

Minnesota's Meth Studies and Cleanup Guidance

- Minnesota Pollution Control Agency and Minnesota Department of Health Kate Gaynor, researcher- former meth lab sites
- Steve Lee, ER Team supervisor
- Brownfield program support

Topics posed by National Alliance

1. Do you have a cleanup standard? If so, what is it?
2. Do you regulate contractors for cleanup? If so, what does this entail?
3. Does your state provide notice in property or other official records re: contamination, remediation?
4. Does your state require a seller to provide notice to a buyer or other transferee if the property is a former meth lab site?
5. How is cleanup and remediation funded in your state?

2. Do you regulate contractors for cleanup? If so, what does this entail?

- After 1-1-06
- Cleanups done by a contractor
- Contractor verifies cleanup process done per MDH guidelines
- Guidance has basic contractor qualifications, no certification
- QA/QC Checklist for analytical labs
- Lab certification later

3. Does your state provide notice in property or other official records re: contamination, remediation?

- After 1-1-06
- Local authority prohibits re-occupancy
- County maintains record of labs
- Mn Dept. Health maintains county contact list
- Affidavit filed with recorder after order and after cleanup
- No statewide web site or other list

4. Does your state require a seller to provide notice to a buyer or other transferee if the property is a former meth lab site?

- After 1-1-06
- Affidavit filed with recorder before and after cleanup
- Specific meth lab disclosure upon sale
- Long-standing disclosure of material facts
- Real notice depends on knowledge and candor of seller; or careful record review
- No notice to renters

5. How is cleanup and remediation funded in your state?

- Owner expected to remediate
- County may do the cleanup if:
 - owner failed to do so
 - County can do cleanup using a revolving loan fund
 - County recovers costs through tax assessment and pays back loan

1. Do you have a cleanup standard? If so, what is it?

- Mn meth residue standard was 1 ug/ft² , sample by methanol wipe
- This is a detection based standard, not a health based standard
- Moving toward process based guidance, away from wipe sample based

Problems with 1 ug/ft² standard in absence of health based standard

- Is it necessary to go to 1 ug/ft² ?
- Is it adequate to go to 1 ug/ft² ?
- Can any sampling method tell if you are at 1 ug/ft² ?
- Can you get to 1 ug/ft² with any practical cleanup?

Is it necessary?

Is it adequate?

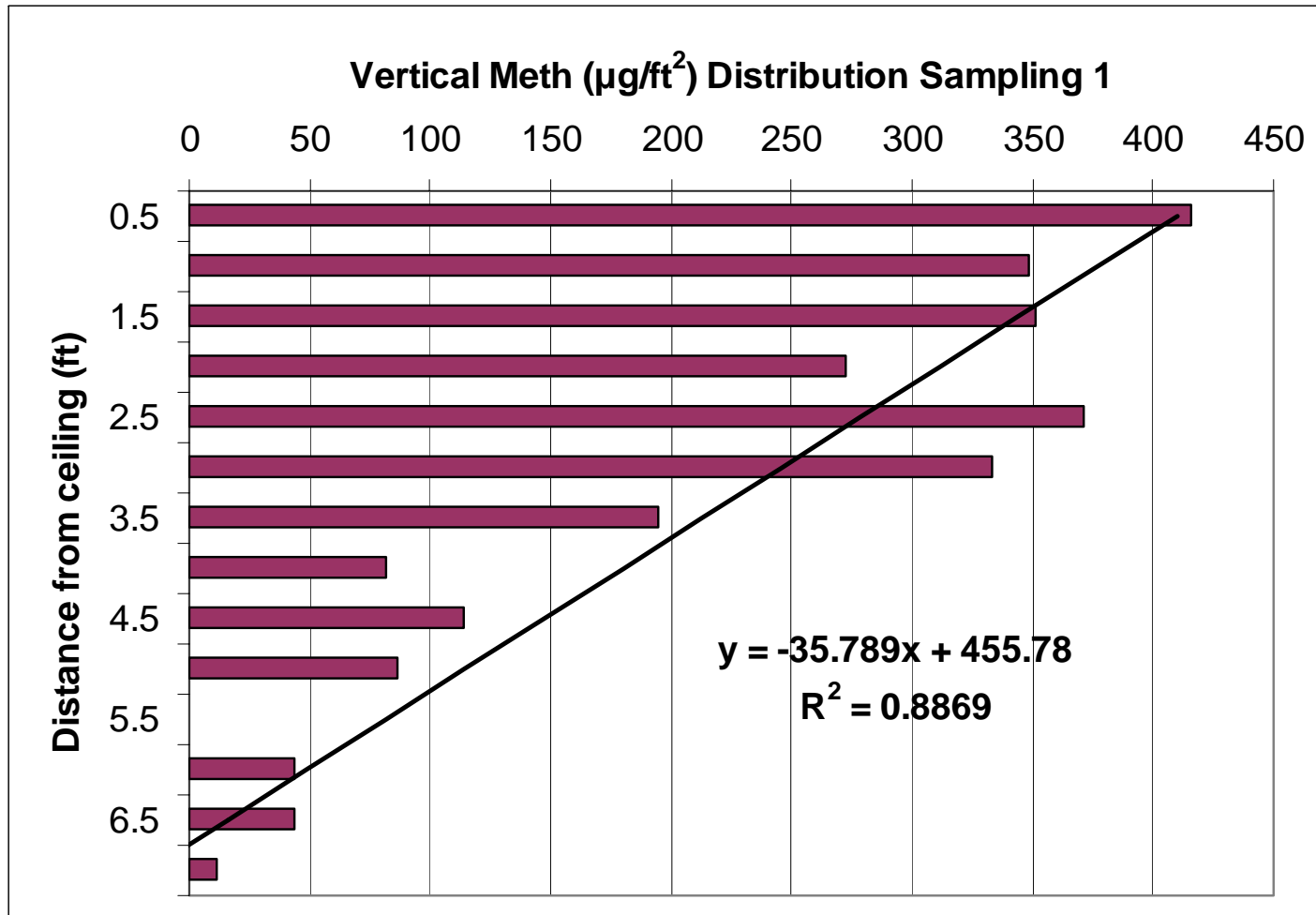
- Meth residue not simply on surface, it infiltrates building material
- Does meth residue in/on surfaces leave those surfaces and migrate into people by mouth, skin, lung?

