

March 17, 2016

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Environmental Protection

Agency

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Fish and Wildlife Resources

Stephanie Brock

Radiation Health Branch

Support Services

EHI Consultants, Inc.

111 Memorial Drive

Paducah, KY 42001

Phone 270.554.3004

Fax 270.554.3248

www.pgdpcab.energy.gov

info@pgdpcab.org

Agenda for the March Board Meeting

6:00

Call to order, introductions

Review of agenda

Federal Coordinator Comments

-- 5 minutes

Liaison Comments

-- 5 minutes

Presentation

-- 20 minutes

- Presentation - Deactivation Update – Fluor Federal Services

Administrative Issues

-- 60 minutes

Board Recommendations

- *Recommendation 16-XX: DOE Funding Priorities for the FY2018 Budget*
- *Recommendation 16-XX: SWMUs 211-A and 211-B Characterization and Response*
- *Recommendation 16-XX: C-400 Interim Remedial Action Phase IIb Steam Injection with Sampling Under the Building*

National Chairs Recommendations

- EM SSAB Chairs Meeting – Top Issue
- DRAFT EM SSAB Chairs Recommendation: Supplemental Environmental Projects
- Proposed EM SSAB Chairs Recommendation : Inclusion of Community Investment Clauses

Public Comments

-- 15 minutes

Final Comments

-- 10 minutes

Adjourn

Fluor Federal Services, Inc.



**March Project Update
Citizens Advisory Board
March 17, 2016**

FLUOR®

Removal of Hazards

- ~252,000 gallons of lube oil were removed from the process buildings and shipped for disposal.
- Removed PCB oil from the 69 PCB transformers located in C-337.
- 113,000 gallons of lube oil was reused as a rinsing agent for PCB oil totes decontamination.
- ~200,000 gallons of PCB oil has been drained, packaged, and shipped.



R-114 Disposition



- 8.3 million pounds of refrigerant (R-114) is in the process equipment or stored on site.
- Removal of ~450,000 lbs. of R-114 into ISO containers and rail cars started in the fall of 2015.
- 12 additional rail cars are being certified for service.
- Issued Request for Proposal (RFP) for R-114 disposition on October 15, 2015.
- Proposals were received on December 14, 2015. Technical evaluations are in progress.

