

Testimony of Kent Slowinski
former member, Spring Valley Restoration Advisory Board
on the Environmental Restoration Program
at the Spring Valley Formerly Used Defense Site
before the Congress of the United States
House of Representatives
Committee on Oversight and Government Reform
June 10, 2009

Thank you for holding this important hearing on the Environmental Restoration Program at the Spring Valley Formerly Used Defense Site.

My name is Kent Slowinski. I grew up in Spring Valley in the 1950's and 1960's at 4721 Sedgwick Street. I've worked in Spring Valley since the 1970's as a landscape crewmember, contractor and architect. I was one of the original members of the Spring Valley Restoration Advisory Board (RAB) from 2001 - 2006.

1. Increased transparency and oversight

On several occasions, the RAB, along with many Spring Valley residents, has asked for increased transparency and oversight. After a year on the RAB, Davis Robinson, a well-respected attorney and neighbor said, "If the Army Corps was a private contractor, they would have been fired a long time ago."

If the Army Corps would put the same amount of energy into conducting a thorough research, investigation and cleanup, as they put into falsely discrediting people, attempting to rewrite history and developing reasons not to research, investigate or cleanup, the cleanup would be much further along than it is today.

What would you do if you learned that the project manager of a federal agency who is supposed to be cleaning up the problem was told to, "Sweep the problem under the carpet - make Spring Valley go away. It's too big for you to handle."

There aren't many Spring Valley residents who understand the culture of the Army Corps or EPA. There aren't many Spring Valley residents who have a background in weapons of mass destruction, chemical warfare agents, and contamination of water, air and soil from arsenic, perchlorate, lead, and mercury to name a few.

I'm beginning to wonder if all of the transparency and oversight in the world can help such a flawed and conflicted process. It just doesn't make sense to continue letting the fox guard the henhouse. It isn't good for business.

We need to protect the health and safety of the of the citizens of the District of Columbia. It is time for a change. We need your help.

2. Health problems

The Spring Valley issue became personal for me in 1996, when my mason found a stokes mortar while excavating a basement for an addition to a house on Sedgwick Street. One of the previous owners of the property developed a brain tumor. The current owners are dealing with serious health problems.

Other neighbors and workers have had similar health problems. Just down the street were two cases of aplastic anemia in the same house, 20 years apart. One was a 7 year old girl. The other was a 70 year old man. Just one case of aplastic anemia raises red flags for public health officials. Two case in the same house is just unheard of.

On three adjacent properties were three cases of multiple myeloma, each fatal. On another adjacent property was one case of pernicious anemia. That individual survived. She and her sister were instrumental in collecting anecdotal health information from their neighbors, which was the beginning of the Northwest Current's 2004 Spring Valley Disease Survey. <http://www.cpeo.org/pubs/SpringValleydiseases.pdf>

All of these properties were built on top of or adjacent to the Sedgwick Trench, where chemical warfare agents were tested on animals. Some of these chemicals are mutagenic. They damage the chromosomes - damage that can be passed down from generation to generation. Some chemicals are so toxic they have no antidote. Some chemicals were so experimental they have no recommend background concentration. Some chemicals are so rare, there is no way to sample for them in the environment.

You don't need to be a Harvard-trained toxicologist or epidemiologist to know that something is terribly wrong. To date we know of more than 200 residents, students and workers with health problems that might be associated with chemical exposure. My name is on the list. Little is being done to educate or assist people with symptoms of exposure. Some form of medical monitoring should be provided.

3. Health study follow up

The 2007 Johns Hopkins Spring Valley Scoping Study found that residents' anecdotal health problems were consistent with existing scientific literature on exposure to chemical warfare agents and agent breakdown products. The follow up health study is only partially funded. We need another \$500,000 to fund the study.

We will likely need another \$500,000 for independent sampling of air, soil and water to determine if the cleanup is complete.

How do you conduct a thorough cleanup?

