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NWS EARLE
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DEPARTMENT OF THE NAVY

NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

5090
Ser 1856/1821/JPK
APR 8 1993

U. S. Environmental Protection Agency
Attn: Paul Ingrisano
J. Javits Federal Building
New York, NY 10278

Re: INSTALLATION RESTORATION (IR) PROJECT, NAVAL WEAPONS STATION
(NWS) EARLE, COLTS NECK, NJ

Dear Mr. Ingrisano:

This letter is in response to your letter of March 23, 1993 which questions the validity of data obtained in the Remedial Investigation (RI) and the Site Investigation (SI). Several points made in your letter appear to be due to a misunderstanding during the conference call of February 18, 1993.

Both undiluted and diluted analyses were performed to obtain the lowest possible detection limits for each analyte while also quantifying acetone. The final RI Report will include a detailed discussion of the significance of acetone in the blanks and its impact upon any other analytes. The Navy proposes limited sampling with analysis only for acetone during the Feasibility Study to confirm our conclusions.

Decontamination for the Site Investigation used methanol followed by hexane in accordance with the revised QAPP. Any reference made to a methanol rinse should have been methanol/hexane. Since this error appears to be only in communication and not in practice, we see no reason to question the SI data.

Responses to the audit comments are included as enclosure (1). We appreciate this assistance and intend to take a more active role in field oversight. If you have any questions or comments concerning this matter, please contact me at (215) 595-0567.

Sincerely,

John P. Koliccius
Remedial Project Manager
By direction of the Commanding Officer

Copy to:
NJDEPE, Joseph Freudenberg
NWS Earle, Gus Hermann
Weston, Richard Johnson

RESPONSE TO EPA LETTER DATED MARCH 23, 1993
CONCERNING FIELD DECONTAMINATION PROCEDURES DURING
THE RI AND SI AT NWS EARLE, JANUARY, 1991 THROUGH JUNE 1992

Presence of Acetone in The Rinse Blanks and Laboratory Response

The response to EPA Comments 1,2 and 3 are the same as the response to Comment 3 of Attachment 2, dated 11 August 1992 and follow up from conference call of 18 February 1993. These responses apparently crossed EPA's 23 March letter in the mail.

From review of the report summary tables and the data packages from round 1, it appears that all samples were run at least once with a dilution factor of 1 which means that the detection limits are the same as the CRQL for CLP SOW 2/88 (5 or 10 ug/L depending on the analyte).

For rounds 1 and 2, the samples were run at dilutions to obtain acetone on scale. For round 3 in some cases acetone was not diluted on scale and was, therefore, reported with a "E" flag indicating exceedence of the calibration curve. The "E" flag was included in the draft RI Report meaning that the concentration probably exceeds the reported value. The data validation report changed the flag to "J" meaning estimated value; under CLP protocol there was no need to reject the data as EPA's comment implies.

EPA's comment about concern of possible masking of target compounds due to elevated levels of acetone is not substantiated. No target compounds eluted near the acetone peak. Acetone's response is typically small and, therefore, there is no tailing effect even with large concentrations. Because mass spectrometry is ion selective, there is no interference in identifying and quantifying other target compounds relative to acetone.

It should also be noted that there were three rounds of groundwater analysis for VOC's. While acetone was showing up in rinse blanks during each round, round 2 levels were much lower than levels that appeared in rounds 1 and 3. Since the rinse blanks did not stand out as a problem in round 2, there is an opportunity to compare repeated sampling results where acetone appeared in one round and not another. The same Weston sampling team performed both rounds of sampling according to the same procedures and we cannot explain the different results.

Field Decontamination Procedures During the RI and SI

There seems to be an impression on the part of EPA that decontamination procedures for field equipment were not followed during the RI or SI field investigations. This assertion is not true. Weston did follow standard procedures in both cases. These procedures were agreed to by EPA and included in the QAPP prior to the start of field work for RI in January 1991 and the SI in May 1992.

The use of acetone for field decontamination during the RI field investigation was done according to USEPA standard procedures. The decision to use acetone was first documented in the minutes to the TRC meeting on 14 August 1990. The protocol was originally set up according to NJ DEPE; later, Amelia Jackson of EPA requested a minor modification in the procedure to be consistent with EPA procedures. The final changes were made to the QAPP in January 1991 just before the start of field work. The procedures were also posted in the field trailer. Any QC questions arising from the use of acetone are not a question of whether QAPP protocol was used. Weston has already documented its effort to correct the field problem with sample contamination by acetone in the second and third rounds of sampling. While the occurrence of acetone in the rinse blanks appeared under control in the second round, elevated acetone appeared again in the third round rinse blanks. This led to the decision to change the decontamination chemicals for the SI sampling to methanol and hexane.

There appears to be a misunderstanding from our February 18 conference call about what decontamination procedures were used in the field for the SI Investigation in June, 1992. To clarify, Weston proposed switching to a methanol rinse because of previous problems with acetone. Weston faxed a revised procedure to EPA and DEPE on 21 April 1992. Paul Ingrisano requested that hexane be added to the sequence. This was incorporated into the QAPP and hexane was added to the decontamination sequence. The decontamination procedures were also posted in the field trailer and brought to the auditor's attention. We regret any confusion stemming from our previous conversation.

As to EPA's comment regarding "questionable SI data," proper field procedures were followed and no field cross contamination issues have been noted so there is no reason to question the integrity of the SI data. The required corrective action was taken prior to the start of the SI sampling, that is the decontamination rinse chemicals were changed, and the problem has been eliminated.

Attachment 2, Technical Audit

Response to EPA Comment 1 Correction to sample homogenizing was made in the field to EPA satisfaction. No additional response is required.

Response to EPA Comment 2 Weston obtains their laboratory water in very large lots which are stored for future use. We are unaware of any problem with the age of the analysis. We would like to know of any written guidance EPA has regarding time limitations.

Response to EPA Comment 3 Weston regrets that the wrong documentation was provided to EPA on July 6, 1992. This was not brought to our attention until EPA's letter of 23 March 1993. We are in the process of obtaining the correct bottle analysis list and will provide it to EPA as soon as possible.

Attachment 3, Health And Safety Audit, June 10, 1992

Response to EPA Audit Comments 1 through 3, 5 and 8 on operating procedures referred to Versar oversight personnel and HASP which Weston was not asked to review and cannot comment on. Weston personnel operated according to the Weston HASP which was prepared for the RI.

Response to EPA Audit Comments 6,7 and 9 addressed handling and storage procedures for flammable decontamination liquids at the trailer. Corrective action is not possible at this time because the activity was completed in June 1992. However, Weston will address these issues in any future activity including storage lockers, and display of the eye wash bottle (which was in the first aid kit). There were always a number of large bags of vermiculite in the trailer which were used as sample packing material and were available to use on spills if required. These observations were important and we take them seriously. In the future we request that EPA bring up such issues when they are on site so that necessary corrective action can be taken immediately.

Response to EPA Audit Comment 4. On site communications. Generally the sampling team consisted of two Weston personnel who used the trailer as a storage and decontamination area. There was no continuously occupied office and thus no telephone was planned. Workers normally worked together one site at a time. Weapons Station procedures required use of only radios provided by the station. These radios were issued daily. Apparently on the day of EPA's visit the radios had malfunctioned and were not available. This was corrected the following day.