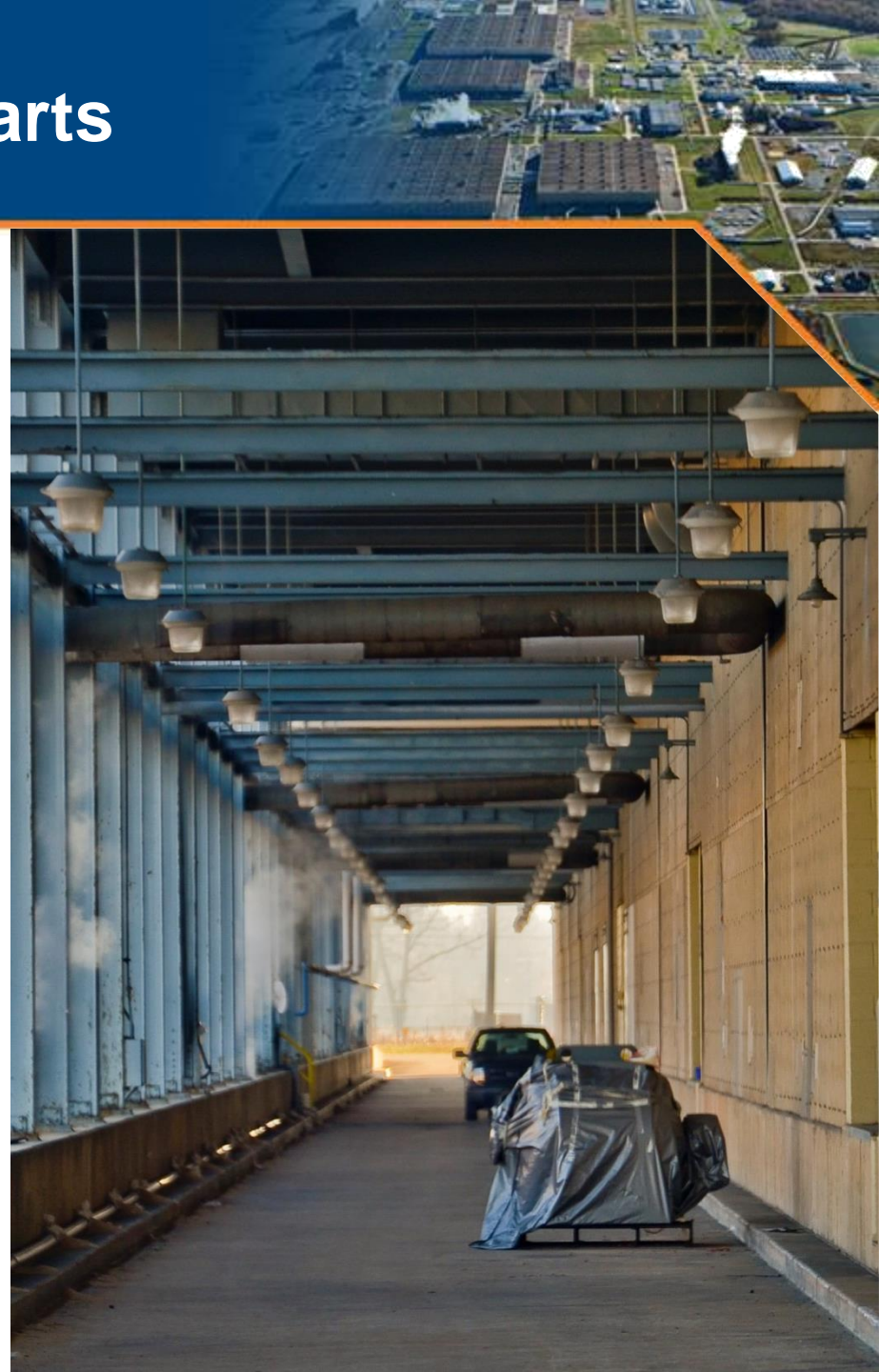
Fissile Deinventory



- Completed C-720 Maintenance and Stores building fissile spare parts deinventory project; shipped 10 tons of waste off-site.
- Ninety percent of all the fissile piping and valving in C-409 have been removed and packaged for off-site disposal.
 - Removed the six tanks which had the majority of uranium deposits.
 - Remaining tanks have been borescoped and will be decontaminated in place.
- Current workforce has over 200 certified Fissile Material Handlers.

Loose Material & Spare Parts

- Nearly 250 items have been identified for reduction from the fissile material inventory of loose material and spare parts in C-337.
- Disposition of these material supports a criticality incredible determination for C-337.
- To date, 17 items have been dispositioned; another 59 items are ready for packaging.
- Some items will be transported to C-400 or C-720 where it will be decontaminated and size reduced for disposal.



Roof Repair



- Roof repairs for the enrichment facilities are complete.
- 74 acres, or 3.2 million ft², of roofs were resurfaced with new material that comes with a 30-year warranty.

Roof Repair

Roof Repair Video Placeholder

Uranium Deposit Removal



- All ten systems to remove uranium deposits from the gaseous diffusion plant have arrived on site.
- Facility modifications at the first process building (C-337) have been completed.
- Operational Readiness Review (ORR) preparation is in progress. Once ORR is complete, deposit removal can begin.

Inactive Facilities



- Since November, 11 inactive facilities have been demolished.

- ✓ C-212 Office Building
- ✓ C-212-A Main Guard Post
- ✓ C-215 Portals 18 & 19
- ✓ C-216 Post 47
- ✓ C-229 Post 229
- ✓ C-408 50-ton Truck Scale
- ✓ C-601-D Fuel Oil Tank
- ✓ C-616-G Tanks
- ✓ C-746-B South Warehouse
- ✓ C-746-M Waste Storage
- ✓ C-801 Bus Shelter

GW NW Plume Pump-and-Treat System

- Modernization of the Northwest Plume Pump-and-Treat operations were completed in February.
- First upgrade since Pump-and-Treat was constructed in 1995.
- Four new ion-exchange tanks were installed and tied into the existing C-612 building. Piping, valves, and actuators were also replaced.
- Since completion, operations have been on-line 100% of the time.



C-400 Treatability Study

- The C-400 Phase IIb Steam Injection Treatability Study Report was issued to EPA and KY for review on December 21, 2015.
- This report addresses the steam effectiveness in the Regional Ground Aquifer (RGA).
- Kentucky comments received on March 3, 2016.
- EPA comments received on March 7, 2016.
- DOE, EPA, and Kentucky are working together to determine the best path forward.

