

SPRING VALLEY

Partnering Meeting
DC Department of Health
51 N St NE, Washington, DC

MEETING MINUTES

PURPOSE OF MEETING: Sampling Strategy Meeting

LOCATION: DC Department of Health

DATE: May 14, 2001

TIME: 10:30 a.m. – 4:00 p.m.

Action items are *bolded and italicized*.

1. INTRODUCTIONS/REVIEW AGENDA

2. UPDATE:

2.1 OU-5 (Sedgwick Trench sample status and results)

Tom Bachovchin presented the arsenic results for the Sedgwick Trench area. He also addressed the arsenic and pH results for the trench borings. Arsenic was below 13 ppm and pH was 5-7+ su (normal range). In general, the arsenic results were highest in the easterly section of the trenches (5040, 5046, and 5054 of Sedgwick, and Quadrant 1 of 3720 Fordham). The arsenic was below background in the lots in the western section (5059 and 5065 Sedgwick). Grid sampling will be accomplished for all 5040, 5046, and 5054 of Sedgwick, and 3720 Fordham properties in accordance with the grid sampling protocol. Since there were elevated results in these backyards, 3712 and 3706 Fordham will be assigned a high priority for quadrant sampling.

MAJ Peloquin proposed a community meeting for residents within the Sedgwick Trench area within the next month.

2.2 OU-3 (arsenic removal, test pits, risk assessment for 4835, restoration)

No results are yet available for the Horace Mann school quadrant properties.

The 4835 Glenbrook Road risk assessment is under review. Parsons is awaiting comments. *Comments are due May 29, 2001.*

2.3 OU-4 (sample status and results for AU and private residences)

MAJ Peloquin reported they now have approximately 500 completed rights of entry.

Tom Bachovchin presented the arsenic results for grid samples on properties that had previously had elevated arsenic levels. There were additional elevated levels on properties on the ball field. A risk assessment will be performed combining these properties into a single exposure level commensurate with the use of the area (recreational). Results for the one property between the ball fields and the CDC are pending. Rich Albright raised the issues of skin rashes on teams using the fields. Bethany Bridgham reported these results were anecdotal.

The initial individual risk assessments are being developed, incorporating comments received to date on the 4835 risk assessment.

2.4 SDA (confirmation results and stream sediment removal).

The upper stream has been remediated. The current plan is to replace the railroad ties with new railroad ties. Parsons recommended against using railroad ties due to the creosote treatment. Pressure treated lumber sometimes contains arsenic. Parsons recommended concrete. Rich Albright suggested borax treated landscape timbers. (Update after meeting - The manufacture AWS contacted said wood treated this way should not be used where constantly exposed to water as the chemical used in the treatment process, disodium octaborate tetrahydrate is water soluble. *Parsons will investigate other pressure treated lumber without toxics. CENAB will discuss the options, including concrete, with the property owners.*

The lower stream has been excavated and is awaiting confirmation sampling results.

2.5 Test Pits

The test pits were started today. Air monitoring indicated 2-3 X TWA for Lewisite. DAAMS have been pulled and are awaiting confirmation. It appears there is an associated 5 gallon drum. Rich Albright requested a copy of the tape. This will be copied from the video system that is a security system and requires special equipment. *Parsons will make a copy.* At a later update, Michael Winningham reported they had uncovered additional glassware and some contained liquid. Initial DAAMS tube results were negative for Lewisite.

2.6 Geophysical surveys at 5058 and 5054 Sedgwick

Chris Evans reported there is a large anomaly in the backyard of 5058. Sherri Anderson-Hudgins reported the homeowner is in the process of selling the property and wants the anomaly removed right away. Rich Albright distributed a letter from Mr. Gordon on these properties. Chris Evans reported the two anomalies have been confirmed and no more can be done without intrusive investigation.

Discussion was held on how to address the intrusive investigations from the USACE approval perspective. Previously intrusive investigations were done under operations orders. Since the area is known to have CWM, emergency removals cannot be used. Therefore, it appears it will require an amendment to the Site Safety Submission and associated pre-ops, etc. *Sherri Anderson-Hudgins will take this as an action item to determine the path forward.*

MAJ Peloquin asked Chris Evans for an evaluation of the geophysics prioritization status. Chris Evans reported he has identified 40 priority one properties within the CTA.

