



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 49TH FIGHTER WING (TAC)
HOLLOMAN AIR FORCE BASE NM 88330-5000

HAPB 12692

REPLY TO
ATTN OF 49 SG/DE

09 JAN 1992

SUBJECT January Assessment Confirmation Sampling of Lagoon Groundwater

TO Dr Bruce Swanton
Hazardous and Radioactive Materials Bureau
Environment Department
1190 St. Francis Dr.
P.O. Box 26110
Santa Fe, NM 87502



1. This is to verify your statements made in a conference call on 12-31-91, (Ref Atch 1), regarding groundwater resampling requirements, originally stated in a letter addressed to Brig Gen Lloyd Newton dated 12-17-91.
2. You stated that method 8240 sampling would not be required if it was verified that Environmental Sciences and Engineering did not use blank corrections in method 8010 analyses. Radian Corporation has since verified this to be the case.
3. In a previous conversation between you and Dr Fred Fisher of our Environmental office, it was determined that method 8270 sampling was not required. (Reference our 12-23-91 letter from Mr Howard E. Moffitt to Dr Bruce Swanton.)
4. In summary, it was agreed to modify the instructions in your letter of 12-17-91 to Brig Gen Lloyd Newton to indicate that sampling of groundwater for method 8080 will be required. Results should be reported using method detection limits (MDL's) to define analytical limits.
5. If you have any questions, please contact Dr Fred Fisher at 479-3931.

Howard E. Moffitt
HOWARD E. MOFFITT
Deputy Base Civil Engineer

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1 Atch
Memorandum For The Record

cc: w/Atch
Ron Stirling, COE, Omaha NE
Brent Johnson, HQ TAC/DEEV
Jon Rinehart, EPA Region VI, Dallas TX
Wally Hise, Radian Corp, Austin TX

JAN 1992
HAZARDOUS WASTE
PROGRAM

Readiness is our Profession

MEMORANDUM FOR THE RECORD

Subject: Results of a 12-31-91 1000 MST conference call regarding Holloman AFB sewage lagoon investigations.

Participants:

Dr Bruce Swanton, New Mexico Environment Department (NMED)
Ms Sharon Moore, Holloman Air Force Base, NM
Dr Fred Fisher, Holloman Air Force Base, NM
Mr Wallace Hise, Radian Corporation, Austin, TX
Dr Steve Gibson, Radian Corporation, Austin TX
Ms Jean Youngerman, Radian Corporation, Austin TX
Mr Ron Stirling, Army Corps of Engineers, Omaha NE (COE)
Ms Danielle Lakin, Army Corps of Engineers, Omaha NE (COE)
Mr Dave Splichal, MRD Laboratory, COE, Omaha NE
Mr Jon Rinehart, Environmental Protection Agency Region 6, Dallas (EPA)
Mr Brent Johnson, HQ Tactical Air Command (TAC), Langley AFB

RECORDER'S NOTE: All subsequent references to pages or tables refer to "A-E Sampling and Quality Control Summary Report (A-E SQCSR) for Appendix IX Groundwater Sampling Holloman Air Force Base, Radian Corp., November 1991" unless otherwise noted.

(1) All participants agreed that method 8010 results for methylene chloride performed by Environmental Sciences and Engineering (ES & E) show blank values <2 ug/L (Table 3-1, p. 3-9). It was agreed that this indicates that hits of methylene chloride in method 8240 samples performed by Radian and PDP Analytical (EPA contractor) are laboratory contamination (assuming that ES & E's method 8010 results are not blank-corrected).

(2) All participants agreed that acetone was found only in PDP Analytical's samples (compare Table 3-1, p. 3-9 to PDP Analytical's summary table, included as an attachment to the 5 Nov 91 letter from Radian to COE). It was agreed that acetone was therefore a laboratory contaminant.

(3) NMED stated that, pending verification that method 8010 results were not blank corrected, resampling for method 8240 would not be necessary. Radian will contact ES & E to verify that the method 8010 results were not blank corrected.

(4) Radian elaborated upon a letter concerning method detection limits that was sent to participants prior to the call. GC-MS techniques (method 8240) were contrasted to conventional GC techniques such as method 8080 which uses electron capture detection.

GC-MS allows reliable detection of substances below quantitation limits because both retention time and mass spectra are used to verify the identity of a compound. However, limits for accurate quantitation are rather high compared to conventional GC techniques. Interferences are reduced in GC-MS by the use of two independent methods to identify the compound (retention time and mass spectra). Therefore, reporting values below quantitation limits with J flags will provide a reliable indication of the presence of the compound.

Conventional GC is subject to more interferences than is GC-MS, so Radian does not recommend the reporting of flagged values below quantitation limits. Confirmation of hits in conventional GC requires running the sample through a second column with different phases than the original. Typically, this is accomplished by splitting samples after injection and passing the samples through two columns in parallel. Identical detectors are normally attached to both columns. Hits may also be confirmed with GC-MS, but this is not advised because of the lower sensitivity.

NMED noted that Radian's reporting limits for several method 8080 constituents were similar to MDL's in SW-846, 3rd edition. NMED requested that Radian attempt to meet the MDL's listed in SW-846, 3rd edition.

(5) NMED stated that HAFB/Radian is not required to measure detection-monitoring indicator parameters during the upcoming resampling for method 8080. NMED stated that if no hits are found and if the sampling is otherwise successful, HAFB will be permitted to resume detection monitoring by sampling indicator parameters in Jun/Jul 1992.

(6) ACE asked to receive QA samples for two wells. Radian agreed to collect samples from well MW-5, which had the most method 8080 hits, and from one other well to be specified later.

(7) HAFB, HQ TAC, COE and Radian agreed that it would be necessary to schedule a separate resampling trip late in Jan 1992 because there was no longer sufficient time to organize the resampling effort to coincide with the upcoming IRP site sampling trip during the week of 6 Jan. The sludge/soil sample collection has now been scheduled for late Feb, and it was agreed that the groundwater resampling needed to be completed before then.

RECORDER'S NOTE: Radian contacted ES & E on 12-31-91 following the conference call. ES & E confirmed that they do not blank correct method 8010 analyses.

Recorder,

Dr Fred M. Fisher
49 SG/DEV
Holloman AFB, NM 88330
505 479-3931

Fred M. Fisher

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