Southwest Plume Oil Landfarm (SWMU 1)

- Completed deep soil mixing soil treatment at SWMU 1 on October 8, 2015.
- Completed lime stabilization of loose soils created by the mixing process on November 13, 2015.
- Completed demobilization of the 200 ton crane on November 4, 2015 and began site restoration.
- Currently installing wells for post-treatment sampling.

Site During Mixing



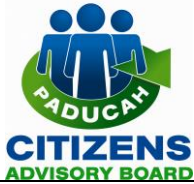
Site Restoration Underway



Burial Grounds SWMU 4



- Four wells were installed at SWMU 4 as part of Phase V, the final phase of current fieldwork.
- Excavators began digging test pits to gather subsurface information from 0 to 20 feet below the ground surface. All test pits are complete.
- A Remedial Investigation report is scheduled to be submitted in summer 2016.



PADUCAH GASEOUS DIFFUSION PLANT CITIZENS ADVISORY BOARD

115 Memorial Drive • Paducah, Kentucky 42001 • (270) 554-3004 • info@pgdpcab.org • www.pgdpca.org

Paducah Gaseous Diffusion Plant Citizens Advisory Board Meeting Minutes March 17, 2016

The Citizens Advisory Board (CAB) met at the Environmental Information Center (EIC) in Paducah, Kentucky on Thursday, March 17th at 6:00 p.m.

Board members present: Ken Wheeler, Basil Drossos, Renie Barger, Judy Clayton, Tom Grassham, Dick Rushing, Cindy Ragland, Shay Morgan, Bill Murphy, Victoria Caldwell and Nancy Duff.

Board Members absent: Kevin Murphy, Cindy Butterbaugh, Carol Young and Mike Kemp.

Board Liaisons and related regulatory agency employees: Brian Begley, Gaye Brewer (KDWM); Julie Corkran, EPA (by phone).

DOE Deputy Designated Federal Official: Jennifer Woodard, DOE.

U.S. Department of Energy (DOE) related employees: Buz Smith, DOE; Cory Hicks, Mark Duff, Steve Christmas, Fluor Paducah (Fluor); Tammy Courtney, Swift and Staley (SST); Eddie Spraggs, Pro2Serve (P2S); Eric Roberts, Jim Ethridge, EHI Consultants (EHI).

Public: Aaron Gunn, First Response, Inc.; Carolyn Green, Professional Environmental Engineers, Inc.; Kevin Latta, CSI; Lessie Price, AECOM; Betsy Madru, Waste Control Specialists (WCS).

Introductions:

Barger opened the meeting at 6:00 pm, and asked for introductions and then reviewed the Agenda, adding one item.

Woodard reported that the Presidential budget for the site for FY2017 was for \$272 million.

Smith reported that the DOE Science Bowl was a success. He indicated that the participation from local schools was the largest that they had had.

Begley said that several documents had been worked between his office and DOE recently.

Barger then turned the meeting over to **Mark Duff** from Fluor Federal Services for a deactivation update presentation. He reported, at this time, about ninety percent of the lube oil used during operations at the plant, had been removed. **Duff** also reported that they were in the process of obtaining more rail cars to offload the Freon that is located in the process buildings, so that it can be removed. He also said that fissile material was being removed from the buildings.

Murphy asked if what was shipped from the C-720 Maintenance Building. **Duff** indicated that it was primarily valves and pumps.

Duff continued by reporting that all of the process buildings now had new roofs.

Drossos asked what the process was for removing “holdup” in the process. **Duff** explained that the U^2OF^2 reacted with ClF^3 and was trapped and removed.

Duff then reported that the Northwest Plume treatment system had been completely upgraded. He also reported that the deep-soil mixing project performed on the southwest plume had been a success.

Murphy indicated that he could not see what would be classified material that was in a burial ground. He added that he wasn’t asking what it was, just that he didn’t see how it would be because the gaseous diffusion process was well documented. **Woodard** said that there were parts of the process that had not been de-classified and still had to be protected.

Wheeler asked if there were no options to dispose of the Freon mentioned earlier. **Duff** indicated that there were several bidders but there were some questions that needed to be answered before proceeding with disposal.

Administrative Issues:

Roberts introduced a draft letter from the CAB requesting an extension on the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant: Solid Waste Management Units 5 & 6 Public Comment Period. This extension would allow the CAB to submit comments as a group before the end of the established comment period expires. The letter was voted on and approved by a vote of 11-0.

