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MEMORANDUM REGARDING CONCERNS WITH AGENCY COMMENTS ON THE
PRELIMINARY ASSESSMENT/SITE INSPECTION FOR FIRE VALVE AREA SITE SS009
KANSAS CITY MO
12/14/1995
RICHARDS GEBUR AIR FORCE BASE



DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

14-Dec-95

MEMORANDUM FOR BRAC CLEANUP TEAM
MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR)
ATTN: BOB GELLER
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
ATTN: BOB KOKE

FROM: Operating Location Q, AFBCA
15471 Hangar Road
Kansas City, MO 64147-1220

SUBJECT: Preliminary Assessment/Site Inspection (PA/SI) for the Installation Restoration Program (IRP) Site, Fire Valve Area - SS009

1. I am very concerned about one issue in the two sets of review comments provided by Mr Golson (11 Oct 95 and 30 Oct 95) on the subject report, and am requesting you review the matter. At issue is what level of contamination warrants the creation of a new IRP site, and at what level is a detection considered merely "noise." As detection levels plummet, chasing every small detection of contamination and calling it an IRP site is way beyond the means of any government agency, and is not in the best interest of the citizens we serve. After 50 years of use as a military/civilian airport, a right-minded person comes to expect the occasional, low-level forensic evidence of products that were stored or used in the local area. Evidence of mankind's wide-spread use of PCBs on this planet has been detected in ice at the North Pole.

2. Our situation is this: In a single sample at 2½ feet below asphalt pavement, we detected three compounds; ethylbenzene, xylene, and 2-hexanone, (see Table 1) way below any action levels (150,000 times or more below the Missouri Department of Health ASLs!) Field gas chromatograph screening samples all around the "hit" detected nothing. Figure 1 depicts the area that Mr. Golson is "strongly suggesting" the Air Force create a new IRP site at, based on the data in Table 2. In my role as the RPM, I find that one of the CERCLA criteria for an IRP site, "site poses an imminent threat to human health and the environment" is not met. I am unable to justify making this area an IRP site.

Table 1, Soil Boring FSB8 Analytical Data

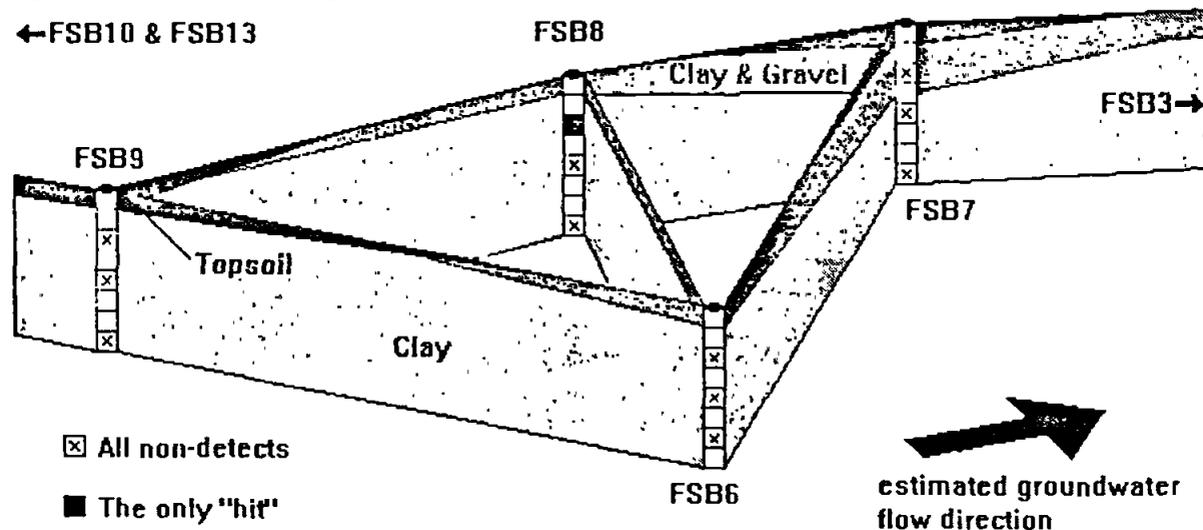
Sample Depth	Parameter Sampled	Result (ppb)	Residential ASL (ppb)
2.5 feet	Semi-Volatile Organics	Not Detected	NA
2.5 feet	Purgeable TPH	Not Detected	NA
2.5 feet	Extractable TPH	Not Detected	NA
2.5 feet	Ethylbenzene	36	5,600,000
2.5 feet	2-Hexanone	27	No ASL*
2.5 feet	Xylenes	68	110,000,000
2.5 feet	Remaining Volatile Organics	Not Detected	NA

* 2-Hexanone is not a carcinogen

Table 2, Localized Data Summary for the FSB8 Area

Soil Boring	Sample Depth (ft)	Parameter Sampled	Result
FSB6	2.5	Field GC (VOCs)	ND
"	4.5	Field GC (VOCs)	ND
"	2.5	PID reading	ND
"	5.5	PID reading	ND
FSB7	2.5	Field GC (VOCs)	ND
"	4.5	Field GC (VOCs)	ND
"	7.5	Field GC (VOCs)	ND
FSB8	2.5	Semi-Volatile Organics	ND
"	2.5	Purgeable TPH	ND
"	2.5	Extractable TPH	ND
"	2.5	Ethylbenzene	36 ppb
"	2.5	2-Hexanone	27 ppb
"	2.5	Xylenes	68 ppb
"	2.5	Other Volatile Organics	ND
"	2.5	Field GC (VOCs)	ND
"	4.5	Field GC (VOCs)	ND
"	7.5	Field GC (VOCs)	ND
"	2.5	PID reading	ND
FSB9	2.5	Field GC (VOCs)	ND
"	4.5	Field GC (VOCs)	ND
"	7.5	Field GC (VOCs)	ND
"	2.5	PID reading	ND
"	5.0	PID reading	ND
"	6.5	PID reading	ND

Figure 1, Fence Drawing of the FSB8 Area



3. I consider the following factors important in assessing the FSB8 hit. Three down-gradient samples (in FSB7) across the street detect nothing. Two samples below the "hit" in FSB8 detect nothing. Three up-gradient samples (in FSB9) detect nothing. The only possible up-gradient source is the street. There is no evidence of migration. Three side-gradient samples (in FSB6)

detect nothing. The "hit" was collected near the surface, in a parking lot, under asphalt pavement, and next to a street intersection. No spills have ever been recorded in the area. The area was only used for employee parking. The parking lot was gravel before it was paved. Determining ASL exceedance for xylene and ethylbenzene can be done visually or by smell ($C_6H_5CH_3 < 11\%$, and $C_6H_5C_2H_5 < 1/2\%$). The same sample showed non-detect for the remaining volatile organics, all semi-volatiles, and both purgeable and recoverable petroleum hydrocarbons. What caused the "hit"? I offer two possibilities; 1) an old, unreportable gasoline spillage from an employees car stranded in a gravel parking lot, or 2) a normal summer-time application of herbicide to keep the weeds from growing out of cracks in the asphalt. According to the *Handbook of Toxic and Hazardous Chemicals, 3rd Ed., by Marshall Sittig, Vol. I*, xylene and ethylbenzene are common solvents in agricultural insecticides, herbicides, and rodenticides. The lack of recoverable petroleum hydrocarbons tends to point to normal herbicide application.

4. I believe we, as a BRAC Cleanup Team need to decide what levels are "noise" and what level warrants further study. The rule-of-thumb I adopted early in my career from a seasoned EPA colleague is "A magnitude of two, gives me nothing to do." His departments simple mnemonic meant that if a soil sample results came back two orders of magnitude or more below a health-based cleanup level for surface soil, in their experience at NLP sites, the area did not warrant additional investigation. He quoted some SITE report (I don't recall the name) as the basis of his departments rule-of-thumb. The same report caveats this guideline when shallow water wells are located within a few hundred feet. Here at Richards-Gebaur, the nearest wells are over a mile away, and are not shallow. Given our situation, I believe EPA's rule-of-thumb is conservative.

5. For Bob Koke: Please delay the HRS-II scoring of the PA/SI data package we sent, pending some additional samples for PCBs at site SS009. An addendum to the PA/SI will be delivered in a few months.

6. Please be prepared to articulate your respective positions on this issue at the next BCT meeting, January 1996 (TBD). Understanding respective positions, finding common ground, and arriving at a common sense solution to this issue will be our goal. Does EPA or MDNR have project manager guidelines on this subject for those EPA/Missouri funded cleanups? I welcome any calls on this issue, and can be reached at (816) 348-2511, x28.



P. Mark Esch
BRAC Environmental Coordinator