

N60508.AR.000590
NAS WHITING FIELD
5090.3a

LETTER REQUESTING APPROVAL FOR A FIELD CHANGE DURING PHASE 1 REMEDIAL
INVESTIGATION NAS WHITING FIELD FL
3/1/1991
NAVFAC SOUTHERN

Ms Allison Drew
Remedial Project Manager
US EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308-3423

Dear Ms Drew:

SUBJECT: NAS Whiting Field Phase I Remedial Investigation: Field Change Request, Volatile Organic Chemical Method Change

This letter is to follow up our telephone conversation this morning (March 13, 1991) in which we requested approval for a field change in the analytical method to be used for volatile organic chemicals (VOC) in the groundwater program for the above referenced investigation.

The approved Work Plan calls for Phase I groundwater sampling by means of an in situ procedure, the Bengt-Arne-Tornessen (BAT) procedure. This is a screening technique in which a sampling probe is pushed to the desired aquifer zone and a sample collected. Since this is not an approved procedure for basing risk or response action decisions, it provides data quality level II. In the approved Work Plan, VOC analyses were called for using the USEPA Contract Laboratory Program (CLP), Caucus Organics Protocol (COP) at Navy quality control (QC) levels C and D (equivalent to USEPA levels III and IV). The CLP-COP method for VOC achieves a practical quantitation limit of 5 ug/L and a method detection limit of 2 to 3 ug/L. In Florida, the applicable standard for several of the halogenated VOC is 3ug/L and the standard for benzene is 1 ug/L.

The field change request is to change the VOC procedure from CLP-COP using gas chromatography/mass spectroscopy (GC/MS) which achieves a practical quantitation limit of 5 ug/L to method SW-846 no. 8240 using a 25 ml sample size. This will allow a 1 ug/L quantitation limit and identify the same chemicals with the same degree of confidence as the CLP-COP. Method 8240 is also a purge and trap GC/MS method.

We feel it is necessary to retain the use of GC/MS for chemical identification purposes. However, it is necessary to quantitate VOC at less than 5 ug/L. Because of the change in method, QC documentation is different, and all Level C and D data deliverables cannot be developed in accordance with the CLP. The change would therefore require a change in QC level to Level E for the groundwater VOC analyses only. This is adequate for the site screening purposes which are the objective of the Phase I groundwater program and is congruent with the Level II quality of the sample collection procedure. End use of the Phase I data is siting Phase II monitoring wells.

Please review this request and approve or provide input as soon as possible. As we discussed, we are implementing the BAT sampling program today to stay as near as possible to schedule. A decision relative to analytical method is necessary before March 18, 1991, to meet sample holding times.

We feel that the positive attributes of the change to gain added

sensitivity far outweigh the change in QC level. Because the objectives of the Phase I groundwater and the sampling program is site screening, the change in QC does not negatively impact the program.

Please notify Mr Ted Campbell, Southern Division at (803) 743-0576, if there are any questions or comments on the requested change.

Sincerely yours,
E. C. Jordan Co.

Michael A Keirn

Michael A. Keirn, PhD.
Project Manager

cc: Ted Campbell Southern Division
Jim Holland NASWF
Allison Drew USEPA
Project file