



DEPARTMENT OF THE NAVY

SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
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NIROP FRIDLEY
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ES11JM
30 January 2003

David N. Douglas, Project Manager
Superfund Unit 2/Superfund Section
Majors and Remediation Division
Minnesota Pollution Control Agency
Division of Ground Water and Solid Waste
520 Lafayette Road
St. Paul, MN 55155-4194

Subj: PILOT-SCALE STUDY TO ENHANCE IN-SITU BIOREMEDIATION OF
CHLORINATED SOLVENTS AT THE ANOKA COUNTY PARK, FRIDLEY, MN

Dear Mr. Douglas:

Southern Division, Naval Facilities Engineering Command, has reviewed your comments in your letter dated December 10, 2002, on additional analytical work proposed for subject project and is pleased to provide you with these responses.

I. Microseeps, Inc. SOP AM20Gax

Comment 1: *Section 5.3.4, page six, last sentence*

This section discusses the situation where when a sample analyte concentration exceeds the highest calibration standard, then the "...concentrations is calculated by assuming detector response linearity..." This situation can cause problems, as this procedure may be inaccurate. Therefore, if a high concentration is found, be careful that this is a true number. The MPCA staff recommends flagging all data exceeding the highest standard concentration (of the curve).

Response: Concur. We will have the laboratory flag the data as recommended.

Comment 2: There is no detailed discussion of sample preparation - which may have a lot to do with how the samples are taken. Include this discussion.

Response: Samples are collected in the field in 40-ml vials similar to other VOC samples. The samples are prepared in the laboratory per SOP PM01G before analysis. Refer to Section 5.1 of the SOP AM20Gax. Copy of SOP PM01G is attached.

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Comment 3: Ensure all samples are spiked in this SOP (as well as the other SOPs). Microseeps may be spiking samples, but it was difficult to tell if Microseeps uses MS/MSD on all sample sets. (See Section 5.4.5.)

Response: Surrogate spikes are added to all samples and analyzed. Also, MS/MSD spike is analyzed for each batch of samples to check for matrix interference and precision. Also, a laboratory control spike sample is analyzed for each batch of samples to check accuracy.

II. Microbial Insights, Inc. SOP No. VFA

Comment 1: Identify at what levels the calibration standards are prepared.

Response: The initial calibration standards are prepared at 1, 4, 10, 20, 40, 80, 100, and 200 ppm levels for all target compounds. Also, a continuing calibration standard is analyzed at 40ppm level for all target compounds at a 10% frequency.

Comment 2: Add a surrogate spike to this analysis to check for matrix effects.

Response: An MS/MSD spike is analyzed for each batch of samples to check for matrix interference and precision. Also, a laboratory control spike sample is analyzed for each batch of samples to check accuracy.

If you have any questions regarding this letter, please feel free to contact me at (843) 820-5609.

Sincerely,



JEFF MEYERS, PE, CHMM
Remedial Project Manager

Cc: Dave Seely, USEPA Region 5
John Betcher, MPCA
Mark Sladic, TetraTech NUS
Venky Venkatesh, CH2MHILL