4. Historical research and Conceptual Site Model

In 2001, I attended the Interstate Technology Regulatory Council's UXO Basic Training (Unexploded Ordnance). In the first chapter of the material it stated, the first two steps in any cleanup are to conduct a thorough historical research and develop a Conceptual Site Model. After more than 10 years on the project, the Army Corps has yet to do either. If they have, the documents are not publicly available. The only Spring Valley Conceptual Site Model I've seen is in Dr. Richard Albright's book, *Cleanup of Explosive and Chemical Munitions*. Dr. Albright was removed from the project in 2002.

5. National Archives research team

In 2001, I organized a research team at the National Archives in College Park. We met with staff and explained our mission. The Archives staff was very helpful. They provided a copy of the National Archives accession order which listed some of the documents in the AUES files at Fort McClellan. It included 320 cubic feet of field test reports, "moving pictures," maps and more. The report indicated the Army cancelled the accession order in 1993 because the AUES files were in daily use by the Army in locating buried munitions in Spring Valley.

After 10 years, why hasn't the Army Corps transferred the documents from Fort Leonard Wood to the College Park National Archives so that a thorough historical research can be conducted and a Conceptual Site Model developed?

6. 1918 AUES map

Our National Archives research team located a 1918 AUES map that documented more than 20 additional structures that the Army Corps historians were not aware of. One of the structures was a Livens Gun Pit, which to everyone's surprise still exists near the northwest corner of American University's intramural field. The Livens Gun Pit was used to determine the trajectory of a range fan with an impact area near the Dalecarlia Reservoir. An EOD technician said it was the skinniest range fan he had ever seen, suggesting the range fan should have been wider. The Army Corps overlaid the 1918 map onto a current map, but omitted at least 30 AUES structures - more examples of incomplete historical research.

7. AUES files lost

The National Archives historians were concerned that the AUES files would be lost when Fort McClellan closed in the late 1990s. They lost track of the AUES files until 2001, when the files were located in a locked vault at the Army Chemical School at Fort Leonard Wood, Missouri.

Other important documents provided to the Army Corps have been lost, such as the 1918 AUES map, WC & AN Miller's development plans for Spring Valley, and several historical aerial photographs - more examples of incomplete historical research.

8. Incomplete historical research

In 2001, RAB members asked the Army Corps to research the AUES files and consider transferring the files to the College Park National Archives. The Army Corps refused to transfer the AUES files, saying the files were Army property. The Army Corps reluctantly agreed to look at the 2,000 AUES photos, but would not agree to look at the other AUES files.

The Army Corps will likely tell you they have done a thorough historical research. At a RAB meeting last year, the Army Corps said they made two trips to Fort Leonard Wood and would make a third trip if necessary.

What they won't tell you is that on the first trip, the Army historian was sick, so the files could not be accessed. On the second trip they looked at 2,000 photos, but ignored most of the other files. They scanned 264 images onto 2 discs, but the Army withheld one disc without explanation. The Army Corps never followed up on the missing disc. There was some discussion at the Partnering meetings about a third trip to Fort Leonard Wood, but it never took place.

The photos on the first disc were instrumental in proving that chemical munitions were ballistically fired and that rocket testing was conducted at AUES. This raised questions about a range fan and perchlorate contamination in the groundwater.

9. Asking the wrong question

On several occasions, the Army Corps seems to have deliberately asked the wrong question. Regarding the Rocket Test Area, the Army Corps asked their munitions experts in Huntsville, Alabama, "Did the Army use rockets with perchlorate in WWI?" The answer was no. It looked as if perchlorate wouldn't be an issue.

But the District's Department of Health asked the right question, "Did any AUES chemicals contain perchlorate?" The answer was yes. Perchlorate was present in at least 11 AUES chemicals.

Elevated perchlorate levels (48-124 ppb) have been detected in the groundwater by Sibley Hospital and American University. Lower perchlorate levels (2.4 ppb) have been detected in the District's treated drinking water. Developing fetuses and infants are most susceptible to perchlorate. Perchlorate exposure is associated with developmental delays.

10. Army Corps Community Outreach

In 2007, I brought some concerns to the Army Corps Community Outreach Coordinator regarding possible perchlorate exposure to some children who grew up near the Glenbrook Road Burial Pit. They were developmentally delayed. They went to grade school with my brother and sister and me. I was concerned that there might be an exposure pathway with the groundwater entering the basement or with the children playing in the creek.

