

SF₆ Emission Reduction Partnership for the Magnesium Industry

Partners Workshop – Designing a New Emissions Tracking and Reporting Tool

Presented by:

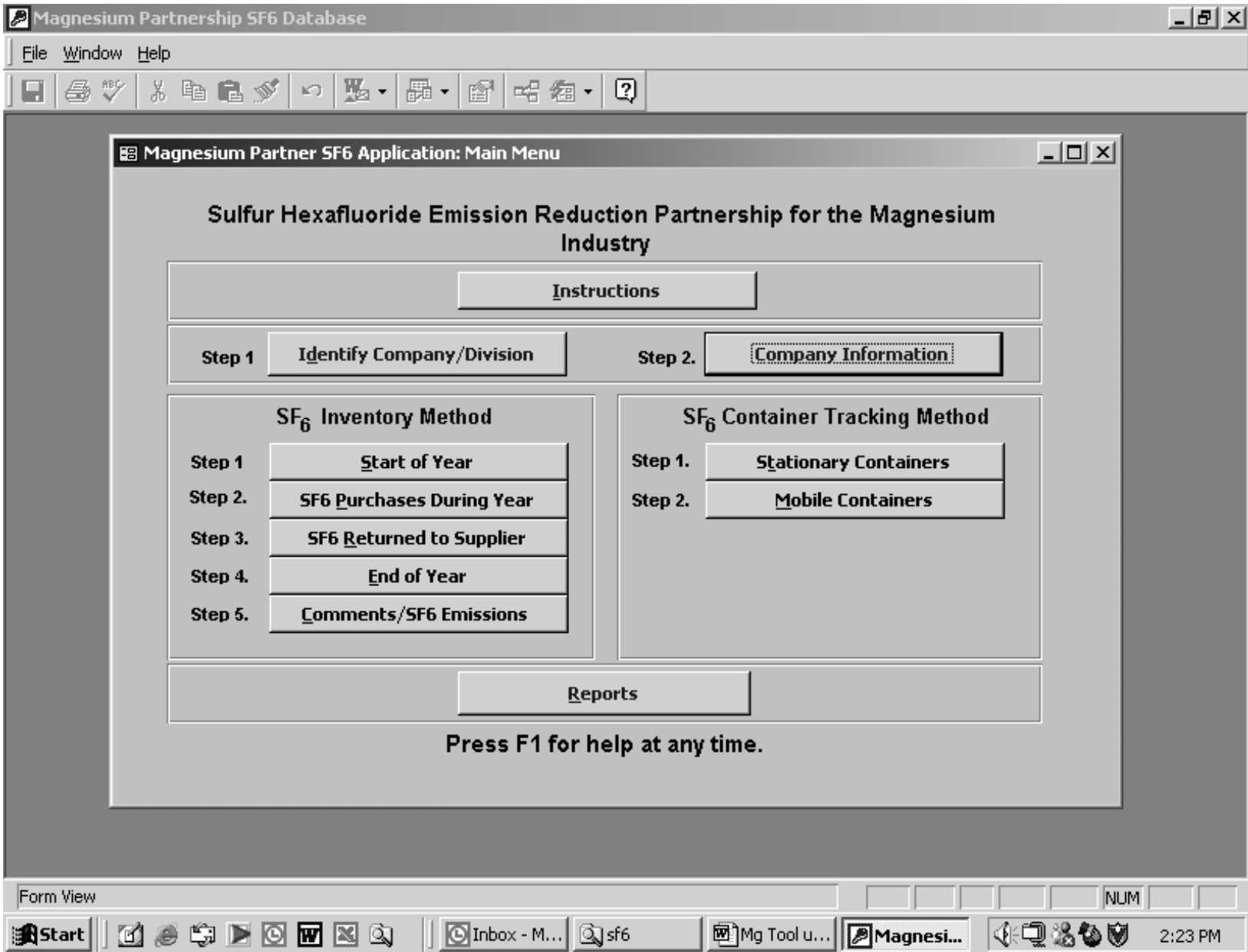
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Current SF₆ Emissions Annual Reporting Tool

- Access-based software package
- Partner inputs annual tracking data – cylinder or container accounting
- Tracking data stored in Access database
- Assumes 100 percent of SF₆ used is emitted
- Automated partner report generation



Magnesium Partnership SF6 Database - [Company/Division Information]

File Edit Insert Records Window Help

Open Form Close Exit

Identify Company/Division

Please enter a unique descriptive name for the Company or Division for which you are tracking SF6 use.

Company/Division:

Enter the year in which the data was collected for this Division or Process.

Year:

Indicate the units you are using to report your data.

Check Units

Pounds Kilograms

Indicate if you are reporting actual data or any estimated data based on container weighings.

Estimated Data?

Actual Estimated

Please indicate how much Magnesium was processed in the reporting year.

Amount of Magnesium Processed in Reporting Year: metric Tons

Record: of 1

Form View

Start | | | | 3:29 PM

Magnesium Partnership SF6 Database - [Beginning of Reporting Year]

File Edit Insert Records Window Help

Open Form Close Exit

Start of Year Press F1 for form specific help

Reporting Year:

Company/Division:

Make certain you place at least a space into each of the Full, Partially Full, and Empty Container sections. This is required to ensure successful report generation.

Units: Kilograms (kg)

SF₆ Contents of Full, Partially Full, and Empty Containers

A. Full Containers

List the contents of each full container according to container ID. Note the container capacity by net weight and the actual net weight measured.

	Container ID	Container Capacity	Actual Net Wt.
▶		0.0	0.00

Record: of 1

B. Partially Full Containers

List the contents of each partially full container that you had at the start of the year according to container ID. Note the container capacity by net weight.

You must insert a reporting year for the data

NUM

Start | | | | 1:44 PM

Reporting Tool Limitations

User interface design

- Toggle between “reference cells” causes confusion and data entry problems (Access is a relational database)
- Background data are not transparent
- All cells must contain a “space” when not used and makes data entry time consuming

Only SF₆ can be tracked (ignores alternatives)

Changes to IPCC reporting guidelines (i.e., degradation) cannot be incorporated

Software architecture cannot be readily updated

Areas for Improvement

- Data Input
- Software framework
- Emissions tracking flexibility
- Reporting requirements

Creating a New Reporting Tool – Data Input

- Historical data stored on one worksheet and can be easily viewed/compared
- Data input on a single screen with clearly defined inputs and units
- Reporting tool available from the EPA website (i.e., downloadable)
- Tracking methodology allows user-specified inputs (e.g., degradation rates)
- Container tracking? QA/QC?

Creating a New Reporting Tool – Software Framework

- What is the most compatible software framework?
- Use Excel-based software?
 - Excel is more widely used than Access
 - Excel spreadsheets can be easily manipulated by partners
 - User-friendly automated interface can be created

Creating a New Reporting Tool

- Emission Tracking Flexibility

- Provide greater flexibility; for example, tracking options for alternate cover gases:
 - AM-Cover™ (HFC-134a)
 - Novec™ 612 (fluorinated ketone)
 - CO₂
- Indirect emissions?
 - EPA-sponsored energy audits

Creating a New Reporting Tool

- Reporting Requirements

Report format options:

- Partnership reporting to EPA (similar to current format)
- Historical emissions summary
- Communicating accomplishments

Hard copy or electronic report submission?

- Confidentiality?
- Report electronically to IMA?

Direct data entry into online reporting form (i.e., web-based version of the Excel tool)?

Creating a New Reporting Tool

Other comments/suggestions?

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