SITE REMEDIATION MACT STANDARD

ASTSWMO Conference Call

January 29, 2002

OUTLINE

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- **Source Category Scope**

- **Rule Summary**
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  - **Compliance Schedule**
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- **Schedule**

BACKGROUND

Basis for Regulating Site Remediation Activities:

- **Clean Air Act Amendments of 1990 (CAA) require EPA to list industry categories of major sources of hazardous air pollutants (HAP).**
  - **Major source: potential to emit 10 tons/year of a single HAP or 25 tons/year of a combination of HAP.**

- **The site remediation source category was listed as a major source of HAP in 1992.**

- **The source category description included National Priorities List Sites, Corrective Action Sites and UST sites.**

- **Site Remediation was listed in the 10-year MACT category with a promulgation deadline of November 15, 2000.**

SOURCE CATEGORY SCOPE

We are recommending a revision to the source category description. The revised description would exclude the following remediation activities:

- **CERCLA authorized remediation.**
- **RCRA Corrective Action and Federal Order authorized Remediation.**
- **Remediation at farms site, gasoline stations and residential sites.**
- **Controls at landfills complying with NSPS.**

APPLICABILITY

A facility would be subject to the rule when both the following criteria are met:

1. **Remediation operations are performed at a facility collocated with other sources that individually or collectively are a major source of HAP; and**

2. **A non-remediation activity is performed at the facility that is covered by a category on the major source category list (i.e., a MACT source category).**

APPLICABILITY (CONTINUED)

Affected sources:

1. The group of *process vents* associated with remediation.

2. The group of *remediation material management units* used in remediation.

3. The group of *equipment components* that contain or contact remediation material in a remediation related activity.

Exemptions:

1. Facilitywide - Volatile HAP (VOHAP) content of remediation material undergoing remediation at the site is less than 1 Mg per year.

2. Cleanup activities that are initiated within 7 days after the contamination occurs.

3. Mixed/radioactive waste managed in accordance with all applicable regulations under the Atomic Energy Act and Nuclear Waste Policy Act authorities.

COMPLIANCE SCHEDULE

<u>New sources</u> - affected source groups constructed after proposal: comply with rule upon startup or promulgation date, whichever is later.

<u>Existing sources</u> - affected source groups* constructed before proposal: comply with rule three years after promulgation.

*** If a *unit* is added to an existing affected source group after the proposal date the affected source group is still an existing source.**

CONTROL REQUIREMENTS - VENTS

Affected Source	Applicability Cutoffs	Recommendation for Proposal
Process Vents	**Vents are exempted from control requirements if:** **1) total of all remediation vent emissions < 3 lb/hr and < 3.1 tpy; or** **2) material remediated with a vent-associated process has a HAP content < 10 ppmw.** **3) individual vents with flow rates < 0.005 m^3/min; or** **4) individual vents with flow rates < 6.0 m^3/min and HAP concentrations < 20 ppmv.**	**Control HAP emissions from <u>all</u> remediation vents to either:** **1) emit < 3 lb/hr and < 3.1 tpy for all affected source vents *combined*; or** **2) Reduce emissions by 95% for all vents *combined*.**

CONTROL REQUIREMENTS
NON-VENT AFFECTED SOURCES - GENERAL

Affected Source	Applicability Cutoffs	Recommendation for Proposal
All Remediation Material Management Units: tanks, surface impoundments, containers, OWS, transfer systems.	Units *exempted* from control requirements if: 1) Quantity of HAP < 500 ppmw; or 2) One or more units handle < 1 Mg of HAP annually	Control HAP emissions in accordance with the individual unit requirements below.
Tank	*Exempted* from control requirements if: used for biological treatment process meeting §63.683	See tank summary table
Surface Impoundments	*Exempted* from control requirements if: used for biological treatment process meeting §63.683	Floating membrane cover; or vent to a control device. 40 CFR 63 Subpart QQ
Containers	See container summary table	See container summary table

Oil/Water Separators Organic/Water Separators (OWS)		**Install a fixed roof, a floating roof, vent to a control device or operate a pressurized system. 40 CFR 63 Subpart VV**
Transfer Systems	**Drain system** **Non-drain system**	**Use any combination of covers, hard-piping and venting to control devices. 40 CFR 63 Subpart RR** **Use covers, hard-piping or vent to control device. §63.689(c)**
Equipment Leaks	***Exempted* from control requirements if components handle remediation material containing <10% HAP or operate < 300 hrs/year**	**Leak Detection and Repair program . Meet 40 CFR 63 Subpart TT or UU**

CONTROL REQUIREMENTS - TANKS

Tank Size	HAP Vapor Pressure	Recommendation for Proposal
< 10,000 gal	< 11.1 psia	Comply with Control Level 1 or 2: Control level 1 - fixed roof meeting Subpart OO; or Control level 2 - fixed roof with internal floating roof; external floating roof; vent to control device meeting §63.685(d); use a pressure tank; or locate tank in an enclosure vented to a combustion device.
10,000 gal # size < 40,000 gal	< 1.9 psia	Control level 1 or 2
10,000 gal # size < 40,000 gal	$ 1.9 psia	Control level 2
$ 40,000 gal	< 0.1 psia	Control level 1 or 2
$ 40,000 gal	$ 0.1 psia	Control level 2

CONTROL REQUIREMENTS - CONTAINERS

Container Design Capacity	Additional Criteria	Recommendation for Proposal
26 gal < capacity # 119 gal	All containers except those used for stabilization processes	Comply with Control Level 1, 2 or 3: Control level 1 - DOT packaging requirements; cover (e.g., a tarp); or install an organic vapor-suppressing barrier; Control level 2 - DOT packaging requirements; operate container with no detectable emissions; or use a vapor-tight container; Control level 3 - Vent container directly to a control device or vent inside an enclosure to a control device. 40 CFR 63 Subpart PP
> 119 gal	not in light material service	Control level 1, 2 or 3
> 119 gal	in light material service	Control level 2 or 3
> 26 gal	used for a stabilization process	Control level 3

Light material service - when the conc. of organics with a VP > 0.04 psi is $20 percent by weight
Stabilization - for example, the addition of binders to reduce mobility of contaminants

EXEMPTIONS

- ## General

- Total HAP in extracted remediation material and from remediation process vents < 1 Mg annually.
- Cleanups initiated in less than 7 days.

- ## Affected Process Vents

<u>All vents combined</u>:
- Emissions < 3 lb/hr and 3.1 tpy.

<u>Individual vents</u>:
- Low flow : vent flow rate < 0.005 m^3/min.
- Low flow/concentration: vent flow rate < 6.0 m^3/min and total HAP concentration in vent stream < 20 ppmv.
- HAP concentration in remediation material < 10 ppmw.

- ## Remediation Material Management Units

- Individual units handling remediation material with a HAP concentration < 500 ppmw.
- One or more units handling < 1 Mg HAP/year.
- Units meeting biological treatment requirements (tanks and surface impoundments only).

- ## Equipment leaks

- Components contacting remediation material with < 10% HAP or < 300 hrs/yr.

SCHEDULE

- **Proposal signed by May 1, 2002.**
- **Proposal will allow a 60-day comment period.**