Since an amendment to the Site Safety Submission will be required for any intrusive investigation, it was decided additional geophysics of the area could be accomplished concurrently. The geophysics will commence after the geophysics work plan is approved. The intrusive investigations will be accomplished at 5058 and 5054 Sedgwick first.

Regarding the geophysics of 5058 and 5054, the previously collected data will be evaluated using the newer version of Geosoft. *Sherri Anderson-Hudgins will work with Scott Millhouse (USAESCH) to re-evaluate this data.*

MAJ Peloquin asked Rich Albright the DC Health response to this approach in light of the letter from Mr. Gordon. Rich Albright responded he felt it would be satisfactory so long as the residents are continually informed.

3. AIR MONITORING – 4825 GLENBROOK AND/OR 5065 SEDGWICK

CENAB made a request to do air monitoring in the basement of 4825 Glenbrook. The owners are requesting a detailed air monitoring plan outlining the objectives of the study. The homeowner at 5065 Sedgwick also requested indoor air monitoring. This is the residence where there was a reported case of multiple myeloma. Rich Albright wants to ensure the monitoring includes arsine.

Ken Shuster discussed his conversations with EPA emergency response team. This evidently is a real-time instrument that has not been tested for the contaminants of concern. The individual Ken Shuster talked to also stated the Gore Sorbers ? are not calibrated for the chemicals of concern. After discussion, it was decided to sample for arsine and mustard agent. These are contaminants that are unlikely to be present from any source other than chemical agents. *Ken Shuster will follow up with the EPA contact regarding the applicability and availability of this instrument. Someone needs to take the lead with ECBC, CHPPM or others – Parsons or CENAB?*

Rich Albright requested air monitoring at 5054 Sedgwick because of the high arsenic and the anomaly. *MAJ Peloquin will discuss this with the homeowner.*

4. SAMPLING PLAN ISSUES

4.1 Composite sampling

The issue of the number of composite samples per property for those properties outside of the CTA. Lan Reeser explained to obtain the same confidence level of 6 composite samples in each of 4 quadrants requires 8 composite samples in each of the two halves. This is based upon a low coefficient of variability for the background arsenic. Using 8 composite samples, the screening level for grid sampling should be lowered. *Parsons will investigate the proper screening level.*

4.2 Final POI-specific contaminant lists

Tom Bachovchin briefed the attached list. Sampling will be performed from the 1918 level to one foot below for those properties with fill. For properties at the 1918 level or with cut, samples will be taken from the surface to one foot below. There was no objection to the recommendation that Adamsite analysis be eliminated in favor of using arsenic as an indicator compound. Similarly, hydrocyanic acid and cyanogen chloride will be eliminated from the list in favor of using cyanide as an indicator analyte.

CENAB reviewed the “new” Mark Baker list of compounds filled into shells and determined there were no new compounds to add. Ray Livermore discussed their rationale. This included:

Xylyl Bromide—used as a gas, volatile, not expected to be present.

Oleum—fuming sulfuric acid, soluble in water and not expected to be present at this point.

Magnesium Arsenide—found as magnesium or arsenic. Magnesium is common metal and not a health hazard and arsenic will be analyzed.

Red Lead—Lead tetroxide, would be found as lead. Excluding the Small Disposal Area, only one sample contained lead greater than 400 ppm.

Aluminum Powder—found as aluminum. Abundant and not a health hazard. No samples except Small Disposal Area have been greater than the EPA RBC.

Magnesium Powder-- found as magnesium. Abundant and not a health hazard.

Benzoic Acid—becomes gaseous at 100 degrees F. Anaerobically degrades to CO₂ and methane.

Methyl Alcohol—volatile and highly soluble in water. Not expected to be present at this time.

4.3 Soil sample depth

Soil sampling will be performed at the 6” level per USEPA guidance. This predicts the risk to residents from airborne dust or soil tracked into a residence. Harry Harbold recommended taking the boring in a garden area if requested by the resident if there is no ground scar.

4.4 Contaminants outside the CTA

Approximately 15% of the properties outside of the CTA will be subjected to additional boring sampling similar to the POIs within the CTA. These will be developed following receipt and review of EPIC’s analysis of additional ground scars.

