

ENVIRONMENTAL MANAGEMENT PROGRAM

1. PROGRAM NAME: NIEHS Aboveground Storage Tank Program

2. Significant Environmental Aspect(s):

Soil or groundwater contamination
Stormwater releases
Ecological disturbance

3. Document Control Code: EMP-2007-AST

4. Date: 11/29/2007

5. Program Lead:
Bill Steinmetz – HSB
Bob Roe – ORF/FOB
William Boyd – ASAB

6. Goals and Objectives

Five-year Goals(s):	Annual Objective(s):	Performance Indicator(s)	Resource requirements
Perform certified tank inspections on all petroleum storage tanks	Maintain compliance with SPCC requirements	SPCC Plan is modified to include new tanks and certified by a professional engineer	Current resources
	Maintain compliance with NCDWQ Stormwater permit requirements	Results of regulatory compliance inspections and internal compliance audits	Current resources
	Perform integrity testing on the underground fuel lines connecting the 101C fuel oil tank with the 101C basement emergency generators	Integrity test passes or corrective actions completed	Current resources
	Maintain adequate spill supplies	Spill supplies maintained at the suggested minimum levels listed in the SPCC Plan	Current resources

7. Reason(s) for Significance:

Potential health impact
Potential environmental impact
Legal and regulatory requirements

8. Potential Environmental Impacts:

Potential for soil and groundwater contamination in the event of a spill
Impact on aquatic life and water fowl especially in and around the NIEHS Lake

9. Legal and Other Requirements (Specify):

Federal: 40 CFR Part 112, Spill Prevention Control and Countermeasures Plan (SPCC Plan)

10. Program Description:

The EPA requires facilities that have over 42,000 gallons of underground or 1,320 gallons of aboveground petroleum storage capacity to prepare and implement a Spill Prevention Control and Countermeasures (SPCC) Plan. All containers capable of storing 55 gallons or more of petroleum products must be documented within the SPCC Plan. The NIEHS currently has an aboveground storage capacity of 275,000 gallons. This capacity is primarily comprised of fuel oil storage but also includes E85 fuel (85% ethanol / 15% gasoline), transformer mineral oil, engine oil, and elevator hydraulic fluid. Therefore, preparation of a SPCC Plan is required. The NIEHS SPCC Plan documents spill potential, prevention, response, and cleanup operations along with procedures for unloading petroleum products during tanker truck deliveries. There are no underground storage tanks located on NIEHS property. All ASTs have secondary containment through double-walled construction or placement within a concrete containment area. All ASTs are also secured with locked containment valves or enclosed with locked fencing.

11. Operational Controls

Activity	Controls	Responsible Persons	Monitoring	Records	Comments
Petroleum product deliveries including E85	DOT Requirements 40 CFR Part 112 NIEHS SPCC Plan	ORF/FOB NVT Project Officer NVT Operations Supervisor NVT Utility Operators ASAB Transportation Specialist	SPCC requires government or contract personnel present during all petroleum deliveries High level alarms	Product delivery records SPCC / stormwater management training attendance records	
Secondary containment maintenance including concrete vaults, drum containment decks and interstitial space in double-walled tanks	40 CFR Part 112 NIEHS SPCC Plan	ORF/FOB NVT Project Officer NVT Operations Supervisor NVT Utility Operators HSB / Environmental Compliance Officer	Concrete containments are inspected weekly	Maintenance logs internal memorandum	
Rainwater release from secondary containment areas	40 CFR Part 112 NIEHS SPCC Plan	ORF/FOB NVT Project Officer NVT Operations Supervisor NVT Utility Operators	Containments are inspected weekly; more frequently following heavy precipitation events	Rainwater release records	
Petroleum container maintenance & inspections, including product inventory and	40 CFR Part 112 NIEHS SPCC Plan	ORF/FOB NVT Project Officer NVT Operations Supervisor	Visual inspections and stick measurements of storage containers	Logbooks	

visual inspections		NVT Maintenance Supervisor NVT Utility Operators ASAB Transportation Specialist			
Petroleum container integrity testing	40 CFR Part 112 NIEHS SPCC Plan	HSB / Environmental Compliance Officer	Testing follows recommended intervals	Test results	
Boiler and emergency generator operations using fuel oil		ORF/FOB NVT Project Officer NVT Operations Supervisor NVT Maintenance Supervisor NVT Utility Operators	Fuel meters, time meters, gauges	Fuel consumption records Maintenance logs	
Onsite NIEHS fleet vehicle fueling using E85	NCDAQ Air Permit Stage 1 Vapor Recovery Requirements Executive Order 13149	ASAB Transportation Specialist Mail Room Contractors (Fleet Vehicle Assistants)	Use of vapor return hose, vehicle fleet maintained at 75% or greater flexible-fueled	Fuel delivery and consumption records	

12. Action Plan: Structure, Authorities, Responsibilities

Targets/Milestones to meet Annual Objective(s)	Timeframe	Responsibility
Conduct SPCC / Stormwater Management training	Annual	Environmental Compliance Officer / HSB
Conduct integrity testing on underground fuel lines	Every 3 Years	Environmental Compliance Officer / HSB
Modify SPCC & Stormwater Management plans as needed	As needed	Environmental Compliance Officer / HSB

13. Relevant Document(s)

Document Name	Location	Document Custodian
NIEHS SPCC Plan	Hardcopy, electronic	Environmental Compliance Officer / HSB
NIEHS Stormwater Management Plan	Hardcopy, electronic	Environmental Compliance Officer / HSB
North Carolina Division of Air Quality Permit	Hardcopy, electronic	Environmental Compliance Officer / HSB

Executive Order 13149	Available online	Environmental Compliance Officer / HSB
14. Competence of persons responsible		
Title	Basis for Competence	
HSB Environmental Compliance Specialist	Professional level education and experience	
NIH ORF/NVT Project Officer	Qualified experience and on-the-job training	
ASAB Transportation Specialist	Qualified experience and on-the-job training	
Mail Room Contractors (Fleet Vehicle Assistants)	On-the-job training	
NVT Operations Supervisor	Qualified experience and on-the-job training	
NVT Maintenance Supervisor	Qualified experience and on-the-job training	
NVT Utility Operators	On-the-job training / Introductory and refresher training (SPCC/Stormwater Management)	
15. EMS Review		
Name / Signature	William K. Steinmetz	
Certification Date	November 29, 2007	