Instead of looking into the matter, I received an email from the Army Corps stating there was no truth to what I said and questioning my integrity - another example of an incomplete investigation.

11. How do you determine if the cleanup is complete?

Look at the historical documents. There is evidence of several burial pits that have not been investigated, such as the Sergeant Maurer Burial Pit, the Arthur Osborne Burial Pit, the Ian McFee Burial Pits and the Rick Woods Burial Pits.

12. Sergeant Maurer Burial Pit

A photograph taken by Sergeant Maurer, Erik Olson's grandfather, documented the burial of 20-30 ceramic carboys of mustard agent and/or lewisite. EPA EPIC determined the Sergeant Maurer Burial Pit is under the house at 4825 Glenbrook Road. During the recent work at Pit 3 there was evidence that workers disturbed the burial pit and reburied some munitions by the foundation of the house. But the Army Corps hasn't talked to the workers who built the house or looked under the house. Mustard agent breakdown products were detected in the ground under the driveway - additional evidence of the Sergeant Maurer Burial Pit.

In 1992, contractors excavated 60-80 truckloads of soil from the site. The Lorton Landfill refused the soil because it was too contaminated. The National Park Service ordered contractors to remove the contaminated soil from the Fort Totten Metro site after a bulldozer operator passed out and an NPS representative became sick.

No one has located the contaminated soil. Some believe it was sent to the Boys and Girls Town of Washington in the 4800 block of Sargent Road, NE - another example of an incomplete investigation.

13. Arthur Osborne Burial Pit

A 1922 newspaper article by Arthur Osborne in the American University *Courier* states that the American University Board of Trustees gave the Army Corps permission to bury \$800,000 worth of explosives on the far reaches of the campus. This burial pit hasn't been found either.

14. Ian McFee Burial Pits

In 1993, someone identifying himself as Ian McFee called the Mayor's office. He said he worked with the Civilian Conservation Corps, which buried munitions, including French 75mm rounds, in 14 burial pits. Some believe the burial pits are either by the C&O Canal by Chain Bridge or on the Dalecarlia Reservoir property. A Naval Research Lab geophysical survey identified 8 large anomalies - possible burial pits - by the C&O Canal. These pits have not been investigated.

15. Rick Woods Burial Pits

In 1984, two Civil War relic hunters recovered approximately 100 75 mm shells from the Dalecarlia Reservoir property. The munitions were recovered near the surface, under just inches of dirt. The relic hunters could only take 27 munitions at a time in their truck so they made

several trips. They stacked up the extra munitions against two trees, but when they came back, the munitions were gone. Only half of the munitions were accounted for. One of the relic hunters has never been contacted.

In 2007, the Army Corps provided inaccurate information to the Naval Research Lab which was hired to conduct a geophysical survey of the area. Even though the wrong area was surveyed, the Army Corps concluded there were no large burial pits on the Dalecarlia property.

16. Munitions in the Dalecarlia Reservoir

The Area of Interest Task Force identified several impact areas by the Dalecarlia Reservoir. They questioned if munitions may have overshot the impact area and landed in the Dalecarlia Reservoir. They considered expanding the impact area to include the Dalecarlia Reservoir. A Navy EOD technician said if munitions were fired into the reservoir 80 years ago, they would be too deeply buried in the sediments to be removed through dredging and they would still be intact.

17. AUES inventory of munitions

A 1918 AUES inventory indicated there were more than 4,000 munitions remaining at AUES at the end of the WWI. Instructions were given to transfer the munitions to Edgewood Arsenal. But returning ships had priority and Edgewood was full. There are no documents indicating the munitions were transferred from AUES to Edgewood. The only logical conclusion is that the munitions remained at AUES and were likely buried in the area. Fewer than 1,000 munitions have been recovered to date.

18. Burial pits in tunnels

One document indicates the Army tunneled into hillsides to bury munitions. This is credible information as the Bureau of Mines was involved at AUES. If this is the case, many of these munitions are buried too deep to be detected by the current geophysical surveying equipment.

19. Complete and accurate information in a timely manner

Another way to determine the thoroughness of the cleanup is to look at how information is provided to the community. On several occasions the Army Corps has failed to provide complete and accurate information in a timely manner.

