



WASHINGTON, D.C. OFFICE

fifth floor

flour mill building

1000 potomac street nw

washington, d.c. 20007-3501

TEL 202 965 7880 FAX 202 965 1729

OTHER OFFICES

beijing, china

new york, new york

portland, oregon

seattle, washington

GSBLAW.COM

GARVEY SCHUBERT BARER

A PARTNERSHIP OF PROFESSIONAL CORPORATIONS

Please reply to HAROLD G. BAILEY, JR.
bbailey@gsblaw.com TEL EXT 1784

February 20, 2013

VIA FEDERAL EXPRESS AND EMAIL

Mr. Shawn M. Garvin
Regional Administrator
USEPA Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Re: Imminent and Substantial Endangerment to Health and Safety of Two Young Children;
Excavation of Buried Chemical Weapons Adjacent to Children's Residence;
Petitions for Immediate Action by USEPA under RCRA Section 7003 --
Request for Investigation of Violation of Executive Order 13045 Protection of Children;
Request for USEPA Administrative Order Requiring Relocation During Excavation

Dear Administrator Garvin:

On behalf of two young children residing at 4830 Glenbrook Road, Luisa Z., 22 months old, and Lucas Z., 5 years and 10 months old (Children, pictured in Attachment 1), I am urgently seeking your personal attention to address an imminent danger to these Children in the Spring Valley community of Washington DC. I request that you review and grant the Children's petition under RCRA Sec. 7003 that USEPA: (1) investigate and determine whether USACE has violated Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks, and (2) act immediately to order the relocation of the Children while the U.S. Army Corps of Engineers (USACE) excavates for chemical weapon materials (CWM) and explosives less than 15 yards from where the Children live and play; and

For decades, the U.S. Army and American University have known that CWM were buried around the boundaries of American University, and more specifically at 4825 Glenbrook Road. USACE is only now undertaking a major excavation of this dangerous burial site. Previously, huge and deadly amounts of CWM from the American University Experiment Station (AUES) have been unearthed from relatively shallow depths at various locations at the Glenbrook Road site. The following is a partial listing of the CWM found in the front yard of 4825 Glenbrook Road by a USACE contractor, approximately 30-60 feet from the Children's front yard:

Mustard Chemical Nerve Agent
Lewisite Chemical Nerve Agent
Arsine Gas-filled Projectiles
Vomiting Chemical Agent DA

Munitions/Explosives (75 mm. projectiles)
Tearing Chemical Agent CN
Arsenic Trichloride (intact open containers)
Arsenic at 4,280 mg/kg (20 mg/kg safety limit)



February 20, 2013

Page 2

Parson Human Health Risk Assessment, July 2011 (HHRA), descriptions of Test Pit 120 and 134 (pertinent pages and diagrams attached at Attachment 2).

The USACE contractor made the following statement about the CWM in these Test Pits:

“Based on the findings from the TP 120 and 134 investigations, [USACE] is likely to encounter containerized CWM, ABPs and agents/hazardous toxic waste (HTW) contaminated soil in the uninvestigated areas of TP 120 and 134. Further action may be warranted to mitigate any unacceptable risk and hazards.” HHRA at p. viii.

In addition, three projectiles containing pure arsine gas were recovered from the front of 4825 Glenbrook. See <http://wmdindc.blogspot.com/2013/01/photograph-of-aues-arsine-still.html>. This is of particular danger to the Children because this CWM is already in gaseous form that could quickly migrate to harm the Children if there is an accidental release. It is also documented that a number of workers were accidentally exposed to airborne chemicals (likely lewisite) from the front yard of 4825 Glenbrook, resulting in eye and respiratory harm. See HHRA 1-3.

Today, USACE informed me that USACE is shortly going forward with excavations at or near Test Pits 120 and 134 without granting the request of the Children’s parents that the Children be relocated during excavation activities. USACE has cited another document, the Munitions and Explosives of Concern Hazard Assessment (MEC HA) as justifying their refusal to relocate the Children, even though the MEC HA contains the following disclaimer in its first paragraph, Attachment 3:

*“Note that this MEC HA does **not** address or otherwise evaluate potential risks related to chemical agent posed by chemical warfare materiel (CWM) that might be present at the site.”*