Clayton then introduced *Recommendation 16-01: DOE Funding Priorities for the FY 2018 Budget* for consideration and vote. After discussion and some rewording, the recommendation was passed by a vote of 11-0.

Murphy then introduced *DRAFT Recommendation 16-XX: SWMUs 211-A and 211-B Characterization and Response*, only as a point of information. This recommendation would be considered and voted on at a later date.

Murphy then introduced *Recommendation 16-02: C-400 Interim Remedial Action Phase IIb Steam Injection with Sampling Under the Building* for consideration and vote. After discussion the recommendation was passed by a vote of 11-0.

Barger then introduced the suggested Top Issue to be presented at the EM SSAB Chairs’ meeting. **Roberts** further explained the document. **Murphy** asked if the items were listed in priority. It was determined that the priority would not make a difference. **Caldwell** asked if this would be a business request or a community request. **Roberts** indicated that it was really both.

Barger then introduced an EM SSAB Chairs’ meeting recommendation concerning supplemental environmental projects. **Roberts** further explained the recommendation. **Clayton**

asked where the funds came from to support the supplemental project. **Roberts** indicated that it usually came from the contractor's profit. The recommendation was passed by a vote of 11-0.

Roberts then introduced a proposed recommendation by the Portsmouth SSAB to be presented at the upcoming EM SSAB Chairs' meeting. The recommendation proposed that a contractor that wins a contract return a certain amount of their profit back to the community. **Clayton** asked if contractors are required to "buy local" in performance of their contracts. **Woodard** explained that it was not a requirement but the contractor was evaluated against that issue. **Morgan** questioned the listing of "charitable giving" in the document because that term could be interpreted in different ways. **Grassham** disagreed with the idea of making it a requirement of a contract based on the idea of hopefully getting longer termed contracts and this would lessen the contractors profit discouraging a longer term.

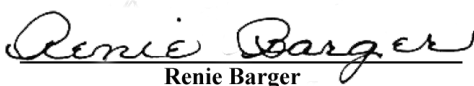
Public Comments: none

Final Comments:

Grassham asked about the status of giving public tours of the PGDP site. **Smith** indicated that the media plan was waiting for approval and should have a decision within the next month.

The meeting adjourned at 7:56pm.

Approved by **Renie Barger, Chair**



Renie Barger

Working in the Community



- The annual DOE Regional Science Bowl was held for middle school teams on February 5th and high school teams February 19th.
- Calloway County was the middle school champion and Gatton Academy from Bowling Green, KY won the high school competition.
- Both teams will compete nationally this spring.



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DRAFT Recommendation 16-XX: DOE Funding Priorities for the FY 2018 Budget, Rev. 7

Revised March 16, 2016

Background

The Department of Energy (DOE) took control of the Paducah Gaseous Diffusion Plant (PGDP) in October of 2014 and the site has been transitioned to DOE. In the President's FY2017 budget request, \$272 million was proposed to execute planned deactivation activities, as well as meet ongoing operating and remediation commitments at the PGDP. This funding is nearly \$50 million below the FY2014 enacted budget.

To continue to meet planned activities, DOE needs to provide consistent funding for FY2018 and beyond. Recognizing the current budget environment, the CAB believes DOE should provide funding for the site at the appropriate annual funding level equal to the FY2014 enacted level of \$322 million, adjusted for inflation, to meet FY2018 base operations, enforceable commitments, and other priorities and planning packages to allow for progression toward more demolition activities.

Additionally, the current deactivation contract is set to expire in July of 2017. It is vital that we maintain the momentum and safety record established by Paducah's experienced, highly trained workforce that is currently in place at the site.

The CAB was provided the following generic list of categories (in draft form) for the FY2018 Integrated Priorities List (IPL).

1. **IMMINENT THREATS** – No activities at Paducah currently are identified in this category.
2. **BASE OPERATIONS**
 - Security
 - Surveillance and Maintenance
 - Utility Operations
 - Deactivation/Stabilization
 - Infrastructure Optimization
 - Waste Operations
 - UF6 Cylinder Maintenance
 - DUF6 Conversion Operation and Maintenance
3. **ENFORCEABLE COMMITMENTS** – Federal Facility Agreement (FFA)
 - On-site Waste Disposal Facility (if selected)
 - C-400
 - Burial Grounds – SWMUs 5 and 6
4. **OTHER PRIORITIES/PLANNING PACKAGES**

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- Accelerated Deactivation
- Accelerated Environmental Restoration
- Accelerated Decontamination and Decommissioning

Items listed under Base Operations must be fully funded in order for the site to continue operations. The CAB recommends that all Enforceable Commitments and Other Priorities/Planning Packages listed on the 2018 Draft IPL be fully funded.