As of April, the Army Corps was one year behind in posting Partnering meeting minutes to the Army Corps website, despite agreeing to post Partnering and RAB meeting minutes within one month of the meetings. RAB members are allowed to attend Partnering meetings, but none of them do. Aside from RAB members, the Partnering meeting are closed to Spring Valley residents. There have also been delays in posting the RAB meeting minutes. Some have complained that the minutes have been sanitized.

The Army Corps has withheld sampling data from project partners and residents. The composite soil sampling that was used to determine Exposure Point Concentrations and the AUES List Sampled Properties are two examples.

20. Delayed Area of Interest reports

The Area of Interest (AOI) Task Force was established to identify areas that require additional investigation. Much of the information for the AOIs is provided by past and present residents. But the Army Corps doesn't release any information on the AOIs until after the reports have been investigated and closed. The AOI binder at the Palisades Library Information Repository includes just 12 of the 30 Areas of Interest reports. The Army Corps is missing a valuable opportunity to gather additional community input that could lead to a more thorough investigation and cleanup.

This has led to some legal issues. A home buyer considered suing the seller for not disclosing that the home was located in an AUES range fan. But the range fan isn't a designated AOI. In addition, the range fan is not identified in any publicly released documents.

The AOI Task Force was disbanded after one of the members retired. A logical step would have been to replace the AOI Task Force member. As a result, an AOI report on expanding the FUDS boundary into AU Park was never reviewed - another example of an incomplete investigation.

21. Incomplete or flawed sampling

Another way to determine if the cleanup is complete is to look at the sampling conducted, such as indoor air monitoring, composite soil sampling, AUES chemical sampling and groundwater monitoring.

22. Indoor air monitoring

In 2001, the Army Corps agreed to conduct indoor air monitoring on six Spring Valley properties, two with high arsenic levels, two with moderate arsenic levels, and two with low arsenic levels. Eight years later, the sampling has not been conducted.

One Sedgwick Street property was found to have arsenic particulate matter at 200-1,000 times recommended background concentrations. Questions were raised regarding the sampling protocol, but the property was never resampled. Soil sampling indicated the property did not have elevated arsenic in the soil, raising questions of where the arsenic came from.

23. Arsine gas

Indoor air monitoring for arsine gas has never been conducted. Arsenic can methylate to form arsine gas in an iron rich, acidic and moist environment or in the presence of certain fungi. These conditions are present on most Spring Valley properties. Iron occurs naturally in soil, the soils are naturally acidic and rainfall is predictable. Arsine is one of the most toxic AUES chemicals. There is no antidote for arsine exposure which is associated with brain tumors. Several residents have had brain tumors.

24. Flawed composite soil sampling

Composite soil sampling used to identify properties for follow up grid sampling was not in compliance with EPA soil screening guidance. The composite sampling diluted hotspots - potential exposure pathways. Instead of taking a trowel of soil from the four quadrants of a property to make up one of eight composite samples, eight trowels of soil were taken from one of the four quadrants to make up just four composite samples. This reduced the sampling costs, but it also decreased the levels of arsenic detected and diluted hotspots.

Some properties that have been declared free of contamination are surrounded by 3-6 other properties with elevated arsenic. During the first year of arsenic remediation work, contractors had to chase contamination onto 25 percent of adjacent grids, indicating a confidence level of just 75 percent. EPA soil screening guidance recommends a confidence level of at least 95 percent. The Army Corps refused to resample "clean" properties.

25. Secret soil sampling

In 2001, the Army Corps conducted extensive sampling of four properties for approximately 250 AUES chemicals. The property owners were unaware of the sampling, until two years later, when the Army Corps accidentally released the results. The Army Corps said there was no reason to inform the property owners because there was no health risk. More than 100 AUES chemicals

were detected.

One RAB member said, "How can you say there is no health risk, when you haven't tested for 40 of the chemicals on the list?" Some of the chemicals were so rare they had no recommended background concentrations or reference doses. There were quality control/quality assurance issues with the sampling because the samples were held too long before being sampled, but the properties were never resampled. The Army Corps would not say why the four properties were selected, but all four properties had a history of health problems with past and present owners.