In the USACE HHRA, the only CWM exposure pathway assessed is through the soil; so the HHRA specifically excludes the possibility that the Children could be accidentally and directly exposed to exploding or otherwise airborne CWM if USACE protection and containment efforts fail. For example, the HHRA takes counter-factual approach to assessing CWM risks by stating that “Mustard agent and ABPs were not identified as COPCs [Chemicals of Potential Concern] because they were not detected in any of the in-place soil samples.”, thereby self-restricting the HHRA evaluation to “only assumed exposures” to soil. HHRA at 2-8, 3-1. However, the HHRA acknowledges that:

“Since the excavation of TPs 120 and 134 was halted when arsenic trichloride was discovered, these toxic or harmful compounds present potential risk to human receptors...Based on these findings and others, the uncertainty is high for finding additional CWM and AUES-related items remain [sic] in areas not completely excavated to bedrock or competent saprolite...Potential risk of encountering MEC, containerized CWM, ABPs and agent/hazardous toxic waste (HTW) contaminated soil remains in the uninvestigated area of TPs 120 and 134, which cannot be quantitatively evaluated.” (emphasis added)

HHRA at 5-12, 5-15, 5-16. More plainly stated, the HHRA does not assess the most dangerous CWM exposure pathway to the Children – direct airborne exposure through explosion or other airborne



migration -- and the HHRA admits that the Test Pits closest to the Children (human receptors in USACE terms) present an unassessed potential risk. The HHRA acknowledges that the “uncertainty is high” for finding additional CWM in the areas closest to the Children. But the HHRA has been intentionally restricted to evaluating only one exposure pathway – soil – even when other exposure pathways could tragically occur, because USACE believes that these pathways “cannot be quantitatively evaluated”.

The MEC HA and HHRA demonstrate that the USACE is proceeding to excavate known CWM areas yards away from the Children while relying on hazard assessments that by their express terms do not evaluate the potential CWM risks to the Children. USACE is knowingly exposing the Children to imminent and substantial risks from CWM based on two risk assessments that are transparently and dangerously deficient in two material aspects: (1) the MEC HA and the HHRA do not assess all CWM risks; and (2) neither the MEC HA nor the HHRA assess the special risks of direct airborne CWM exposure to children.

Petition #1 for Immediate USEPA Action: Investigate and Correct USACE Failure to Assess Risks to Children in Violation of Executive Order.

Executive Order 13045, Attachment 4, states:

“A growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health and safety risks... each federal agency (a) shall make it a high priority to identify and assess environmental health risk and safety risks that may disproportionately affect children; and (b) shall insure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.”

The above-noted deficiencies of the USACE HHRA and MEC HA constitute a clear violation of the words and intent of E.O. 13045. I request that (a) USEPA initiate a prompt investigation of how and why the special CWM risks to the Children have not been adequately assessed by USACE, and (b) USEPA use its authorities under Section 7003 to issue an Administrative Order requiring USACE to undertake and complete a new CWM exposure hazard assessment specific to the Children.

Petition #2 for Immediate USEPA Action: Issuance of Administrative Order Requiring USACE to Arrange for the Children’s Relocation Until USACE Concludes CWM and Munitions Excavations at 4825 Glenbrook.

Greater endangerment to the Children than the deficiencies of the USACE hazard assessments is created by the immediate risks to the health and safety of the Children from the current USACE Site Specific Work Plan (SSWP, Attachment 5) for CWM and Munitions/Explosives excavations at 4825 Glenbrook:

1. *USACE Is Seriously Underestimating the “Maximum Credible Event” (MCE) for CWM/Munitions Protections.* The SSWP’s protective measures, temporary emergency exposure limits (TEEL) for humans, and containment structures are all based on USACE’s determination of the MCE for 4825 Glenbrook. USACE uses an MCE of the evaporative release of 1 liter of arsenic trichloride, but a picture of previous glass containers with CWM previously found near



4825 Glenbrook clearly exceed 1 liter. See Attachment 5, p. 3-27, Attachment 6. Moreover, the HHRA and MEC HA acknowledge that in addition to arsenic trichloride present at Test Pits 120 and 134, actual chemical weapons such as mustard and lewisite in uncovered intact containers, along with ABPs and HTW, were also discovered. Consequently, USACE's estimation and analysis of the maximum quantity and physical condition of the MCE does not square with the actual evidence of CWM discoveries at or near 4825 Glenbrook. This faulty analysis destroys the credibility and effectiveness of the SSWP's protective measures and the TEEL for humans. The potential victims of USACE's faulty MCE are the Children, along with USACE personnel and contractors.

