MEMORANDUM

SUBJECT: Applicability of Section 169 of the Clean Air Act (PSD) in Respect to the Control of Hydrogen Sulfide Emissions from New Geothermal Power Plants in California

FROM: Director, Division of Stationary Source Enforcement

TO: Clyde B. Eller, Director Enforcement Division, Region IX

This is in response to your memo (Enf. 3-4-4) dated April 17, 1978, concerning the applicability of the prevention of significant deterioration (PSD) regulations to emissions of hydrogen sulfide from geothermal power plants.

Since the definition of major source does not specifically identify geothermal power plants, the size criteria which triggers a PSD review for this source category would be its potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act. Potential to emit as defined in the latest draft of the PSD regulations, means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. Annual potential is based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation.

In the preamble to the latest draft of the PSD regulations (April 20, 1978) regulated under the Act means any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type. This then includes all criteria pollutants subject to the national ambient air quality standards (NAAQS) review, pollutants regulated under the Standards of Performance for New Stationary Sources (NSPS), pollutants regulated under the National Emission Standards for the Hazardous Air Pollutants (NESHAP), and all...
pollutants regulated under Title II of the Act regarding emission standards for mobile sources. Since geothermal power plants are only subject to PSD when they have the potential to emit 250 tons per year or more of a pollutant, best available control technology (BACT) will only be required for those pollutants for which the potential emissions are equal to 250 tons per year or more.

Therefore, since hydrogen sulfide is regulated under NSPS, the geothermal power plants would be subject to PSD for that pollutant, if these power plants have the potential to emit, at least 250 tons per year of hydrogen sulfide. The extent of the PSD analysis for hydrogen sulfide, would be the application of BACT and perhaps an analysis of the air quality related values as contemplated in §165(d).

This response has been completed with the concurrence of the office of General Counsel and the Office of Air Quality Planning and Standards. Should you have any additional questions or comments, please contact Rich Biondi (755-2564) of my staff.

Edward E. Reich

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