26. Groundwater monitoring

Groundwater contamination is a very serious concern because in several places in the neighborhood, groundwater comes to the surface or enters the basements of homes. Perchlorate has been detected at Sibley Hospital, American University and in Glover-Archbold Park.

Other FUDS sample groundwater on a quarterly basis to document seasonal changes in groundwater. In Spring Valley the monitoring has been conducted on less than an annual basis. It is usually done during the summer, when there is less chance of detecting AUES chemicals.

Groundwater monitoring can be used to determine the extent of contamination plumes, to determine if contaminants are entering the Dalecarlia Reservoir, and to locate burial pits. Groundwater monitoring has been so infrequent, it appears very little has been accomplished. There have been many disagreements among the Partners.

The Army Corps developed a groundwater flux model to determine if groundwater entering the reservoir might impact the drinking water. They determined there was no danger to the reservoir if the calculations came in under 1,000 parts per billion. The first calculations came in around 3,000 parts per billion. They recalculated until they came up with a more acceptable figure of 200 parts per billion. The Army Corps concluded that groundwater contamination posed no danger to the Dalecarlia Reservoir or the District's water supply. Perchlorate has been detected in the District's treated drinking water at 2.4 parts per billion.

27. Community outreach and health issues

The Army Corps Community Outreach Coordinator ignored health concerns that I brought to her attention regarding children who may have been exposed to perchlorate near Pit 3. Instead of looking into the matter, the Army Corps said there was no truth to the matter and questioned my integrity in bringing the issue to her attention. Perchlorate is associated with developmental delays in infants and developing fetuses.

28. Munitions destruction

Perhaps the greatest concern should be reserved for the proposed munitions destruction behind Sibley Hospital in June or July. The Army Corps hasn't provided much information on what will be destroyed. We know that one round is an explosively configured arsine-filled round. Arsine is associated with brain tumors. There is no antidote. The other munitions likely contain mustard agent. Mustard agent is mutagenic. Children are most susceptible to eye injury from mustard agent exposure.

Is it safe to destroy chemical munitions in the neighborhood next to Sibley Hospital and the District's water supply?

Toxic chemicals will have to be trucked in to neutralize the chemical warfare agents. Thousands of gallons of hazardous waste will have to be trucked out. There are no plans to use a blast containment structure in case of an accidental detonation, no warning siren in case of an accidental chemical warfare agent release, no signs posted by the safety circle to warn people in

the area of the munitions destruction, and no instructions for residents on sheltering in place. These safety measures were all used at Pit 3, where the same munitions proposed for destruction were recovered.

At the March community meeting several people asked that the munitions destruction be moved to a nearby military base, such as the Naval Research Lab, a hazardous waste facility, where munitions have been safely destroyed in the past.

The Army Corps claims it is too dangerous to transport the munitions, but munitions have been safely transported from Spring Valley to Pine Bluff Arsenal in Arkansas in 1993 and to Battelle Institute in Ohio in 2001, as well as from American University to Sibley Hospital.

29. The function of the RAB

Another way to determine if the cleanup is complete is to look at the way the RAB has functioned. Instead of learning to work with its critics and people who have advocated for a more thorough research, investigation and cleanup, the Army Corps has removed those people from the project.

In 2006, the last original RAB member resigned in protest. He cited the Army Corps' attempts to keep certain project personnel from appearing before the RAB and keeping other people off the RAB.

30. Conflict, corruption or incompetence on the RAB

The Army Corps allowed a Pentagon employee onto the RAB who orchestrated the changing of the RAB's ground rules to remove the two RAB members who uncovered lapses in the historical research, investigation and cleanup.

Questions have been raised about several RAB members. One RAB member moved out of Spring Valley, but continues to be on the RAB in conflict with the RAB ground rules. The Horace Mann RAB representative has no connection with the school. The current RAB Community Co-chair works for a company that has contracts with the Army Corps, USEPA and DDOE. Another RAB member doesn't think arsenic is a health issue, even though arsenic has been detected at levels as high as 274,000 parts per million. (The arsenic cleanup level is 20 parts per million.)