2. *USACE May Again Be Mistakenly Undertaking "Low Probability" Work in Areas Without CWM Containment Structures.* At another CWM site near 4825 Glenbrook, USACE conducted a "low probability" investigation without a containment structure. In the backyard of one family with a child on Rockwood Parkway (Lot 18), USACE made two mistakes: first, USACE was incorrect in its assumption that there was a low probability of finding CWM in Lot 18 – a vial of lewisite was discovered; secondly, the USACE initially conducted the Lot 18 work without a containment structure. Once more, this week USACE is again conducting low probability activities under the SSWP without containment structures. If USACE is mistaken again as to the probability of finding CWM and needing containment structures, and if an airborne release of CWM accidentally occurs, then once again among the victims will be the Children.
3. *USACE Could Be Fatally Underestimating the Explosive Blast and Fragmentation Risks of the 4825 Glenbrook Excavation to the Children at 4830 Glenbrook.* The HHRA acknowledges that munitions and explosives of concern (MEC) are "likely" to be encountered in the uninvestigated areas of Test Pits 120 and 134. The MEC HA attempts to assess how MEC consisting of 75 millimeter projectiles and other fragmentation munitions could be hazardous to "additional human receptors" – a euphemistic reference to the Children who could be killed by pressure blast or explosive fragmentation. The MEC HA admits that human receptors – read the Children—within approximately 120 feet of the 75 millimeter projectiles found at Test Pits 120 and 134 would be within the "hazardous fragmentation distance". MEC HA at R-10; see also SSWP Figure 3-3. Despite these explicit acknowledgments that the Children are in a zone of danger from MEC "likely" to be encountered in the current excavation, the USACE believes (hopes) its protective measures will be sufficient to protect the Children. Given the inherent instability of decades-old munitions and explosives, and non-remote possibility of an accident or other unforeseen event that could result in an MEC explosion and/or fragmentation, USACE's failure to relocate the Children could be a fatal underestimation of a clear and present danger.

Faced with the clear risk of accidental explosion of MEC/CWM as close as 15 yards from the Children, USACE had a choice to build explosion-resistant containment structures for excavation at 4825 Glenbrook. For reasons other than maximizing safety to the Children, USACE chose to forego the more protective structures previously used at in favor of an "Engineering Control Structure" (ECS), a tent-like structure with virtually no explosion resistance. SSWP at 2-1 – 2-4, 3-15. As a result, an accidental explosion at 4825 Glenbrook could quickly destroy the ECS tent and release fragments and CWM into the air – and directly at the Children.



4. *USACE Is Ignoring the Potential Danger from CWM, ABPs and MEC Migrating Toward the Children's Front Yard.* Both the MEC HA and the HHRA discuss the potential for migration of CWM, ABP's and MEC. The Children live directly down-gradient from 4825 Glenbrook, and the Children are the humans most at-risk from groundwater migration of CWM and ABPs, see HHRA Figure 3-1, as well as from MEC being exposed through frost heaves. MEC HA at R-5. A clear example of the groundwater migration risk the Children are currently experiencing is the discovery of perchlorate in a groundwater monitoring wells in the Children's front yard. Attachment 7. While it is unclear whether the origin of the perchlorate is 4825 Glenbrook or some other up-gradient site owned by American University, the facts are that perchlorate is a explosives-related contaminant, and perchlorate is migrating toward the Children. The groundwater exposure pathway to the Children from CWM, ABPs and MECs has been acknowledged as a risk by USACE and the danger to the Children and their residence from migrating contaminants has been confirmed by recent groundwater sampling. Nevertheless, USACE is refusing to take any steps to protect the Children from migrating contaminants that could become airborne after leaking into the Children's down-gradient residence.

I want to emphasize that the Spring Valley Restoration Advisory Board (RAB) comprised of interested citizens has supported relocation of the Children (Attachment 8). The RAB recognized that special consideration should be given to Children and that special precautions such as relocation are appropriate when the level of endangerment is so substantial. The Children and their parents are grateful for the RAB's support.

On behalf of the Children, Luisa Z. and Lucas Z., I am requesting that you look at Attachment 1 and take a personal interest in this petition, in recognition of the risks to these Children and the requirements of Executive Order 13045. I sincerely believe that swift action by USEPA is the only effective means of averting a foreseeable, mortal danger to the Children.

Sincerely,

Garvey Schubert Barer

By 
Harold G. Bailey, Jr.

Attachment 1 – Pictures of Children (for USEPA only)
Attachment 2 – Portions of HHRA
Attachment 3 – Portions of MEC HA
Attachment 4 – Executive Order 13045
Attachment 5 -- Portions of SSWP