

P2P Labs in Colorado

A New Challenge on the Horizon



Chemicals Unique to P2P Labs

- Phenyl-2-propanone
- Methylamine
- Mercuric chloride*
- Lead acetate
- Sodium acetate
- Acetic anhydride
- Benzaldehyde
- Phenylacetic acid
- Nitroethane
- Pyridine
- Thorium oxide
- Manganese oxide
- N-methylformamide
- Benzyl cyanide

* Converts to elemental mercury during synthesis

Basic Method

- Combine: P2P, methylamine, mercuric chloride, alcohol and aluminum foil
 - ✦ ingredients may vary
- Separate oil layer from sludge
- Wash oil with solvent
- Separate solvent layer
- Salt out with hydrogen chloride gas

Sampling Methods for P2P Labs

- Lead - collect wipe samples using NIOSH Method 9100
 - ◆ Comply with AQCC Regulation No. 19
 - ◆ Collection by a certified Lead Inspector

Sampling Methods for P2P Labs

- Mercury - collect vapor samples 3-4 ft. off floor using NIOSH Method 6009 (8hr).
 - ◆ Real time monitoring by cold vapor atomic absorption or Jerome gold film is allowed
 - ◆ Limitations of instruments must be understood
 - ◆ Detection limits proximate to cleanup level
 - ◆ Confirm with NIOSH Method 6009
 - ◆ <http://www.epa.gov/epaoswer/hazwaste/mercury/pdf/chapter3.pdf>

Mercury Cleanup

- Remove porous and semi-porous items
- Clean non-porous surfaces with HgX powder and water
 - ✦ Can also use fine powder sulfur or zinc
 - ✦ Can use sulfur impregnated cloths a final wipe down
- Heat home to 80-85°F for at least 8 hours
- Reduce heat and vent for at least 2 hours
- <http://www.epa.gov/epaoswer/hazwaste/mercury/pdf/chapter5.pdf>

Mercury Vapor Cartridges

- Mercury vapors are colorless and odorless
 - ◆ Must use “end-of-service-life” indicators
 - ◆ Must be readily visible to the user without manipulation while wearing the respirator.
- **DO NOT USE APR's** when concentrations of mercury vapor are:
 - ◆ IDLH
 - ◆ are unknown
 - ◆ When the concentration exceeds 10 times the PEL with half-face respirators or 50 times the PEL with full-face respirators.

NEVER USE A VACUUM

- Not only will the mercury contaminate your vacuum; the heat from the vacuum will evaporate the mercury, further distributing it throughout the structure.

- Similarly, never use a broom to clean up mercury. It will only distribute the mercury into smaller beads, and it will contaminate the broom.



Lead Cleanup

- Comply with general requirements of AQCC Regulation No. 19
 - ✦ Remove dust with HEPA vacuum
 - ✦ Wash down surfaces
- Regulation 19 Permit is not required for lead contamination strictly from meth production

Disposal

- Bag or containerize all debris to prevent spreading contamination
- Must make a hazardous waste determination for contaminated debris:
 - ✦ Toxicity Characteristic for lead = 5.0 mg/l
 - ✦ Toxicity Characteristic for mercury = 0.2 mg/l

New Cleanup Techniques

Concerns and Pitfalls



Apply and Leave Products

- Do not comply with Colorado's meth lab cleanup regulation
 - ◆ Do not qualify as a "detergent water wash"
- Effect on meth and other compounds is unclear
 - ◆ Chemically alters or destroys meth?
 - ◆ Other compounds of concern remain?
- Can't be used if lead or mercury present

Bleach

- Complies with regulation only if part of a washing process
- Health and safety concerns
- Effect on meth unclear
 - ✦ Oxidation
 - ✦ Chemically alters or destroys meth?
- Effect on other compounds of concern unclear
- Never should be used in the presence of mercury

Hydrogen Peroxide Solutions

- Complies with regulation only if part of a washing process
- May agitate surface contamination allowing for easier removal
- Health and safety concerns
- Effect on meth unclear
 - ✦ Oxidation
 - ✦ Chemically alters or destroys meth?
- Effect on other compounds of concern unclear

Ozone

- Does not comply with the regulation
 - ✦ No washing process
- No data to demonstrate effectiveness
 - ✦ On meth
 - ✦ On other compounds
- Can't be used for lead or mercury

Potential Uses for Smoking

- If smoking only can be definitively demonstrated
 - ✦ Detergent water wash not required
- If process leaves behind only harmless byproducts
 - ✦ Complete alteration/destruction of meth
- Could be used with contents in place