5. REVIEW LIST OF ADDRESSES IN EACH CTA POI

Discussion centered on what properties are within POIs in the CTA. Parsons presented the properties that had any portion of the lot within the POI. Everyone agreed these are the only properties that initially require sampling. If contamination is found at any POI, the POI bounds may be expanded.

6. SOIL GAS

Rich Albright distributed a paper discussing the formation of arsine from soil bacteriological activity. Ed Bishop recommended capturing a sample using an inverted vessel and sample for arsine. *Someone needs to take the lead-DCEHA, Parsons or CENAB?*

7. NEXT PARTNERING MEETING

The next meeting will be held the second week of July 10, 2001, at the Spring Valley resident office.

**SPRING VALLEY OU-5
POI SPECIFIC SAMPLING PLANS - CTA**

Sampling Plan 1 (POI 19)

- ? Arsenic
- ? Mustard
- ? Mustard ABP (oxathiane, dithiane, thiodiglycol)

Sampling Plan 2 (POIs 15R and 16R)

- ? Arsenic
- ? Mustard
- ? Mustard ABP (oxathiane, dithiane, thiodiglycol)
- ? Lewisite ABP (CVAA/CVAO)
- ? Adamsite (**use arsenic as indicator**)
- ? Hydrocyanic acid (**use cyanide as indicator**)
- ? Cyanogen chloride (**use cyanide as indicator**)
- ? Cyanide
- ? Carbon Disulfide

Sampling Plan 3 (POIs 7, 13, 39)

- ? Arsenic
- ? Mustard
- ? Mustard ABP (oxathiane, dithiane, thiodiglycol)
- ? Lewisite ABP (CVAA/CVAO)
- ? Adamsite (**use arsenic as indicator**)
- ? Hydrocyanic acid (**use cyanide as indicator**)
- ? Cyanogen chloride (**use cyanide as indicator**)
- ? Cyanide
- ? Carbon Disulfide
- ? Tetryl
- ? Trinitrotoluene (TNT)
- ? Nitroglycerin
- ? 2,4 dinitrotoluene (2,4-DNT)
- ? 2,6 dinitrotoluene (2,6-DNT)
- ? **Nitrobenzene (part of original explosive suite)**

**SPRING VALLEY OU-5
POI SPECIFIC SAMPLING PLANS - CTA**

Sampling Plan 4 (POI 38)

- ? Arsenic
- ? Adamsite (use arsenic as indicator)
- ? Tetryl
- ? Trinitrotoluene (TNT)
- ? Nitroglycerin
- ? 2,4 dinitrotoluene (2,4-DNT)
- ? 2,6 dinitrotoluene (2,6-DNT)
- ? **Nitrobenzene (part of original explosive suite)**

| CTA POIs | Sample Plan | Notes |
|----------|-------------|---|
| 16 R | Plan 2 | Borings will be placed at the center of each patch. This POI area will be extended per the revised EPIC review. Now named POI 16R. |
| 19 | Plan 1 | |
| 15 R | Plan 2 | This POI area will be extended per the revised EPIC review. Now named POI 15R. |
| 7 R (?) | Plan 3 | |
| 13 | Plan 3 | |
| 39 | Plan 3 | |
| 38 | Plan 4 | Arsenic as an indicator of Adamsite |
| 17 | ? | Potential dump area at end of ravine (truck turnaround), outside of the CTA. 2 composite arsenic samples per lot. Possible Geophysical investigation? |

| <u>Name</u> | <u>Organization/Address</u> |
|-------------------------|-----------------------------|
| Sherri Anderson-Hudgins | USAESCH-OE-DC |
| Tom Bachovchin | Parsons ES |
| Ed Bishop | Parsons ES |
| Michael Winningham | Parsons ES |
| Marianne Cardwell | Parsons ES |
| Ray Livermore | CENAB |
| Lan Reeser | CENAB |
| MAJ Mike Peloquin | CENAB |
| Richard Albright | DCEHA |
| Chris Evans | CENAB-EH-GG |
| Mark Baker | CENAB |
| Mr. Harry Harbold | USEPA |
| Ken Shuster | USEPA |
| Jorge Abud | American University |
| Bethany Bridgham | American University |
| Mark Stephens | USEPA |
| Susan Platt | CENAB |