UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING (HBT)
BOSTON, MASSACHUSETTS 02203-2211

8 February 1999

Mr. Emil Klawitter (eeklawitter@efdnorth.navfac.navy.mil)
Northern Division, Naval Facilities Engineering Command
Code 1823/EK
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

Monitoring Event 12 Final Report for Site 9 at Naval Air Station, Brunswick, Maine

Dear Mr. Klawitter:

Thank you for the above report of results from the July 1998 sampling event which was prepared for the Navy by EA Engineering, Science and Technology, Inc. Site 9 has been the subject of much discussion in the last year and the results from monitoring event 12 have been reviewed at RAB/technical project meetings and included in monitoring well results graphs supplied by EA last fall. As such, the EPA has no formal comments or concerns specific to this report that require formal responses from the Navy.

We have reviewed the report and have several observations for your consideration. We request they be included in the appropriate appendix of the 1998 annual report for the record.

1. VOC's in groundwater have fallen to levels more in line within historical ranges at site 9. Please see enclosed charts for your information.

   a. The rising overall trend in total and average VOC's observed in events 8-10 was reversed significantly in event 12. Because single events shouldn't be taken out of context of long term trends, we will defer further analysis until future event results and the 1998 annual report are available. Data quality also counsels a "wait and see" approach for more data.

   b. The data quality review stated that the results for MW-NASB-069, 079, 080, 081, 079 (DUP), LT-901 (SED) and SED-010 DUP should be regarded as estimates and are biased low because of low surrogate recoveries on the initial sample and that the reanalysis was rejected because of holding time discrepancies (page 6, fourth bullet). We note this with some concern because this could have significantly skewed event 12 results low as most of the sample points with VOC detections are affected.

   c. The finding and footnote (a) on table 5 regarding this data quality issue are confusing and could be misleading. We recommend that the qualifying footnotes on table 5 clearly state which sample produced the result and any qualifying information in any future similar instances. For example, a clearer footnote (a) would have been; "Results should be regarded as estimates and are biased low because of low surrogate recoveries on the first sample. The subsequent reanalysis was rejected due to holding time discrepancies."

2. VOC's in groundwater and surface water continue to be about evenly split between 1,2-dichloroethylene (DCE) and vinyl chloride. DCE and vinyl chloride are respectively the first and second decay daughters in the decay chain of the most likely "parent" release solvent. No clear trend is discernable yet, we will continue tracking this relationship. Please see enclosed charts for your information.

3. Parent VOC's trichloroethylene (TCE) and/or tetrachloroethylene (PCE) were detected in MW-NASB-69 and 74 at levels similar to past events and less than MCL/MEG's. MW-NASB-74 is downgradient of the building 201 septic system, a suspected historical source of VOC's. Both chemicals were found in MW-NASB-74 whilst only TCE was found in MW-NASB-69; and at less than one part per billion.

4. In 1998, it appears the groundwater gradient might be increasing to it's historical level across the site prior to construction of the retention ponds in late 1996. Elevations of most wells are rising slightly in response to the ponds. Please see enclosed charts for your information.

5. VOC's were detected in the unnamed stream at SW-010 at levels similar to previous and events and nearby monitoring wells. VOC's were not detected at the upstream seep (LT-901).

6. TAL metals.

   a. We could not locate the metals results for MW-NASB-72 on table 5. Results were found on the lab data sheet in appendix C.1 with no exceedances of primary MCL/MEG's.

   b. We note that MW-NASB-71 was inadvertently not sampled.

   c. We recommend that footnote (d)'s description be added to table 5 in future reports. It appears that this is a qualifier for secondary MCL's or site background.

7. Sediments.

   a. We note that VOC's were detected at estimated values in the range of 1-11 parts per million in sediment at LT-901 (SED). VOC's have been detected at this location in the past.

   b. We believe that site runoff, including portions of the airfield and flight line, are the cause of PAH's of about 18,000 ppm in unnamed stream sediment at
   c. SED-010. This is in the same range, but a bit lower than in event 11.

   d. PAH's in sediment from general site runoff may present a greater environmental risk than the CERCLA site.

   e. We note that the retention ponds were drained at the time of event 12 for

cleaning under the Air Station's NPDES program.

