

Review Form

Which Docket is being reviewed? (please underline)

Titles: NIOSH Manual of Analytical Methods (NMAM)

- 9106: Methamphetamine and Illicit Drugs, Precursors, and Adulterants on Wipes by Liquid-Liquid Extraction (NIOSH-176)
- 9109: Methamphetamine and Illicit Drugs, Precursors, and Adulterants on Wipes by Solid Phase Extraction (NIOSH-177)
- 0911: Methamphetamine on Wipes by Liquid Chromatography-Mass Spectrometry-SIM (NIOSH-178).

Anticipated Publication: NIOSH Manual of Analytical Methods (NMAM), 5th Edition

Return by: September 30, 2009

Return to: Dr. W. Gregory Lotz, Director, Division of Applied Research and Technology,
Mailstop R-2, NIOSH, 4676 Columbia Parkway, Cincinnati, OH 45226, or email at
wlotz@cdc.gov.

YES NO
(explain below)

- | | | |
|--|-------------------------------------|-------------------------------------|
| 1. Does the Backup Data Report explain the problem and summarize relevant literature adequately? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the information in the Method and Backup Data Report technically accurate? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Are there any recommendations concerning organization of the documents? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Are there any changes or corrections needed in the Backup Data Report? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Are there any changes needed in the Method? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. In general, is the Method and Backup Data Report satisfactory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. What is your recommendation for this Method as now written? (Check One): | | |
| a. Approve for publication/dissemination | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Approve after modification (please describe) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Do not approve (please describe) | <input type="checkbox"/> | <input type="checkbox"/> |

DETAILED COMMENTS:

Check here if a separate sheet is attached

METHOD 9106

My comments on the method itself are suggestions for consideration, I believe the method can be published as-is but these suggestions may make the method easier to follow.

1) On the first page the "SHIPMENT:" requirements do not include the use of a cooler and ice although several areas within the method suggest refrigeration of wipe samples soon after collection. I think the method should be written to include shipping samples (or transporting samples) in a cooler with bagged ice and custody seals to be consistent with the recommendation to refrigerate and protect samples from possible tampering found in the supporting documents.

2) Page 2 of 32 in "SOLUTIONS:" step 6 – Why not write "0.3N hydrochloric acid in methanol: Dilute 2.5 mL conc. hydrochloric acid in 97.5 mL methanol." Or "0.3N hydrochloric acid in methanol: Dilute 2.5 mL conc. hydrochloric acid in enough methanol to make 100mL."

3) Page 4 of 32 - #10 – The first sentence is confusing – "...minimum of two field blanks with one field blank for every ten samples..." this implies that more than ten samples are always collected – many labs have fewer than ten samples collected from it – suggest a specific collection rate. Also, a field blank sample rate of 10% seems excessive. Consider suggesting "...no less than 5%, or one per batch, or 1 for each set of different equipment used (one for each lot of solvent and wipes)."

4) Page 10 of 32 Second sentence of the 3rd paragraph: "A second precision and accuracy test using methanol confirmed that methanol was an acceptable substitute." Does this mean that long and short-term sample stability is roughly the same for isopropanol and methanol? That a wipe sample collected with methanol is stable for up to 7 days without refrigeration? If this has not been determined for methanol then emphasizing sample refrigeration is potentially even more important for methanol collected samples (which is likely going to be most of the samples collected due to its increased sample accuracy).

5) Page 16 of 32 – Table 5: This table does not indicate which solvent was used along with the cotton gauze and whether substituting with another solvent changes the stability.