Examples of meth residue observations

Bedroom Vertical and Horizontal Wipe Sampling



Vertical Wipe Sampling



Serial methanol wipes

Painted drywall, meth residue

- First wipe 127 ug/ft²
- Second wipe 111 ug/ft²
- Third wipe 117 ug/ft²
- Fourth wipe 100 ug/ft²

- Paint peel 997 ug/ft²

Wood stud near surface sampling



Brick Micro-vacuum Sampling



Can you tell if you are at 1 ug/ft²
using any sampling method?

- Methanol wipes of painted drywall yield small percent of the meth in wall
- Methanol wipes of unpainted drywall, raw wood, cement, ceiling, brick yields almost none of the meth in the material
- Microvacuuming wood, brick, fabric yields some of the meth in the material

What is wipe sampling's significance?

- Does “sample-able meth” from a material's surface correlate to mobile or “bio-available” meth? Or to the level of hazard?

Can you get there with practical cleanup?

- Serial washing observations
- Carpet shampooing observations

- Painting observations
- Fabric washing observations

Serial washing

Painted drywall, meth residue ug/ft²

- First wash pad 40 ug/ft²
- Second wash pad 49 ug/ft²
- Third wash pad 37 ug/ft²
- Water rinse pad 19 ug/ft²

- Methanol wipe 225 ug/ft²
- Paint and paper peel 3603 ug/ft²

Additional sampling observations available

- On powerpoint presentation on CD in packet
- Will be published
- Will trade data with anyone

How sampling observations are affecting our cleanup guidance

- Throwing away carpeting and all except high value low contact materials will remove much meth mass
- Washing walls will not remove much of the wall's meth
- Painting a wall will isolate most of wall's meth, permanently we hope
- HEPA vacuuming will remove some meth from rough surfaces

Despite Sampling Drawbacks, Some Strongly Desire Sampling

Owners, local authority, contractors

- Can sampling prove “safety” i.e. no health hazard? No
- Sampling can GUIDE cleanup, sampling cannot prove cleanup
- Appropriate sampling can show improved conditions and meth mass reduction/isolation
- Appropriate sampling can document conditions after cleanup, in case new cooking or smoking occurs after the cleanup

So, moving toward process-based cleanup guidance

- If a bust is made, presume meth contamination in the structure(s)
- Do a rigorous standard cleanup
 - Throw carpet, furniture, low value contents
 - Wash to prepare for painting or sealing
 - Paint or seal 2x
 - Wash high value contents as possible
 - Consider structure use and materials for non-occupancy areas
- Goal is meth mass reduction/isolation

Reasons for sampling meth residue

- If presumption of residue is contested, appropriate sampling will show meth presence
- Appropriate sampling to confirm and document improved conditions after cleanup
- “Appropriate” includes choice of materials & methods, careful data interpretation

What do we need to know to do it right?

- Out-migrating behavior of meth residue from various materials, e.g. into the air, or through new paint
- Air-borne meth questions- particle size, vapor, sampling
- Intake behavior of meth residue into lungs, GI tract, skin
- Health Risk Studies
- Are there other byproducts; is meth residue a good indicator of hazard ?
- Sampling methods and interpretation suited to variety of materials and the health based standard
- Health-based standards for starting a cleanup, and stopping a cleanup, considering a variety of building materials

