

National Working Group on Cleanup and Remediation of Methamphetamine Laboratories:

Site Assessment and Remediation Issues



Presented by

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Presentation overview

- **Site Assessments:**
 - **Initial and complete.**
- **Remediation standards**
 - **Health-based vs. feasibility-based**
- **Laboratory analytical methods**
- **Field sampling**
- **Waste disposal, asbestos, and septic guidelines.**
- **Other issues**

Site Assessment Issues

- Working group discussed assessment issues.
- All agree on the need for initial cleaning (acute exposures).
- Real issue: Assessment for lower-level, chronic exposures.
- 3 distinct elements: Precursor chemicals, meth., and by-products.
- Don't conduct formal, quantitative risk assessment for each site.
- Expedited sampling methods (field testing).
- Do residual levels of chemicals even pose an unacceptable risk?
- Post-decon. sampling and exposure studies to better define the risks?
- Best use of resources.

Site Assessments in WA. state

1. Initial: By local health to determine contamination.
 - Follow WAC 246-205-530
 - Within 14 days of law enforc. notification.
 - By sampling or observation.
 - Typically meth. wipe sampling.

2. Complete: By decon. contractor to assess full extent of contamination.
 - Follow WAC 246-205-111
 - Workplan approval.
 - DOH-certified Contractors.
 - Evaluate inside and outside.
 - Photos, sampling plan, decon. procedures, waste disposal plan, final report, etc.

Remediation Standards

- **Feasibility-based:**
 - **Readily achievable by most labs.**
 - **Based on analytical limitations.**
- **Health-based:**
 - **Based on laboratory animal toxicity studies or;**
 - **human epidemiological studies**
- **Methamphetamine:**
 - **Currently, very little chronic toxicity data.**
 - **WA. state standard is feasibility-based.**

Laboratory Analytical Methods

- ✓ Env. Regulatory agency accredits labs in WA., including meth. analysis.
- ✓ Aug. 17, 2004 memo for meth. accreditation.
- ✓ GC/MS or HPLC/MS.
- ✓ MDL must support the 0.1 ug/100cm² cleanup standard (5 times below PQL).
- ✓ PQL must be at or below the 0.1 ug/100cm² cleanup standard.
- ✓ Audits.
- ✓ Goal: National accreditation for meth analysis

Field Sampling

- ❑ By cleanup contractor or by 3rd party?
- Field sampling methods/procedures
 - Methanol vs. isopropyl alcohol vs. deionized water.
 - Composite vs. discrete wipe sampling?
 - Consider on-site analysis where possible.
 - Quicker results and lower costs.
 - Mobile labs, direct read instruments, colorimetric methods, pH paper, PIDs, etc.
- ❑ In WA., sampling procedures detailed in written Guidelines.

Disposal of Drug Lab Wastes (Oct. 2, 2002 DOH Guidelines)

- In WA., pressurized containers & bulk chemicals/wastes are handled by Ecology Dep't.
- Problem: Small quantities of residual waste.
- The property owner becomes the generator.
 - Considered small quantity generators (SQGs).
 - SQG exemptions from most state and federal regs.
- Options:
 - Licensed HW transporter.
 - County household hazardous waste collection facility.
- Consult with local/state health, DOT, env. agency.
- Contact waste facility prior to delivery.

Asbestos

(Oct. 2, 2002 Guidelines)

- **WA. CDL Program has written guidelines.**
- **In WA., asbestos is regulated by state OSHA.**
- **Decontamination Workplan must address asbestos if demolition occurs.**
- **Construction or Custodial Project?**
 - **Decon. construction requires AHERA inspection.**
 - **Decon. custodial projects typically don't.**
 - **(exception: popcorn ceilings).**
- **Any asbestos abatement requires certified asbestos contractor.**

Dep't. of Ecology Septic Guidelines (Dec. 27, 2001)

- Sample septic if drug lab chemicals are suspected.
- Method 8260 (VOC) analysis.
- Septic waste typically will not designate as:
 - Listed HW, ignitable HW, or toxic/persistent HW
- If $> 10,000$ ppm VOCs, manage as HW.
- Between 1,000 ppm and 10,000 ppm, check with regional air agency to aerate.
- If $< 1,000$ ppm VOCs, dispose at septage treatment facility, sewage treatment plant, or HW mgt. facility, subject to acceptance.
- Typically just pumped.

Other issues

- **Forced air HVAC systems must be cleaned.**
- **Collaborate with EPA, ATSDR, CDC, others.**
- **Need to evaluate cleaning methods.**
- **Subcontractor health and safety rqts.**
- **Current DOH meth lab studies.**
- **Epidemiological evals.**
- **Identify appropriate indicator substances.**
 - Is meth. the best?
 - Use a surrogate for meth.?
- **Consolidate existing studies (CA., WA., MN., National Jewish, and others).**
- **National forum, sponsored by WA. and others?**

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