Enforceable commitments should be funded to comply with the Federal Facility Agreement milestones. Continued progress toward environmental remediation milestones remains a top priority of the CAB. Since the site has been transitioned back to the DOE, the opportunity exists for regulatory agencies involved with the FFA to re-evaluate site-wide remediation strategies.

While we all agree that contamination of the aquifer is of grave concern, DOE would be short-sighted in focusing its limited resources primarily upon Groundwater remediation. Immediately after discovery of contamination off-site, DOE took actions to mitigate exposure to the public. The CAB encourages the DOE to plan a balanced approach to remediation of Groundwater, deposit removal, and accelerated deactivation, recognizing the potential health, safety, and environmental risks all of these pose.

It is important for DOE to conduct projects so that there is work in the planning stage (field work, document preparation, agreements), preparation stage, and execution stage. In this way, projects move forward and steady work is provided to the workforce. Additionally, sequencing is necessary so that projects dovetail into one another. For example, assuming a CERCLA cell will be built on-site, an available cell is needed before SWMU 4 is remediated. Dirt from the Soils project can be used as fill dirt. Remediation, decontamination and demolition sequencing should complement adaptive reuse desires of the community.

While there are no Imminent Threats listed at the Paducah site, the CAB is aware that the items listed under Other Priorities/ Planning Packages are critical to the safety of future workers and the environment. The CAB does not wish to see these additional items ignored to the point where risk level increases. Elimination of these potential risks and safety hazards is the most cost effective long term strategy.

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Recommendation

The CAB recommends:

- DOE fully fund the Draft List of 2018 IPL activities.
- DOE maintain an appropriate annual funding level equal to the FY2014 enacted level of \$322 million, adjusted for inflation, in future budget requests. This will allow the site to better meet enforceable milestones, maintain facilities in a safe condition, allow for accelerated deactivation activities, uranium deposit removal, plan appropriately to maintain a skilled workforce and minimize chances of increased contamination threats at the Paducah site.
- Ensure that throughout the myriad of contracting scenarios, the current deactivation work continue seamlessly at the Paducah site.



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DRAFT Recommendation 16-XX: SWMUs 211-A and 211-B Characterization and Response, Rev. 3

Revised March 16, 2016

Background

The C-720 Maintenance and Stores building on the PGDP site was where most of the plant's equipment and instrumentation fabrication and repairs were performed. The C-720 Building encompasses nearly 337,000 square feet for the various large machine tools, motor and electronic repair facilities, large parts storage areas, loading docks, and paint spray facilities. A required part of certain equipment repair involved cleaning the used parts, often with trichloroethylene (TCE). Use of TCE was discontinued by 1993 once it was determined to be a carcinogen and was found in dangerous quantities in the aquifer under and surrounding the PGDP plant. Anecdotal stories suggest that small quantities of used TCE were often poured down floor drains or possibly just dumped on the ground when parts were cleaned outside the building. The C-720 Building is a contributing source of groundwater contamination at the plant.

Solid Waste Management Units (SWMU) 211-A and 211-B are areas located immediately northeast and southeast of C-720, respectively. These areas are identified as source locations for TCE. Since the aquifer flow direction is toward the existing pump and treat system, in 2011 DOE recommended a long-term monitoring (LTM) approach. Paducah Citizens Advisory Board (CAB) recommendation 11-06 strongly encouraged DOE to take a more active approach to remediation at these sites, including additional sampling to determine if a dense non-aqueous phase liquid (DNAPL) form was present.

Additional sampling in the Regional Gravel Aquifer (RGA) below the Upper Continental Recharge System (UCRS) from depths of 65 to 100 feet was completed in 2015 for both SWMU 211-A and 211-B. While some TCE concentration readings in 211-A were up to 1200-1400 ppb range (see attachment), reading differences between up gradient and downgradient sites were within the range that suggested there are no current TCE source contributions in that area. The concentration at the 65 foot depth at 211-B, however, was 10,000 ppb, a level just below what would suggest the presence of the DNAPL phase. Accounting for the measurement uncertainty, that reading strongly indicates the presence of DNAPL, and would suggest that something other than a passive monitoring approach be taken. Since there was just a single boring in 211-B, no concentration gradient could be assessed to determine actual source locations. The 211-B measurement point was at the very southeastern edge of C-720, so the TCE concentration beneath the footprint of the building was not determined.