We will discuss resulting trends and make recommendations for future action in our formal comments to the draft 1998 annual report when it is presented. If you have any questions or concerns, please call me at 617-918-1344 email me at barry.michael@epamail.epa.gov.

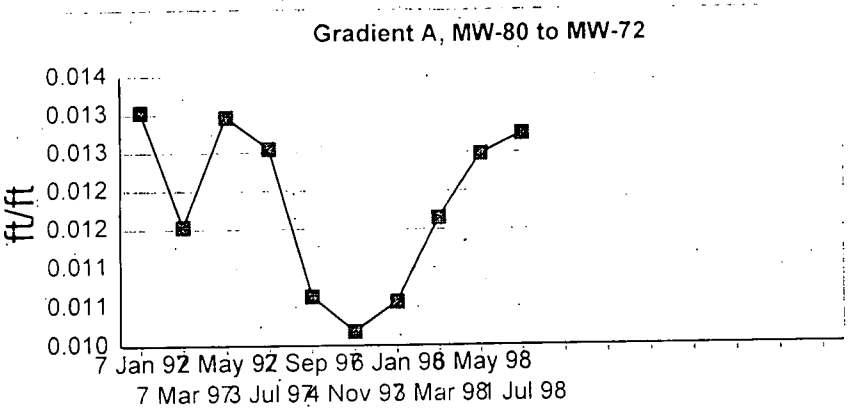
Sincerely,

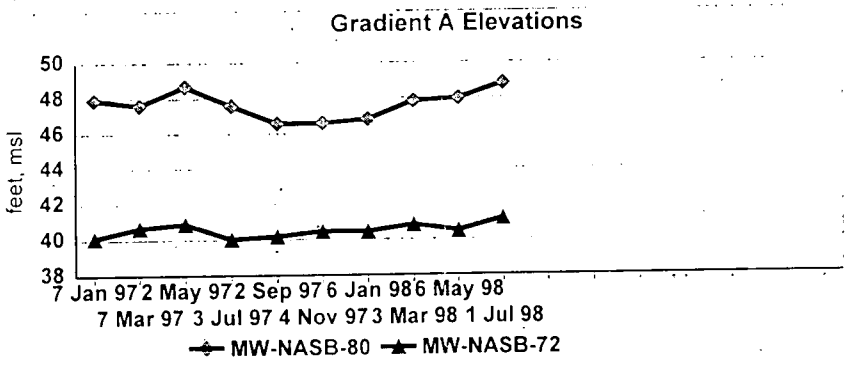
Michael S. Barry
Remedial Project Manager
Federal Superfund Facilities Section,

