

ENVIRONMENTAL MANAGEMENT INITIATIVE

1. Initiative Name:
CO2 Inventory Program

1.a. Environmental Management Program(s) Supported:
Air Emissions

2. Initiative Lead:
Bill Steinmetz

3. Document Control Code:
EMI-2007-CO2 Inventory

4. Date:
October 22, 2007

5. Initiative Description:

This environmental initiative involves completion of an initial carbon dioxide inventory for various emission sources located on the NIEHS Campus. The inventory would be used to establish a carbon dioxide footprint and help prepare the facility for potential greenhouse gas regulations.

6. GOALS AND OBJECTIVES

2008 Objective(s):	Performance Indicator(s)	Resource requirements
<ul style="list-style-type: none"> ▪ List all carbon dioxide sources on the NIEHS Campus, determine emission factors to be used, calculate emissions. 	<ul style="list-style-type: none"> ▪ Baseline inventory completed 	<ul style="list-style-type: none"> ▪ Current resources

7. Significant Environmental Aspect(s):
Air Emissions

8. Reason(s) for Significance:
a. Potential environmental impact

9. Legal and Other Requirements:

- Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management requires federal facilities to reduce greenhouse gas emissions through reduction of energy intensity 30 percent by 2015, compared to an FY 2003 baseline. However, there are no mandatory requirements for federal facilities to inventory greenhouse gas (i.e. carbon dioxide) sources.
- Department of Energy's Voluntary Reporting of Greenhouse Gases (1605(b)) Program

10. Potential Environmental Impacts:

Potential environmental impacts associated with NIEHS carbon dioxide emissions are expected to be minimal

11. ACTION PLAN:

Targets/Milestones to Meet Initiative Objective(s)	Expected Frequency / Completion Date	Responsibility
List all carbon dioxide sources on the NIEHS Campus	1 st Quarter 2008	Environmental Compliance Officer
Research and develop emission factors	2 nd Quarter 2008	Environmental Compliance Officer
Calculate emissions from NIEHS sources	4 th Quarter 2008	Environmental Compliance Officer

12. OPERATIONAL CONTROLS

Activity	Controls	Responsible Persons	Monitoring	Records	Comments
Combustion of fossil fuels in stationary sources such as boilers, emergency generators, and incinerators	NCDQA Air Permit Manufacturer recommended procedures	ORF/FOB NVT Project Officer NVT Operations Supervisor NVT Utility Operators HSB Environmental Compliance Officer	Visible emissions evaluation Fuel oil certifications Continuously monitored parameters	Fuel use records Incinerator data acquisition systems	
Breathing loss and other leaks of CO ₂ from storage vessels such as tanks and gas cylinders	EPCRA Tier 2 Manufacturer recommended procedures and vendor guidelines	ORF/FOB Building Engineers	Storage tank and cylinder pressure gauges	Delivery records	
Combustion of fossil fuels associated with	NCDQA regulations covering Stage II vapor recovery	ASAB Transportation Specialist	Product inventory	E85 fuel delivery records GSA fuel usage	

fleet vehicle operations	systems on the E85 storage tank Manufacturer recommended procedures	Environmental Compliance Officer		database	
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13. RELEVANT DOCUMENT(S)

Document Name	Location	Document Custodian
NCDAQ Air Quality Permit	Hardcopy / electronic copy	Environmental Compliance Officer
CO2 Emission Factors	Online sources	Environmental Compliance Officer

14. EMS REVIEW

Name: William K. Steinmetz	Signature:	Date: 12/04/2007
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