The December 2015 Addendum to the SWMUs 211-A and 211-B Final Characterization Report analyzed the new data and made suggestions for future actions. It suggested that the conceptual site model (CSM) for the 211-A location was valid and recommended LTM for the northeastern portion where the TCE concentrations were lower. It recommended bioremediation and LTM

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for the southwestern portion where the 1200-1400 ppb readings were obtained. The CSM for 211-B was considered invalid because of the potential for DNAPL, and other treatment methods would be required for remediation. It was suggested that appropriate parties hold discussions to evaluate the impact of the possible presence of DNAPL and what remediation options might be feasible.

The presence of the large C-720 Building between these two small sites complicates any plan of action for remediation. It is unknown if locations within the footprint of the building could have been significant TCE sources, or how far the DNAPL region may extend underneath or away from the building. If a concentration similar to what was measured at 211-B extends under the building, the overall region to be addressed may be several times larger than currently estimated.

Recommendation

The CAB recommends:

- **That DOE consider additional sampling in the proximity of the single 211-B sampling point. The potential for the presence of DNAPL, especially under the footprint of the large C-720 building, would complicate any remediation effort.**
- **If current budgets do not allow this additional sampling flexibility, the CAB strongly encourages Paducah DOE personnel to pursue all appropriate channels to obtain additional funding for the SWMU 211-B projects.**
- **Continued support for LTM of the northeastern portion of SWMU 211A and the combination of bioremediation and LTM for the northwestern portion.**



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**DRAFT Recommendation No 16-XX: C-400 Interim Remedial Action Phase
Iib Steam Injection with Sampling Under the Building, Rev. 3**

Revised March 17, 2016

Background

The C-400 Building on the PGDP site was where many of the large components used in the gaseous diffusion process were periodically cleaned. The building contained large vats where the components were dipped for cleaning. Trichloroethylene (TCE) was the degreaser used to clean many of these components. A large tank was located on the southeast side of C-400 to store the quantities of TCE that would be needed for the various cleaning operations. Use of TCE was discontinued by 1993 once it was determined to be a carcinogen and was found in dangerous quantities in the aquifer under and surrounding the PGDP plant. Investigations into the source of the TCE revealed leaks from piping connecting the outside storage tank, which was subsequently removed. An extensive series of water sampling wells helped identify the approximate profiles of TCE concentration in the aquifer. The TCE profiles in the aquifer suggest there were likely several sources of TCE discharge around the plant, but the peak concentrations point to the area around C-400 as source for the highest TCE concentrations. It is impossible to accurately estimate how much TCE may have been released around C-400 due to the piping leaks over the many years of use. It should be noted that TCE was considered a safe cleaning agent at the time it was used as a degreasing cleaner, and was commonly used in many industrial applications around the world.

The Department of Energy has implemented a number of activities to address the health risks associated with the TCE in the aquifer. Water wells used in private residences around the PGDP plant site were capped and a safe potable water supply was provided. Once the scope of the TCE concentration in the aquifer was determined, various remediation methods were developed to protect human health. These remediation methods were limited to what would not interfere with the ongoing uranium enrichment operations that continued at the PGDP site until 2013. Large scale well water pump-and-treat systems were installed at the plant perimeter to remove the TCE from the groundwater. In 2005, an electrical resistance heating (ERH) system was developed that would heat the groundwater at depths up to 60 feet to separate out the more volatile TCE. Three ERH arrays were installed around the C-400 Building and removed over 1700 gallons of TCE, but were limited to relatively small footprints around the building. Another method to heat the aquifer water using steam to separate out the TCE was tested in mid-2015. Steam generated by a conventional package boiler was injected down a well while temperatures were monitored at various points around the injection well. The results of the tests allowed DOE to assess the site specific performance of this system so they could model its effectiveness for a large scale application. The DOE, EPA, and Kentucky are evaluating the effectiveness of the steam and in the planning stage for a large scale implementation of this steam injection remediation system for the area around the southeast corner of the C-400 Building.

