

ENVIRONMENTAL MANAGEMENT INITIATIVE

1. Initiative Name:
Waste Diversion Program

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

2. Initiative Lead:
Bill Steinmetz

3. Document Control Code:
EMI-2007-Waste Diversion

4. Date:
October 22, 2007

5. Initiative Description:

This initiative involves the review of the NIEHS incinerated waste streams as part of an effort to seek an exemption from new rules that will affect the multi-purpose (ES-106-6) incinerator. Incinerators must burn materials that are defined as 90% or greater pathological waste by weight or be subject to new regulatory requirements. Pathological waste includes animal bedding, animal carcasses, and materials that have come in contact with animal tissue such as plastic lab ware. The remaining waste is considered to be non-pathological. Most of this waste must be diverted to offsite sources, such as landfills, rather than incinerated in order to receive an exclusion from the rule. As such, the NIEHS plans to seek reuse and recycling opportunities to reduce the amount of non-pathological waste that must be sent to the landfill.

6. GOALS AND OBJECTIVES

2008/2009 Objective(s):	Performance Indicator(s)	Resource requirements
<ul style="list-style-type: none"> ▪ Establish reuse and recycling programs for specific materials within waste streams that can no longer be incinerated 	<ul style="list-style-type: none"> ▪ Reuse and recycling programs are established or enhanced during the 2008 calendar year 	<ul style="list-style-type: none"> ▪ Current resources
<ul style="list-style-type: none"> ▪ Remove animal care clothing from the incinerated waste stream 	<ul style="list-style-type: none"> ▪ Reuse or recycle 100% of the polypropylene protective clothing worn in the animal care facilities using 2007 data as the baseline 	<ul style="list-style-type: none"> ▪ Current resources
<ul style="list-style-type: none"> ▪ Establish program to increase recycling of lab plastics 	<ul style="list-style-type: none"> ▪ Increase recycling of lab plastics, that were formerly incinerated, by 75% over next two years, using the 2007 waste stream review as a baseline 	<ul style="list-style-type: none"> ▪ Current resources

7. Significant Environmental Aspect(s):

Air Emissions
Solid Waste

8. Reason(s) for Significance:

- a. Legal and regulatory requirements

b. Potential environmental impact

9. Legal and Other Requirements:

State: 15A NCAC 2D .1211 Other Solid Waste Incineration Units (adopted from: 40 CFR Part 60, Subpart FFFF Other Solid Waste Incineration Units)

10. Potential Environmental Impacts:

Increased landfill disposal of solid waste materials

11. ACTION PLAN:

Targets/Milestones to Meet Initiative Objective(s)	Expected Frequency / Completion Date	Responsibility
Review waste streams and categorize types of materials that are incinerated in the multi-purpose incinerator	4 th Quarter 2007	Environmental Compliance Officer / HSB Hazardous Waste Manager / HSB
Select specific waste types to evaluate for reuse and recycling opportunities.	1 st Quarter 2008	Environmental Compliance Officer / HSB Quality Assurance Specialist / ORF
Establish reuse / recycling programs for selected waste types	4 th Quarter 2008	Environmental Compliance Officer / HSB Quality Assurance Specialist / ORF
Develop education programs for affected work groups	4 th Quarter 2008	Environmental Compliance Officer / HSB Hazardous Waste Manager / HSB

12. OPERATIONAL CONTROLS

Activity	Controls	Responsible Persons	Monitoring	Records	Comments
Laboratory research activities generating various types of solid waste for disposal through incineration	Waste Manual Waste Minimization Plan HSB Approval of Laboratory Research	HSB / Hazardous Waste Manager HSB Safety Officer Principal Investigators	Periodic lab inspections Program reviewed annually	Protocol documents	

	Protocols				
Other mission supporting activities generating solid waste that may enter the incinerated waste stream	Waste Manual Recycling Guide QA Guidelines: Building 106 Incineration Program	HSB / Hazardous Waste Manager ASAB / Employee Services Specialist NVT Incinerator Operators Employees disposing solid waste	Incinerated waste stream monitored for unacceptable materials	Weight of recycled materials	
Incineration of medical, chemical and other solid waste generated by NIEHS/EPA research activities	NCDQA Air Quality Permit QA Guidelines: Building 106 Incineration Program MOU between the NIEHS and the EPA for Joint Use of the Incineration Plant (Bldg. 106) Operations and maintenance manual	ORF/FOB NVT Project Officer NVT Operations Supervisor NVT Utility & Incinerator Operators HSB / Hazardous Waste Manager HSB / Environmental Compliance Officer	Operational parameters are continuously monitored and routinely recorded Visible emissions evaluation	Building 106 Incinerator data acquisition system NVT Incinerator Operator logbooks Environmental Compliance Officer logbooks	

13. RELEVANT DOCUMENT(S)

Document Name	Location	Document Custodian
NCDQA Air Quality Permit	Hardcopy / electronic	Environmental Compliance Officer / HSB
NIEHS Waste Manual	Web-based	Hazardous Waste Manager / HSB
NIEHS Health & Safety Manual	Web-based	Safety Officer / HSB
NIEHS Waste Minimization Plan	Hardcopy, electronic	Hazardous Waste Manager / HSB
North Carolina Hazardous Waste Permit	Hardcopy, electronic	Hazardous Waste Manager / HSB
MOU between EPA & NIEHS for joint use of Incineration Plant	Hardcopy, electronic	NVT project officer / ORF/FOB
NIEHS Recycling Guide	Hardcopy, web-based	Employee Service Support Specialist/ ASAB

14. EMS REVIEW

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