One of the benefits of being on the RAB is attending Partnering meetings, but none of the RAB members attend. The Army Corps does not allow residents to attend Partnering meetings.

No one on the RAB raised a concern about the Army Corps being one year behind in posting Partnering meeting minutes to the Army Corps Spring Valley website. No one on the RAB asked why the Brandt construction workers were never asked if they found munitions or reburied munitions anywhere else on the Glenbrook Road site. No one on the RAB asked why a blast containment structure wasn't being used during the munitions destruction process.

Although there are some well-intentioned RAB members, there is an unexplainable lack of curiosity. Little effort is made by the Army Corps to provide the necessary background information to understand many of the issues. You would like to think that RAB members are doing their homework, especially when we are dealing with weapons of mass destruction, chemical warfare agents, toxic explosives, live projectiles, 75 mm rounds, stokes mortars, toxic smoke candles, hand grenades, chemical contamination and people's health.

31. Additional red tape

The former RAB Community Co-chair asked me to apply for the RAB's worker representative position when my term on the RAB expired. I filled out the RAB application form and submitted it. The Army Corps then developed new requirements for the position that have never been required

for any other RAB position, keeping me off the RAB. Some of the documents were postdated by the Army Corps.

32. Ethics investigation

The former RAB Community Co-chair who testified in 2001 and 2002, worked for the USEPA. This conflict of interest was brought to the Co-chair's attention by several RAB members. After several instances of not allowing open discussion at several RAB meetings and efforts to falsely discredit project personnel and RAB members, an ethics complaint was filed with the Co-chair's employer.

33. A lack of curiosity

There appears to be a lack of curiosity on the part of the RAB. Some RAB members, who are concerned about declining property values, would like the Army Corps to leave as soon as possible. Their motto was "Finish in four years." That was seven years ago.

At times there is very little effort on the part of the RAB to press the Army Corps for information, or to verify the accuracy of the information.

The RAB agenda has included some issues that have nothing to do with the Spring Valley cleanup, such as supplying water to District residents and replacing lead service pipes. Other RAB agendas covering relevant topics have little substance, such as the risk assessment process. Even though many risk assessments have been conducted for Spring Valley, none have been shared with the RAB.

34. Dissolving RABs

The RAB does not represent the community's best interest. When the Pentagon employee changed the RAB ground rules to remove certain RAB members, one Advisory Neighborhood Commissioner said, "We have just witnessed a gross miscarriage of democracy." We will never get a thorough investigation and cleanup as long as the RAB allows the Army Corps to conduct business as usual. RABs have been dissolved at other FUDS for one reason or another. Perhaps the Spring Valley RAB should have been dissolved a long time ago. It just isn't working.

35. Superfund National Priorities List

With the new leadership at EPA there is renewed optimism that Formerly Used Defense Sites across the nation will finally get the attention they deserve. It is clear that the current process is not working. One solution is to place Spring Valley on the Superfund National Priorities List and have EPA take over the project.

36. The bigger FUDS picture

Spring Valley is one of 9,000 Formerly Used Defense Sites across the US. Unfortunately, what is going on in Spring Valley is likely being played out at other FUDS. The Pentagon estimates there are approximately 3,000 FUDS requiring cleanup, but State regulators place the figure at closer to 5,000. At current Pentagon funding levels of just \$250 million annually, it will take 80-160 years to cleanup known contamination. Some estimate the cleanup to cost more than \$200 billion as more contamination will be uncovered during the cleanup. If FUDS funding were increased to \$2 billion annually, FUDS could be cleaned up in a more reasonable 10-20 years. At FUDS where there are potential exposure pathways speeding up the cleanup will reduce the number of people exposed to toxins.

37. Increased transparency and oversight

Last month, Councilmember Mary Cheh and her staff put in countless hours on the Spring Valley Roundtable Panel, as did Advisory Neighborhood Commissioners Nan Wells and Tom Smith. But they can not continue putting in the hours that this project has required. It just doesn't make sense to continue letting the fox guard the henhouse. It isn't good for business.

We need to look out for the health and safety of the citizens of the District of Columbia. It is time for a change. We need your help.