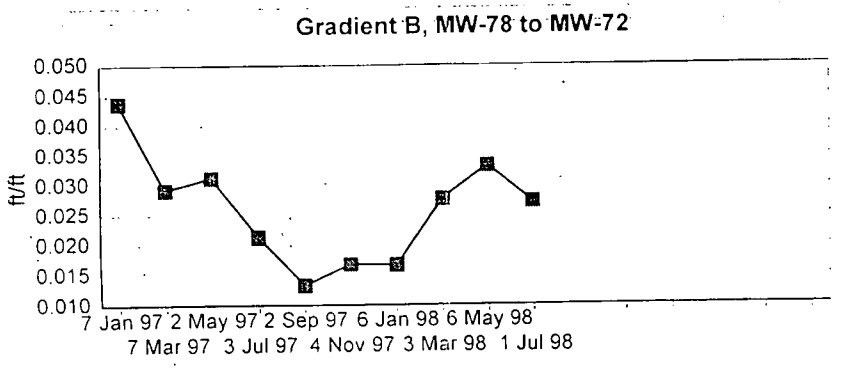
enclosures

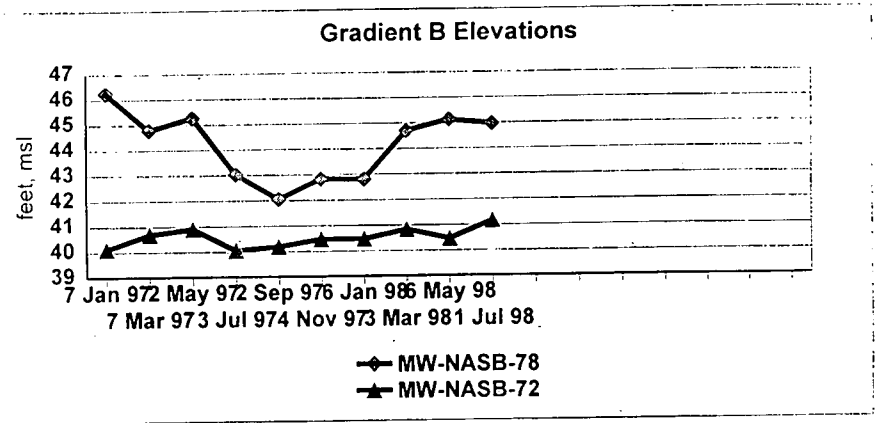
cc. Tony Williams/NASB (WilliamsA@nasb.navy.com)
Claudia Sait/ME DEP (claudia.b.sait@state.me.us)
Tom Fusco/BACSE
Ed Benedikt/Brunswick Conservation Commission (rbenedik@giw.net)
Rene Bernier/Topsham Community Rep.
Jeffery Brandow/ABB-ES (jbrandow@harding.com)
Carolyn LePage/LePage Environmental (clepagegeo@aol.com)
Pete Nimmer/EA Environmental (pln@eaest.com)
Steve Mierzekowski/USFWS (steve_mierzykowski@mail.fws.gov)

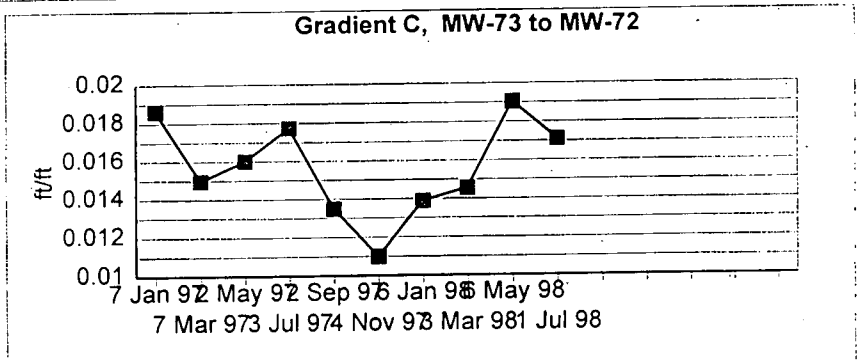
NAS Brunswick Site 9 Groundwater Elevation Data