The Paducah Citizens Advisory Board (CAB) is encouraged by the progress that has been made in this steam injection remediation process. The C-400 Building prevents a good understanding of the TCE concentrations underneath the footprint of the building, however, as it essentially sits on top of the peak TCE concentrations in the aquifer below. While leakage from the external TCE storage tank was known to be a major contributor to the TCE in the aquifer, it is not known if there may have been similar leaks from piping under the building or from the large vats inside. Ongoing usage of the building during enrichment operations prevented drilling through the slab or immediately adjacent to the C-400 building, so there is no direct knowledge of TCE concentrations in that region. Without a clear understanding of the TCE that may be located under C-400, the steam injection remediation process may not be as effective as desired, or may even produce unforeseen detrimental results.

The CAB does not want to disrupt the DOE schedule for evaluation of the large scale steam injection project. Also, it recognizes that there is no funding currently allocated for further exploratory wells under C-400. Better characterization of TCE directly under C-400 is critical to future remediation of the TCE at this major source location.

Recommendation

The CAB recommends:

- **That DOE develop an accelerated plan for sampling of TCE underneath the C-400 building footprint. Drilling for such sampling may involve penetrations through the building slab, angled drilling around the building perimeter, or a combination of both as local conditions and safety considerations permit.**
- **That DOE review their funding allocations to determine if the cost of this TCE sampling project can be absorbed within their near term future budgets that have already been approved, or are currently in the approval process. If current budgets do not allow that flexibility, the CAB strongly encourages Paducah DOE personnel to pursue all appropriate channels to obtain additional funding for this project.**
- **That DOE make every effort to conduct this TCE sampling project without disrupting or delaying their full scale steam injection remediation schedule.**

Paducah Citizens Advisory Board

A Commitment to Appropriate Annual Funding Levels

DOE maintain an annual funding equal to the FY 2014 enacted level of \$322 million (adjusted for inflation). This will allow the site to:

- Meet enforceable milestones
- Maintain facilities in a safe condition
- Allow for aggressive deactivation activities
- Maintain a skilled workforce to promote safety and health as well as minimizing costs associated with repeating layoff and hiring cycles.

PROPOSED
ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

Hanford
Oak Ridge

Idaho
Paducah

Nevada
Portsmouth

Northern New Mexico
Savannah River

Dr. Monica Regalbuto
Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Dr. Regalbuto:

Background

Across the U.S. Department of Energy's (DOE) Office of Environmental Management (EM), billions of dollars are spent on cleanup work at sites that were part of the nation's nuclear development and weapons programs. The communities where these activities occurred were forever changed and experienced positive and negative impacts as a result of the government's presence.

The government has a responsibility to clean up these sites in a manner that is protective of human health and the environment. But the government also has a role to play in the future of these communities after cleanup activities are complete. As evidenced by DOE's admirable endeavors related to reindustrialization/property transfer, educational outreach programs, and other worthwhile community causes, DOE attempts to be a good partner in all of the affected communities with which it works.

It is in that spirit the EM Site Specific Advisory Board makes the below recommendation related to procurement.

Observations and Comments

There are examples across the complex where communities have benefitted from contractors that are contractually obligated to use a portion of their fee to reinvest in the affected communities. The requirements have included local procurement quotas; internships, scholarships and other educational outreach; charitable giving; and community development grants, among others.

Intent

The intent of this recommendation is for DOE contractors to have a central role in providing assistance to the communities where they work and live. The impacts of the actions by these contractors have not only resulted in positive community progress, but has built healthy relationships among DOE, contractors, and local stakeholders.

Recommendation

The EM SSAB recommends DOE include community investment clauses in ALL contracts related to cleanup work within EM projects. Regardless of the size of a contract, the EM SSAB believes all contractors have an obligation to serve (financially and otherwise) the communities that are impacted by their work.

Further, any subcontractors that perform work at these sites should be evaluated by how they contribute to the local communities and that interaction should be a consideration when subcontractors are chosen to perform work.

As you know, these contracts are highly competitive because they are lucrative for the companies that perform this work. The EM SSAB's desire is to not have overly burdensome or restrictive procedures put in place, but rather to encourage reinvestment into the communities that have shown tremendous loyalty and sacrifice to the mission over the years; by requiring contractors to provide a range of assistance to these host communities.

Summation

Whether it be a scholarship for a high school senior, goods being purchased from a local hardware store, a grant to a local arts project, or resources provided to a local food bank, these types of efforts can make a tremendous impact on a community.

