Appendix B

1- Blank Surveys of Users of Sulfur Hexafluoride

2- Blank Survey of Manufacturers and Distributors of Sulfur Hexafluoride

Page 1

California Air Resources Board
Survey on Sulfur Hexfluoride Use

Check if this page is confidential ☐

1	Company/Organization Name:	
2	Parent Company name, if applicable :	
3	Address:	
4	Contact Person:	
5	Phone:	
6	Email:	
7	SIC Code:	
8	Total number of California Employees:	
9	Webpage address:	
10	Does your company currently use SF_6?	
11	Has your organization used SF_6 at any time since 1990?	
12	If located in California, does your organization currently have plans to relocate to another state or country?	

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Check if this page is confidential ☐

13 **Do you use sulfur hexafluroide for:**
Please check all that apply

Tracer studies
- Atmospheric Transport ☐
- Fume hood testing ☐
- Building ventilation ☐
- Air Infiltration ☐
- Leak Testing ☐
- Other (Please specify below) ☐

Magnesium Casting ☐
Medical uses ☐
Other uses excluding semiconductor or utility applications: (please specify) ☐

14 a If you answered yes to any part of question 13, how many kilograms of SF_6 did you use for each purpose in **2007** in the state of California (if use data is not available, please provide purchase information. If actual data is not available, please provide your best estimate. Note below whether the data is actual or estimated. If the specified categories are not appropraite for any of your use, please include in other and specify use.

Is the use/purchase data Actual or Estimated?

	SF6 (in kilograms)	Used or Purchased?	Purchased from?	Additional Information
Atmospheric Transport				
Fume Hood Testing				
Other Tracer Uses (please specify in additional information)				
Magnesium Casting				
Medical Use (please specfiy in additional information)				
Other (please specify)				

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Check if this page is confidential ☐

14b For information provided in Part a, please provide the number of studies, tests, surgeries, or other events in 2007 (California only). If data is not available, please provide the average SF_6 emissions per event and whether this has changed over time.

Use	Number of events in 2007 (provide units)	Average emissions per event (provide units)	Actual or Estimated?
Please choose Tracer Use			
Magnesium	Example: Metric Tons of Magnesium		
Medical Uses			
Tennis Ball Manufacture	Example: Number of Tennis Balls		
Other			

14c If available, please provide use in CA (in kilograms) for 1990, 2004, 2005, and 2006 by source type (available in the dropdown menu
Space is available for two uses, if your company has more than two uses, please add additional lines here or in an attachment.
If information is only available in total, please choose 'All Uses'

Use	1990	2004	2005	2006	2007
Please Choose Use					
Please Choose Use					

14d Did your organization purchase and use the SF_6 directly or contract the service out to another entity? If applicable, provide the name of the contracted entity.

14e How many kilograms of sulfur hexalfuoride do you typically have in stock?

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Check if this page is confidential ☐

15 Is your company organization a member of any industry group? If yes, please state the association.

16 Do you have any reduction strategies to minimize SF_6 emissions? If so, please explain your strategy

17 What is the current price you pay for one kilogram sulfur hexafluoride (in US$)?

18a If considering a switch to another gas, what gas would you use?

18b What is your expected price for the alternative gas?

18c If you were to switch to another gas, would you need to change any equipment?

18d If you answered yes to 18c, What is the likely cost for an equipment change?

18e If you answered yes to 18c, are there any annual operating costs or savings associated with the equipment change and if so, please provide them (in US$)

18f If your organization performs tracer services for others, provide the annual average income from tracer studies or certifications.

19 If there is any additional information you would like to provide, please provide it in the following space.

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I certify that the above information is true, accurate, and complete

Printed Name

Title

Signature (if submitting a hardcopy)

Date

PLEASE RETURN THE SURVEY TO ELIZABETH SCHEEHLE at ESCHEEHL@ ARB.CA.GOV BY JULY 7, 2008
Filing Electronically without Password Protection

Type in your name, title and date; save the file to your computer and name it your company name (e.g., ABC Company.xls). Submit the survey as an e-mail attachment to escheehl@arb.ca.gov by July 7, 2008. Please title your e-mail **SF6 SURVEY**.

