



HEARING BOARD STAFF REPORT

TYPE: REGULAR VARIANCE

CASE NO: 2016-26-N

DATE: September 07, 2016

1.0 **GENERAL INFORMATION:**

- 1.1 **PETITIONER NAME:** Southern California Gas Company (SoCalGas)
- 1.2 **EQUIPMENT LOCATION:** Petitioner operates the equipment described in the Petition at 1171 More Ranch Road, Goleta, CA
- 1.3 **PERMIT NUMBER(S):** Part 70/Permit to Operate 9584-R5
- 1.4 **FACILITY NAME/ID:** La Goleta, FID 01734
- 1.5 **FACILITY DESCRIPTION:** The La Goleta Stationary Source (SSID # 5019) is solely owned and operated by Southern California Gas Company (SoCalGas), a subsidiary of Sempra Energy, with the company regional headquarters located in Los Angeles, California. The La Goleta facility (FID 1734) includes 21 underground gas storage wells and a dehydration plant consisting of a tank farm, odorization equipment, methanol storage tank, and external combustion equipment including flares, as well as a number of gas-fired internal combustion (IC) engines driving natural gas compressors and pumps. The La Goleta facility is permitted to withdraw natural gas from its underground storage at the rate of 680 million standard cubic feet per day (MMscf/day), while its hydrocarbon liquid (condensate, dry) production is restricted to 125,000 gallons per year.

- 2.0 **REASON FOR THE VARIANCE REQUEST:** The facility's Main Unit #3, a 650-bhp natural gas-fueled reciprocating engine and integral compressor, has been out of service since June 30, 2015 due to an engine and compressor overhaul.

In order to return this engine to service it is necessary to operate it under "no load" and "light load" conditions (less than 500 bhp) to check, adjust, tune-up and break-in the engine/compressor following the performed overhaul work. During this break-in period, the catalytic converter element will be removed to prevent oil fouling. Additionally, the Air/Fuel Ratio Controller (AFRC) is not capable of controlling throughout this broad range of horsepower (0-650 bhp) and will need to be turned off until after the engine is tuned, adjusted and operated at or near its normal load and temperatures. Once the engine break-in period is complete, the catalysts will be installed, the AFRC will be turned on, and full compliance with the permit and rule requirements will be met. Further, the variance request does not request any scenario where there are multiple break-in periods interspersed with normal operations using the controls. The Petitioner was issued Variance 2015-01-R in January of 2015 for the same type of break-in period of their Main Unit #2 compressor and were able to return that compressor to a compliant status within the timeframe allowed under the Variance. The Petitioner expects all work on Main Unit #3 to be completed within the timeframe requested under Variance 2016-26-N.

- 3.0 **BACKGROUND:** The Petitioner submitted a Petition for 90-Day Variance on August 09, 2016. Their Main Unit #3 engine overhaul has been completed and beginning the break-in period is pending the Hearing Board's decision on Variance 2016-26-N. The Petitioner hopes to have Main Unit #3 back to normal operation within the timeframe allowed under the 90-Day Variance.
- 4.0 **PERMITTING HISTORY:** Main Unit #3 was in operation before the District existed and was originally permitted in the 1980's.
- 5.0 **COMPLIANCE HISTORY:** Historically, the conditions described in Section 6.0 have not been violated.
- 6.0 **REGULATORY ANALYSIS:** The following permit conditions of Part 70 Permit to Operate 9584-R5 and rule requirements are applicable to the variance request:
- **Condition 9.C.1(a) (Emission Limits)**
 - *See section 7.0*
 - **Condition 9.C.1(b)(iv) (I&M Plan)**
 - *The permittee shall operate in accordance with the District-approved IC Engine Inspection and Maintenance Plan (I&M Plan) and any subsequent District approved updates.*
 - **Condition 9.C.1(b)(v) (Catalyst Operation)**
 - *The Catalyst shall operate at all times the engine is operating to reduce exhaust emissions of NO_x, ROC, and CO from the engine.*
 - **Condition 9.C.1(b)(viii)(A) (AFRC)**
 - *The Air Fuel Ratio Controller (AFRC) shall be operated at all times in accordance with the manufacturer's recommendations.*
 - **Rule 333 E.1(a) requiring control of emissions using the AFRC.**
 - *Emission concentrations, corrected for oxygen, from any such engine shall not exceed the permitted limits.*
- 7.0 **EMISSIONS ANALYSIS:** The following is an estimate of the excess criteria pollutant emissions and toxic air contaminant emissions that will occur due to the granting of this variance. These excess emissions were calculated by subtracting the controlled emissions with the catalyst in use (as permitted) from the uncontrolled emissions without the catalyst. All emissions associated with the break-in period for Main Unit #3 will be over the course of no more than 150 hours of operation during the Variance period and will be tracked and reported by the Petitioner.
- Estimated Excess Emissions in pounds:
 - NO_x 2,156
 - CO 3,593
 - ROC 29
 - Estimated Excess Hazardous Air Pollutants in pounds:
 - Benzene 1.47
 - Acetaldehyde 0.90
 - Formaldehyde 19.86
 - Methanol 0.73

8.0 *RESERVED*

9.0 OTHER FACTORS: none

10.0 DISTRICT RECOMMENDATION: The APCD supports the Petitioner's request and recommends the granting of a regular variance for Southern California Gas listed in the attached draft variance order.

11.0 ATTACHMENTS:

- Attachment 1 – Draft 90-Day Variance Order 2016-26-N



Michael McKay, Inspector
Compliance Division

08/24/16

Date