DOE-EM can play a role in these good works by requiring these activities, and ones like them, through all future contracts at EM sites. In short, it is our expectation that DOE ensure contractors provide meaningful assistance and act as good neighbors while they are a part of our various communities.

As always, thank you for your consideration regarding our work.

ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

**Hanford
Oak Ridge**

**Idaho
Paducah**

**Nevada
Portsmouth**

**Northern New Mexico
Savannah River**

Dr. Monica Regalbuto
Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Dr. Regalbuto:

Background

The Department of Energy (DOE) Environmental Management (EM) sites with legacy waste awaiting permanent off-site disposal have been, or could be, subject to large fines from their respective regulatory agencies for failure to meet legally mandated deadlines for permanent disposal of legacy waste. For example, the New Mexico Environment Department recently fined Los Alamos National Laboratory (LANL) and the DOE Waste Isolation Pilot Plant (WIPP) \$54 million for failures connected to a radiation leak when a drum of waste processed at LANL breached a year ago at WIPP, shutting down the nation's nuclear waste repository. LANL has also acknowledged it will miss deadlines set for later this year for long-term waste cleanup at LANL set in a binding consent decree.

Payment of real or potential multi-million dollar fines has the effect to further reduce the ability of these EM Sites to successfully meet mandated and legally binding cleanup goals. In most cases states have the option to use the funds collected on fines for work unrelated to the issues that led to the fine or for the direct benefit of residents of the affected area. A more effective use of funds would be to use the money collected from fines to fund supplementary environmental projects, given that EM funding allocated to DOE and/or the National Nuclear Security Administration for EM work should be used to protect and/or improve the health and environment of the citizens of the geographic area and population affected by the previous disposal of legacy wastes at the DOE sites.

Comments and Observations

In lieu of fines and penalties that could be required and instituted at the respective facilities, the EM Site-Specific Advisory Board (SSAB) recommends that DOE-EM consider Supplemental Environmental Projects (SEPs) as a beneficial and amenable means to help accomplish the legally mandated cleanup goals at DOE facilities.

An SEP is defined as an environmentally beneficial project which a violator voluntarily agrees to undertake in settlement of an enforcement action but which is not legally required by law. In

addition, the U.S. Environmental Protection Agency (EPA), and most state regulatory agencies, allow for the implementation of SEPs in lieu of a portion of civil penalties calculated under the Civil Penalty Policy, when such payment of fines and penalties are imposed;

There are seven common categories of projects that can be acceptable SEPs:

- Public Health
- Pollution Prevention
- Environmental Protection
- Environmental Restoration
- Environmental Assessments and Audits
- Environmental Compliance
- Renewable Energy

Recommendation:

The EM SSAB recommends that DOE-EM;

1. Pursues SEPs in lieu of fines and penalties issued by regulators.
2. Pursues SEPs, in lieu of new fines and penalties imposed by a new compliance order issued by regulators for violations.
3. Proposes SEPs in settlement of enforcement actions by regulators that meet the following restrictions:
 - Are consistent with the EPA SEP policy and Region implementing guidance
 - Are consistent with or advances the Resource Conservation and Recovery Act
 - Have adequate nexus to the violation as determined by the relevant regulators sole discretion, with site stakeholder and public engagement.
 - Involve the management or administration of the project or funds by the relevant regulator; (state and/or EPA) and benefits the community and/or environment near the impacted site by the violation while providing educational opportunities with contractors and public institutions of higher education.
4. Uses SEPs to primarily benefit the community that is directly impacted by the violation.

In Summary:

It is the intent of the EM SSAB to ensure that DOE-EM funds programmed and allocated for the cleanup and mitigation of legacy waste disposal at sites are used for those purposes and for the benefit of the citizens of the affected areas, where the basis of the violations cited by the relevant regulator occurred.

References:

1. EPA Guidelines for Supplemental Environmental Projects
2. State Supplemental Environmental Project Policy Act/Regulations

Steve Hudson, Chair
Hanford Advisory Board

Herbert Bohrer, Chair
Idaho National Laboratory
Site EM Citizens Advisory
Board

Donna Hruska, Chair
Nevada SSAB

Doug Sayre, Chair
Northern New Mexico
Citizens' Advisory Board

David Hemelright, Chair
Oak Ridge SSAB

Ben Peterson, Chair
Paducah Citizens
Advisory Board

William E. Henderson II, Chair
Portsmouth SSAB

Harold Simon, Chair
Savannah River Site
Citizens Advisory Board