority to implement the requirements of the Part 70 operating permit program. The NCA #1 emits particulate matter (PM₁₀), carbon monoxide (CO), oxides of nitrogen (NO_x), oxides of sulfur (SO_x), volatile organic compounds (VOCs), hazardous air pollutants (HAP), and ammonia (NH₃).

On December 3, 2010, DAQEM issued a renewed Title V Operating Permit for the source. On December 19, 2011, NCA #1 requested an administrative revision of the current Part 70 OP. Based on the information submitted by the applicant and a technical review performed by the DAQEM staff, the DAQEM proposes a revision of the Part 70 Operating Permit to Nevada Cogeneration Associates #1.

This Technical Support Document (TSD) accompanies the proposed Part 70 Operating Permit for Nevada Cogeneration Associates # 1.

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I. SOURCE INFORMATION

A. General

Permittee	Nevada Cogeneration Associates #1
Mailing Address	420 North Nellis Blvd., # A3-117, Las Vegas, Nevada 89110
Contacts	Genevieve E. Marengo and Christopher Kimmich
Phone Number	(702) 651-1224 or (702) 651-1217
Fax Number	(702) 644-1249
Source Location	Apex Industrial Complex (Next to Georgia Pacific), Apex, NV
Hydrographic Area	216
Township, Range, Section	T18S, R63E, Section 34
SIC Code	4931: Electric Cogeneration
NAICS Code	221112: Fossil Fuel Electric Power Generation

B. Permitting Action

The NCA #1 is regulated by DAQEM, has a Title V permit and is a major source for NO_x, CO, and NH₃. The current Part 70 Operating Permit was issued on December 03, 2010.

Based on the current operating permit, the annual compliance certification for each year will be due 30 days after the Operating Permit issuance anniversary date. On December 19, 2011, the source applied for an administrative revision of Part 70 OP to change the requirement date of the compliance certification for each calendar year to be due on or before January 30th. This will allow the source to submit the annual compliance certification for the entire calendar year. Based on the information submitted by the applicant and a technical review performed by DAQEM staff, DAQEM accepts the application for the Administrative Revision of the Part 70 Operating Permit to Nevada Cogeneration Associates #1.

The general conditions of the permit have been updated. Other parts of the permit were not a subject of this permitting action and remained unchanged.