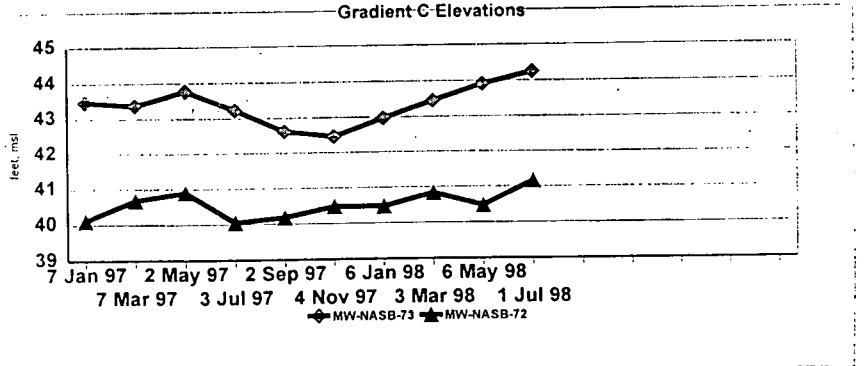






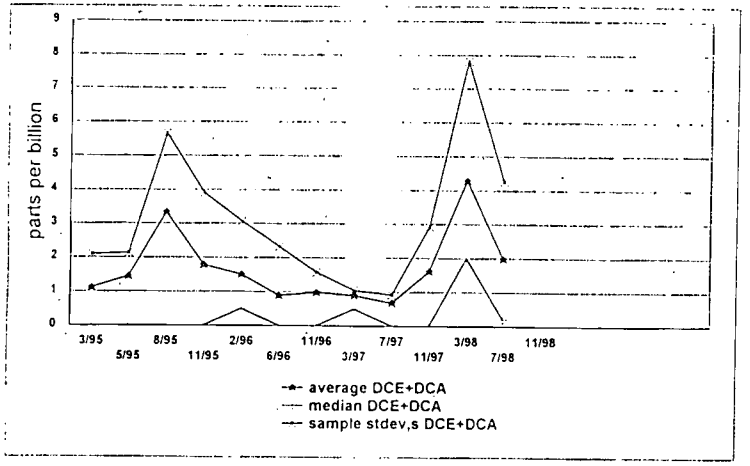


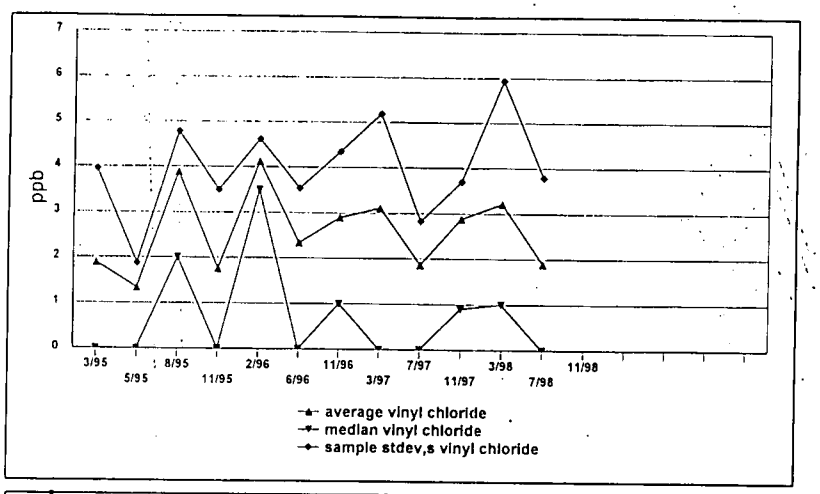


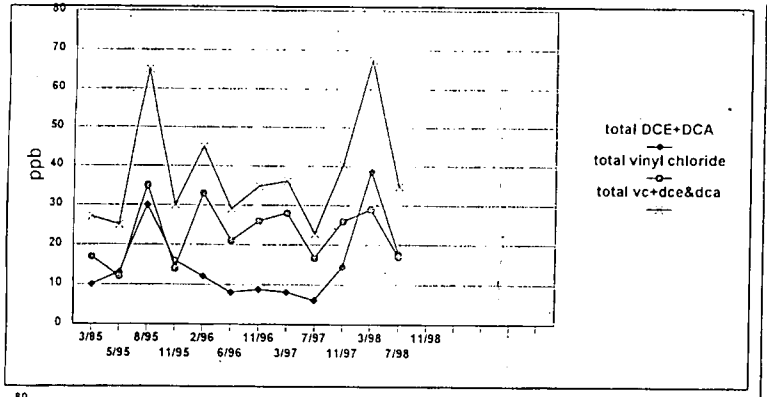


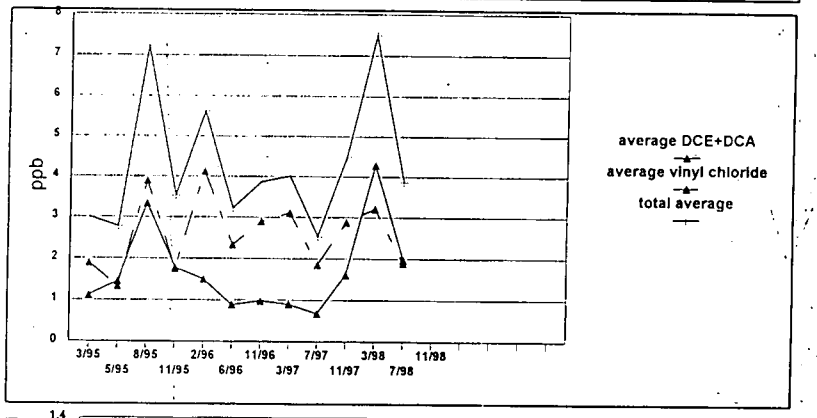
Produced by MS Barry, EPA Region 1

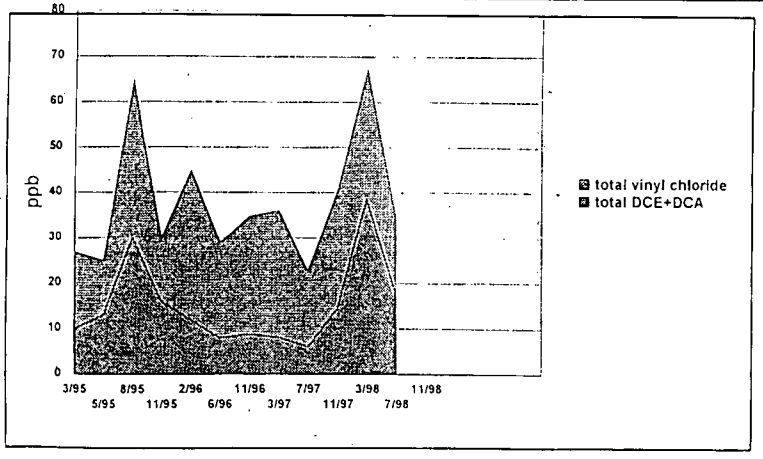
approximated values based upon Navy supplied reports

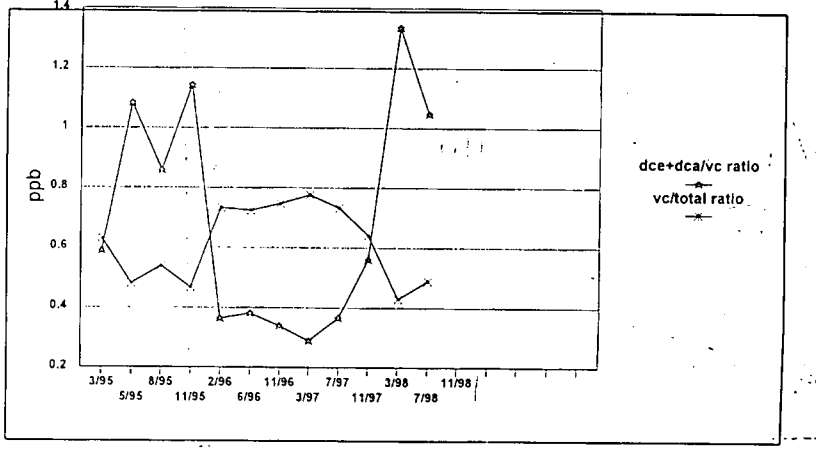

parts per billion
3/95
5/95
8/95
11/95
2/96
6/96
11/96
3/97
7/97
11/97
3/98
7/98
11/98
average DCE+DCA
median DCE+DCA
sample stdev,s DCE+DCA


ppb
average vinyl chloride
median vinyl chloride
sample stdev,s vinyl chloride


ppb
total DCE+DCA
total vinyl chloride
total vc+dce&dca


ppb
average DCE+DCA
average vinyl chloride
total average


ppb
total vinyl chloride
total DCE+DCA


ppb
dce+dca/vc ratio
vc/total ratio