



Designing a High-Quality Inventory Management Plan

**Lisa Nelowet Grice, CH2M HILL
for
EPA Climate Leaders
13 January 2004**



Overview

1. **Rewards of a High-Quality IMP**
2. **Developing a Successful GHG IMP**
3. **IMP Details**

**IMP: Inventory Management Plan,
institutionalizes a process**





“Our Inventory Management Plan helped to improve the *efficiency* of developing our greenhouse gas inventory.”

- Keith J. Miller

Environmental Initiatives and Sustainability

Environmental, Health and Safety Operations

3M



Rewards of the Inventory Management Plan





“Having a GHG management system insures a *sustainable* means of high quality GHG tracking and reporting.”

-Franklyn A. Ericson
Mgr. Environmental Operations &
Central Services





Developing a Successful GHG IMP

Energy Data
Production Data
Real Estate Records
Transportation Logs
Etc.

**Leverage Existing
Data Systems**

ISO 14001: EMS
ISO 9001: QMS
ISO17025: Lab QMS
Six Sigma
Lean Manufacturing
Etc.

**Integrate with
Existing Programs**



IMP Details: Organizational Boundaries

- ◆ **Define basis for including assets in the inventory**
 - **ownership versus control**
 - **consistently define control**
 - **consider shared, co-located and outsourced operations**

Roles, responsibilities

Data management

QA/QC



IMP Details: Operational Boundaries

- ◆ **Direct sources: stationary/mobile combustion, process, fugitives**
- ◆ **Indirect sources: purchased electricity, steam, hot/chilled water**
- ◆ **Optional indirects: waste disposal, product use, raw material inputs...**

Roles, responsibilities

Data management

QA/QC



IMP Details: Emission Quantification

- ◆ **Quantification Method**
- ◆ **Emission Factors *and other Constants***
- ◆ **Activity Data**

Roles, responsibilities

Data management

QA/QC



IMP Details: Data Management

- ◆ **Data Collection**
- ◆ **Data Processing**
- ◆ **Information Management Systems**
- ◆ **Quality Assurance**

Roles, responsibilities

Data management

QA/QC



IMP Details: Base Year Adjustment

◆ Structural changes

- mergers, acquisitions, divestitures, and outsourcing

◆ Methodology changes

- calculation methods, emission factors, error correction

◆ Triggers

Roles, responsibilities

Data management

QA/QC



IMP Details: Management Tools

- ◆ **Roles and Responsibilities**
 - Overall program management
 - Individual program elements
 - Program evaluation to goals
 - Sufficiently institutionalized to survive transitions?
- ◆ **Training and Communication**
- ◆ **Document Retention and Control**



IMP Details: Auditing & Continuous Improvement

- ◆ Internal auditing
- ◆ External auditing
- ◆ Management review
- ◆ Corrective action

Roles, responsibilities

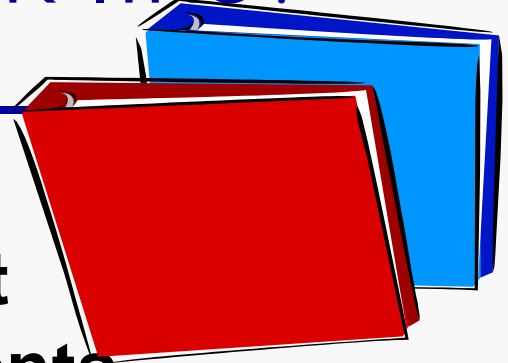
Data management

QA/QC



What does the IMP look like?

- ◆ **Could be a single document that spells out all requirements**
- ◆ **Could be an overview document (or web-based tool) that links to:**
 - existing or new SOP's
 - software data base user guides
 - job descriptions
 - etc.





"We are developing a robust, concrete GHG management strategy through the very *process* of crafting our inventory management plan.

Through this *process*, the course for achieving our overall goals is becoming clearer.

The IMP is an effective guidance tool for navigating the complexities of the issues, keeping us on course over the journey."

-Ben Packard

Director, Environmental Affairs and
Corporate Social Responsibility





Conclusion...

Institutionalize Your Process

Efficiently

Achieve Your Objectives