

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 5
HYDROGEN SULFIDE FROM GEOTHERMAL POWER PLANTS**

INDEX

9-5-100 GENERAL

- 9-5-101 Description
- 9-5-110 Exemption, Alternative Limits

9-5-200 DEFINITIONS

- 9-5-201 Full Power H₂S Flow
- 9-5-202 Gross Megawatt-Hour (MwHr)
- 9-5-203 Miscellaneous Steam Supply Operation
- 9-5-204 Steam Stacking

9-5-300 STANDARDS

- 9-5-301 Geothermal Power Plant
- 9-5-302 Miscellaneous Steam Supply Operations
- 9-5-303 Geothermal Wells
- 9-5-304 Shutdowns and Outages

9-5-400 ADMINISTRATIVE REQUIREMENTS (Not Included)

9-5-500 MONITORING AND RECORDS (Not Included)

9-5-600 MANUAL OF PROCEDURES

- 9-5-601 Sampling and Analysis of Gas Streams

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 5
HYDROGEN SULFIDE FROM GEOTHERMAL POWER PLANTS

9-5-100 GENERAL

9-5-101 Description: The purpose of this Rule is to reduce emissions of hydrogen sulfide (H_2S) from geothermal power plants and associated operations.

9-5-110 Exemption, Alternative Limits: The requirements of Section 9-5-302 or 303 shall not apply to any operation which complies with alternative limitations approved by the APCO and satisfies the following conditions:

110.1 The operator shall submit written application for alternative limits to the APCO.

110.2 The operator shall demonstrate to the satisfaction of the APCO that the controls required in Section 9-5-302 or 303 are not necessary to prevent violations of California or federal ambient air quality standards or other District regulations.

110.3 The operator shall identify alternative control requirements or emission limits which are adequate to prevent violations of state or federal air quality standards or other District regulations.

110.4 The APCO may terminate such exemption if he deems such action necessary to prevent violation of state or federal air quality standards or other District regulations.

110.5 Failure to comply with approved alternative limitations or requirements shall constitute a violation of this Rule.

9-5-200 DEFINITIONS

9-5-201 Full Power H_2S Flow: the amount of H_2S contained in the steam supplied to a geothermal power plant while operating at full rated capacity.

9-5-202 Gross Megawatt-Hour (MwHr): The gross amount of electrical generating capacity of a power plant as guaranteed by the turbine generator manufacturer, prior to internal plant requirements, expressed in megawatt-hours.

9-5-203 Miscellaneous Steam Supply Operation: Any operation associated with providing steam for a geothermal power plant, excluding well drilling, well reworking, well testing and well bleeds.

9-5-204 Steam Stacking: Venting of steam to the atmosphere during a shutdown or outage at a geothermal power plant.

9-5-300 STANDARDS

9-5-301 Geothermal Power Plant: A person shall not emit more than 100 grams of H_2S per MwHr from any geothermal power plant.

9-5-302 Miscellaneous Steam Supply Operations: A person shall not emit more than 1.0 kilogram of H_2S per hour from any miscellaneous steam supply operation.

9-5-303 Geothermal Wells: A person shall not emit more than 2.5 kilograms of H_2S per hour from any geothermal well.

9-5-304 Shutdowns and Outages: A person shall reduce H_2S emissions from steam stacking during a shutdown or outage at a geothermal power plant to no more than 35% of the full power H_2S flow in accordance with the following schedule:

304.1 In a scheduled outage, such reduction shall be accomplished within one hour.

304.2 In an unscheduled outage, such reduction shall be accomplished within four hours.

9-5-600 MANUAL OF PROCEDURES

9-5-601 Sampling and Analysis of Gas Streams: The method of sampling and analysis of gas streams for hydrogen sulfide is prescribed in the Manual of Procedures, Volume IV, ST-281. (Adopted March 17, 1982)