

APPENDIX 8.1H

# Cumulative Impacts Analysis Protocol

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### CUMULATIVE IMPACTS ANALYSIS PROTOCOL

Potential cumulative air quality impacts that might be expected to occur resulting from the operation of the proposed SBRP facility and other reasonably foreseeable projects are both regional and localized in nature. These cumulative impacts will be evaluated as follows.

Cumulative impacts from SBRP could result from emissions of carbon monoxide, oxides of nitrogen, sulfur oxides, and directly emitted PM<sub>10</sub>. To ensure that other projects that might have significant cumulative impacts in conjunction with SBRP are identified, a search area with a radius of 6 miles will be used for the cumulative impacts analysis.

Within this search area, three categories of projects with combustion sources will be used as criteria for identification:

- Projects that are existing and have been in operation since at least 2005.
- Projects for which air pollution permits to construct have been issued and that began operation after 2005.
- Projects for which air pollution permits to construct have not been issued, but that are reasonably foreseeable.

Projects that are existing and have been in operation since at least 2005 are already reflected in the ambient air quality data that has been used to represent background concentrations; consequently, no further analysis of the emissions from this category of facilities will be performed. The cumulative impacts analysis adds the modeled impacts of selected facilities to the maximum measured background air quality levels, thus ensuring that these existing projects are taken into account.

Projects for which air pollution permits to construct have been issued but that were not operational by 2005 will be identified through a request of permit records from the San Diego APCD (see the April 24, 2006 letter to Ralph DeSiena of the SDAPCD). The search has been requested to be performed at two levels. Projects that had a permit to construct issued after January 1, 2004, will be included in the cumulative air quality impacts analysis. The January 1, 2004 date was selected based on the typical length of time a permit to construct is valid and typical project construction times, assuring that projects not reflected in the 2005 ambient air quality data are included in the analysis. Projects for which the emissions change was smaller than 10 pounds per day will be assumed to be *de minimis*, and will not be included in the dispersion modeling analysis.

A list of projects within the area for which air pollution permits to construct have not yet been issued, but that are reasonably foreseeable, has also been requested from the SDAPCD staff. A copy of the request letter is included as Attachment 8.1H-1.

**Attachment 8.1H-1**

**Request to SDAPCD for Information Related to Cumulative Impacts Analysis**



**sierra  
research**

1801 J Street  
Sacramento, CA 95814  
Tel: (916) 444-6666  
Fax: (916) 444-8373

Ann Arbor, MI  
Tel: (734) 761-6666  
Fax: (734) 761-6755

April 24, 2006

Mr. Ralph De Siena  
San Diego Air Pollution Control District  
10124 Old Grove Road  
San Diego, CA 92131-1649

Subject: Information Request for Cumulative Impact Analysis in the CEC  
Application for Certification  
South Bay Energy Facility  
Chula Vista, California

Dear Mr. De Siena:

The air quality impact analysis requirements for the California Energy Commission (CEC) Application for Certification (AFC) include the need for a cumulative air quality impact analysis on projects expected to be constructed in the foreseeable future. Following CEC guidance, the distance from the proposed South Bay Energy Facility within which such projects need to be included in the cumulative impact analysis is 10 kilometers (6 miles), and would include the following zip codes:

- 91911
- 91902
- 91910
- 91913
- 91932
- 91950
- 92113
- 92114
- 92118
- 92136
- 92139
- 92154
- 92155
- 92173

The foreseeable projects are defined as those submitting a permit application, receiving an Authority to Construct, or receiving a revised Permit to Operate for a new or modified facility from the District within approximately the last 2 years (i.e., 2004- present). The information that we need includes the following:

- Project Name;
- Project Address;
- Net Emission Increase of each criteria pollutant in units of:
  - Maximum pounds per hour
  - Maximum pounds per day
  - Maximum tons per year
- Emitting equipment description; and

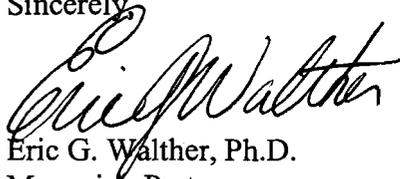
- Stack parameters for air dispersion modeling (e.g., stack height, inside diameter, exhaust temperature, and exhaust flow rate).

If the District has written guidance for the analysis of cumulative impacts, please provide such and advise us if the information requirements would differ from the above request.

We would appreciate receiving the information by May 1, 2006 because we expect to file a permit application with the District June 30, 2006.

If you have any questions, please do not hesitate to call me at (916) 444-6666. Thank you for your attention in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric G. Walther". The signature is written in a cursive style with a large initial "E".

Eric G. Walther, Ph.D.  
Managing Partner

cc: Mike Ringer, CEC  
Andrew Trump, Duke Energy  
Joe Otahal, Duke Energy  
Robert Mason, CH2M Hill