



Air Resources Board



Linda S. Adams
Secretary for
Environmental Protection

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Arnold Schwarzenegger
Governor

January 13, 2009

Dear Sir or Madam:

Re: Sulfur Hexafluoride (SF₆) Emissions Survey for the Electricity Sector and Particle Accelerator Operators

The Global Warming Solutions Act of 2006 (AB 32) requires the California Air Resources Board (ARB) to reduce greenhouse gas emissions to their 1990 level by 2020. To support this effort, ARB is undertaking several measures to reduce sulfur hexafluoride (SF₆) emissions from California sources. The enclosed survey relates specifically to the electricity sector and particle accelerator uses of SF₆.

SF₆ is a greenhouse gas (GHG) that has a global warming potential 23,000 times more powerful than CO₂ and has an atmospheric lifetime of 3,200 years. The most common use for SF₆, is as an electrical insulator in high voltage equipment that transmits and distributes electricity. Because of its long life span and high GWP potency, even a relatively small amount of SF₆ can have a significant impact on our climate. The electric power industry uses about 80% of the SF₆ produced worldwide, with circuit breaker applications accounting for most of this amount.

Because SF₆ emissions from the electric utility industry are the result of normal operations and routine maintenance ⁽¹⁾, the enclosed SF₆ emissions survey for the electricity sector and particle accelerator operators is intended to collect information about your companies' purchases, applications and handling procedures of SF₆. Particle accelerators also may use SF₆ in similar applications and for other uses.

Your survey responses will be analyzed to determine SF₆ greenhouse gas emission reduction potential and to assist ARB staff in developing appropriate control strategies. Your participation in this survey will help assure that new control measures will reflect best industry practices as well as encourage new reduction strategies.

The request for information contained in this survey is made pursuant to Sections 39600, 39607, and 41511 of the California Health and Safety Code, and Section 91100, Title 17, of the California Code of Regulations. These sections authorize

(1) SF₆ can escape to the atmosphere during normal operations; from properly functioning equipment (due to both static and dynamic operation); and, old and/or deteriorated gaskets or seals. SF₆ can also escape when gas is either transferred into or extracted from equipment for disposal, recycling, or storage.
The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

the California Air Resources Board to require the submission of information needed by ARB to estimate atmospheric emissions and to carry out its other statutory duties.

Associated laws and regulations may be found at the following website:

www.arb.ca.gov/html/lawsregs.htm

This survey consists of a four-page questionnaire, a Calculation of SF₆ Emissions methodology (see enclosed Attachment A), a Confidential Information Submittal Form, a Confidentiality Overview, and a copy of California regulations governing the disclosure of public records (see enclosed "Attachment B"). These documents are available in both hard copy and electronic form, both of which are available for downloading from our website at <http://www.arb.ca.gov/cc/sf6elec/sf6elec.htm>

You may complete and return your survey documents on-line, or download them and return the completed surveys by e-mail, fax, or mail to Michelle Garcia at any of the following addresses:

E-mail: mgarcia@arb.ca.gov
Fax: (916) 322-8387
Mail: Michelle Garcia, Air Pollution Specialist
Stationary Source Division, Energy Section
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Please complete and return the survey no later than February 27, 2009. If you have any questions regarding this survey, please contact: Michelle Garcia at mgarcia@arb.ca.gov or (916) 395-9470; or Jeffrey Doll at jdoll@arb.ca.gov or (916) 323-0343. Thank you in advance for your involvement and contribution toward reducing California's greenhouse gas emissions.

Sincerely,

/S/

David Mehl, Manager
Energy Section

cc: Michelle Garcia, Air Pollution Specialist
Energy Section

Jeffrey Doll, Air Resources Engineer
Energy Section

Encs.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency
