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DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGY AND LAND SURVEY

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January 5, 1998

Mr. Louis A. Dell'Orco
Deputy Project Manager, COE
FUSRAP Office
9170 Latty Avenue
Berkeley, MO 63134

Mr. Thomas Freeman
U.S. Army Corps of Engineers
St. Louis District
1222 Spruce Street
St. Louis, MO 63102

RE: Summary Data Package for the St. Louis Airport Site (SLAPS) and Hazelwood Interim Storage Site (HISS), Baseline Groundwater Sampling, 1997

Dear Mr. Dell'Orco and Mr. Freeman:

The information to be included in the Summary Data Package was discussed during the summer of 1997 and further clearly defined in the Abbreviated Plan for Providing Baseline Sampling and Data Collection for Surface Water and Groundwater at the SLAPS/HISS prepared in September 1997. The baseline groundwater sampling at SLAPS/HISS was originally requested by the "Groundwater Technical Work Group". The sampling was designed to fill in data gaps from previous sampling events at SLAPS/HISS as well as collect new information to enhance the characterization of the site. The state is concerned that much of the data as promised in the September, 1997 Abbreviated Plan for Baseline Sampling were not actually supplied in the data package.

The Federal Facilities Section staff and the Division of Geology and Land Survey staff from the Missouri Department of Natural Resources have reviewed the above mentioned document. The comments reflect a concern for inadequacies. It was intended that the results of this effort would provide the group with a more current and complete snapshot of site conditions, since previous site monitoring was discontinued in 1992. First and foremost, the State of Missouri encourages the COE to move forward on the remediation of the FUSRAP sites in the St. Louis area. The responses to these comments, as requested by MDNR, should in no way delay the remediation activities.

After review of the document, the following comments were developed and are being supplied to you for response:

1. Static water level data were not provided with the data package. These data were collected and need to be distributed with potentiometric maps developed within

the various units beneath the site. This information is essential to understanding contaminant movement.

2. Many of the wells that have been sampled are already plugged or are soon to be considered for plugging. We have asked numerous times, that as much data from these wells be collected before they are abandoned. This does not necessarily seem to be happening. More effort needs to be directed toward these wells and a plan for replacement needs to be developed quickly.
3. Tritium analysis was done on a different set of wells than that defined in the Abbreviated Plan for Providing Baseline Sampling and Data Collection for Surface Water and Ground Water at the St. Louis Airport Site and the Hazelwood Interim Storage Site. Much time and effort was spent in the selection of the wells requested in the mentioned document. The analysis on the wells listed on page nine of the September, 1997, Abbreviated Plan, should be revisited and the analysis completed.
4. The data from the gamma logging and the surface water sampling are not part of the data package. This data must also be provided as soon as possible.
5. The significance of the qualifiers and reporting columns on the data sheets need to be further explained.
6. Monitoring Well M10-25D has some unusual reporting results and SQL's. It appears that there is a high level of dichloromethane in the well and other analytical numbers are being affected by the one analyte. We would like to see the well resampled immediately and possible dilution of the sample allow for a better analytical results. Also, what is the meaning of Sampling Quantitation Limit?
7. Background radionuclide concentrations are not defined for ground water.
8. Isoconcentration maps should be developed for the radionuclides and the organics present.
9. Dichloromethane is present in a number of the samples. Is there an explanation for this?
10. The detection limits for protactinium are 200 pCi/l instead of the 50 pCi/l promised in the sampling plan.

11. The units for tritium analysis are pCi/l instead of Tritium units. Can a conversion factor be provided? Most of the water age analysis are done in TU.
12. What is the value of the results if they are below the detection limits?
13. Why does the SQL change for the same analyte different samples, specifically the radionuclides? See sample results for wells B53W17S, M10-08D, and M11-9.
14. The quality control marker and the reported value don't correspond with each other. More explanation needs to be provided on qualifiers and numbers reported. Examples:

	Results	Det. Lmt	SQL	Lab Q	Rev Q
2-Butanone	5 ug/l	1.3	5	U	
Dichloromethane	22 ug/l	1.5	5	U	

Why is a number in the result column if Not detected? U indicates that the analyte was analyzed for but not detected.

	Results	Det. Lmt	SQL	Lab Q	Rev Q
Vanadium	5.8 ug/l	0.5	1.1	B	

How does 5.8 fall between 0.5 and 1.1 (CRDL 1.0) as indicated by the B qualifier? B indicates that the reported value is less than the contract required detection limit (CRDL) but above the instrument detection limit (IDL).

15. What are quality control considerations?

	Results	Det. Lmt	SQL	Lab Q	Rev Q
Dichloromethane	610 ug/l	1.5	25	UJ	

UJ indicates that the analyte was analyzed for and detected but must be estimated due to quality control considerations. What were these considerations?

16. Total Uranium in the recent summary package was reported in the micrograms per liter, while total Uranium in the Remedial Investigation Addendum Report for the St. Louis Site, was reported in pCi/l. What is the reason behind this reporting in different units? The sampling plan also called for the total uranium to be

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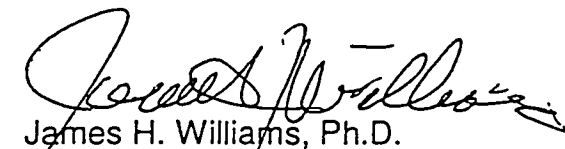
reported in pCi/l. Previous data cannot be compared with these data because of the use of different reporting units.

17. Detection limits on many of the organics and other analytes are much higher than discussed in the sampling plan.
18. The source of the high uranium and organics off site need to be defined.

If you have any questions or comments, please contact Ms. Mimi Garstang at 573/368-2101

Sincerely,

DIVISION OF GEOLOGY AND LAND SURVEY


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Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for the St. Louis Sites, Missouri



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