Filing Electronically with Password Protection

If you wish to add password protection to your electronic submittal follow these steps. When you have completed the survey online in Excel, go to **File**, **Save As…**. change the filename to Survey_electronic_ your company name. Still in the **Save As...** window, click on the **Tools** icon in the upper right hand corner, then **General Options**, and respond to the prompt by typing in a password to open the file (remember passwords are case sensitive). Then click **OK**.

In a second separate e-mail titled **SURVEY ACCESS**, also sent to escheehl@arb.ca.gov, please include the filename and the password to your survey in the body of the e-mail.

Page 4

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Page 1

California Air Resources Board

Survey on Sulfur Hexafluoride Manufacture and Distribution

Check if this page is confidential ☐

1	Company/Organization Name:	
2	Parent Company name, if applicable :	
3	Address:	
4	Contact Person:	
5	Phone:	
6	Email:	
7	SIC Code:	
8	Total number of California Employees:	
9	Webpage Address:	

10	Does your company currently manufacture or distribute SF_6?	
11	Has your organization manufactured or distributed SF_6 at any time since 1990?	
12	If located in California, does your organization currently have plans to relocate to another state or country?	

If you are a manufacturer, please go to page 2, if you are a distributor please go to page 3

Page 2 **To be filled in by Sulfur Hexalfuoride Manufacturers**

Check if this page is confidential ☐

13 How much sulfur hexafluoride (in kilograms) did you sell in 2007:

a. Directly to California users

b. To California distributors

14 Please provide a list of distributors in California and neighboring states: (may provide as an attachment)

15 The following questions relate to how SF_6 cylinders are sold/used:

a If by cylinder, what are the typical sizes (kg/cylinder)?

b Are the cylinders one-way?

c Do the cylinders contain a heel? What portion of the cylinder represents the heel?

16 Provide a breakdown of sales by end-use type (in California):

	%	or kg
Tracer uses		
Magnesium Casting		
Medical Uses		
Tennis Ball Manufacturers		
To Distributors		
Electric Utilities		
Particle Accelerator		
Other (please specify)		
Unknown		

17a How are your sales priced (e.g. $/kg, $/lb)?

17b Do you provide bulk sales? If so, what volume is needed to qualify as bulk?

18 What is your current retail sales price for 1 kg SF_6?

19 What is your current bulk price per kg, if applicable?

20 What are your annual sales of SF_6 in kg and dollars?

Page 3 **To be filled in by Sulfur Hexafluoride Distributors**

SF_6 manufacturers please go to page 4 to complete the survey

Check if this page is confidential ☐

21 How much sulfur hexafluoride (in kilograms) did you sell directly to California users in 2007?

22 The following questions relate to how SF_6 cylinders are sold/used:

a What are the typical sizes (kg/cylinder)?

b Are the cylinders one-way?

c Do the cylinders contain a heel? What portion of the cylinder represents the heel?

23 Provide a breakdown of sales by end-use type (in California):

	%	or kg
Tracer uses		
Magnesium Casting		
Medical Uses		
Tennis Ball Manufacturers		
To Distributors		
Electric Utilities		
Particle Accelerator		
Other (please specify)		
Unknown		

24a How are your sales priced (e.g. $/kg, $/lb)?

24b Do you provide bulk sales? If so, what volume is needed to qualify as bulk?

25 What is your current retail sales price for 1 kg SF_6?

26 What is your current bulk price per kg, if applicable?

27 What are your annual sales of SF_6 in kg and dollars?

Page 4

I certify that the above information is true, accurate, and complete

Printed Name

Title

Signature (if submitting a hardcopy)

Date

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