

**From:** lance.traver [REDACTED]  
**Sent:** Tuesday, April 29, 2008 10:54 AM  
**To:** greg.burbage [REDACTED]  
**Cc:** betsy.westover [REDACTED]; betsy.westover [REDACTED]; bob.bayer [REDACTED] Groome, Chadi D.; clayton.shedrow [REDACTED]; drew.grainger [REDACTED]; greg.burbage [REDACTED] henry.boler [REDACTED] Dimarzio, John A.; joseph.damelio [REDACTED]; linda.nass [REDACTED] preston.leeper [REDACTED] ralph.cansler [REDACTED]; richard.koenig [REDACTED] wayne.farrel [REDACTED]  
**Subject:** RE: PuD SEIS Data Call Request for SAIC

**Attachments:** KAMS-KIS-CSSC Data Call-040408.doc

I have provided the information you requested by referencing the appropriate documents. All of the referenced documents are in DCC. If you need copies of any of them let me know.

I would provide you with one caution. I'm not sure if any of this information has been reviewed for offsite release. I personally would be reluctant to share it with SAIC without first going through the ROI (release of information) process found on Shrine.

Greg Burbage [REDACTED]

04/07/2008 09:10 AM

To "Dimarzio, John A." [REDACTED]  
cc betsy.westover [REDACTED] "Groome, Chadi D." [REDACTED]  
clayton.shedrow [REDACTED] henry.boler [REDACTED] Wayne Farrell [REDACTED]  
Richard Koenig [REDACTED] Lance Traver [REDACTED] Bob [REDACTED]  
Bayer [REDACTED] Linda Nass [REDACTED] Greg [REDACTED]  
Burbage [REDACTED] Betsy Westover [REDACTED] Drew [REDACTED]  
Grainger [REDACTED] Joseph Damelio [REDACTED] Ralph [REDACTED]  
Cansler [REDACTED] Preston Leeper [REDACTED]  
Subject RE: PuD SEIS Data Call Request for SAIC [Link](#)

John,

The scope of the KAMS-KIS-CSSC data call for PuD SEIS was more expansive than I had realized from your voice message (beyond rad. and exposure information). Therefore, I am resending it to various other experts in NMM for their response to SAIC. These individuals are Rich Koenig (KAMS), Lance Traver (KIS), Bob Bayer (CSSC), Linda Nass (air emissions), Greg Burbage (liquid emissions), Betsy Westover (waste), and Wayne Farrell (rads./exposure). I have included their telephone numbers below, along with the attached data call. Within the data call, each individual can find what questions they are expected to respond to (written reply to Burbage).

To those responding to the data call, please simply answer the respective questions within the matrix (in blue text). If you require clarification, give me a call and I will assist you, or you may call John Dimarzio directly at [REDACTED]. You may also e-mail John with your questions if written clarification is desired. Finally, if documentation exists that answers SAIC's questions, you may forward that information to SAIC via Barry Shedrow. Make sure that it is clear to SAIC which questions the forwarded doc.s (PDF, etc.) address. Thanks.

[attachment "KAMS-KIS-CSSC Data Call-040408.doc" deleted by Lance Traver [REDACTED]]

- Koenig - [REDACTED]
- Traver - [REDACTED]
- Bayer - [REDACTED]
- Nass - [REDACTED]
- Burbage - [REDACTED]

Westover - [REDACTED]  
Farrell - [REDACTED]

"Dimarzio, John A." [REDACTED]

04/04/2008 10:50 AM

To <wayne.farrel[REDACTED]>  
cc <clayton.shedrow[REDACTED] <greg.burbage[REDACTED] <betsy.westove[REDACTED]  
<henry.boler[REDACTED] "Groome, Chadi D." [REDACTED]>  
Subject RE: PuD SEIS Data Call Request for SAIC

Thanks for helping us out on this.....

I modified the information request form that we used for the other data calls so you can see the types of information we are searching for to complete the environmental impacts analysis for the Surplus Plutonium Disposition SEIS. We have obtained most of the information we need for construction and operation of H-Canyon/HB-Line, DWPF, MOX FFF, PDCF, WSB, and the K-Area Vitrification Facility. We would like to obtain similar information, where applicable, for KAMS, KIS, and CSSC. Unfortunately, the existing NEPA documents for these facilities (SAs and DOE/EA-1538) contain little quantitative information to help us.

I'll give you a little time to look over the attachment and then I'll give you a call to discuss.

....John

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**From:** greg.burbage [REDACTED]  
**Sent:** Friday, April 04, 2008 9:22 AM  
**To:** Dimarzio, John A.; clayton.shedrow [REDACTED]; wayne.farrel [REDACTED]  
**Cc:** betsy.westover [REDACTED]; henry.boler [REDACTED]  
**Subject:** PuD SEIS Data Call Request for SAIC:

John/Barry/Wayne,

I received a voice mail yesterday from John Dimarzio, SAIC, requesting KIS/KAMS/CSSC information relative to radiological exposure, releases, etc. The Nuclear Materials Management technical lead for such information is Wayne Farrell [REDACTED]. To better expedite the Q & A aspect of this request, I recommend that John make contact directly with Wayne, and allow Barry Shedrow or myself to disseminate written information to SAIC as necessary.

This is an extremely important need for SAIC in support the Environmental Impact Statement for Pu Disposition. Should problems be encountered by any of you gentlemen in transmission of requested data/feedback, please do not hesitate to give me a call. Thanks.[attachment "KAMS-KIS-CSSC Data Call-040408.doc" deleted by Lance Trave [REDACTED]]

**KAMS/KIS/CSSC Information Request**

(please provide numerical data in commonly reported units)

Information Requested	Facility		
	KAMS	KIS	CSSC
<b>General</b>			
<p>Schedule</p> <ul style="list-style-type: none"> <li>- Construction or Modification</li> <li>- Operation</li> <li>- Deactivation and decommissioning</li> </ul>	<p>Schedule <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) CX and/or mods.</li> <li>2) Operation</li> <li>3) D &amp; D</li> </ol>	<p>Schedule <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) CX and/or mods. <b>Completed June 2007.</b></li> <li>2) Operation <b>Hot Operations commenced in June 2007.</b></li> <li>3) D &amp; D <b>TBD</b></li> </ol>	<p>Schedule <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) CX and/or mods.</li> <li>2) Operation</li> <li>3) D &amp; D</li> </ol>
<p>Description of facility including:</p> <ul style="list-style-type: none"> <li>- Floorplan with equipment arrangement</li> <li>- Features that prevent unauthorized entry (unclassified description)</li> <li>- Features that ensure safeguards against malevolent acts or material diversion by internal and external entities (unclassified description)</li> <li>- Fire protection systems</li> <li>- Features that control releases of airborne contaminants (include diagram of treatment train)</li> <li>- Features that control releases of waterborne contaminants (include diagram of treatment train)</li> <li>- Features/procedures that prevent criticality</li> <li>- Description of liquid and non-liquid waste processing</li> </ul>	<p>Facility Description <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) Floorplan</li> <li>2) Unauthorized entry features</li> <li>3) Malevolent acts prevention features</li> <li>4) Fire protection</li> <li>5) airborne release prevention features</li> <li>6) Criticality prevention features</li> <li>7) Liquid/non-liquid waste processing</li> </ol>	<p>Facility Description <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) Floorplan <b>See Figure 2-2 in the KIS DSA Addendum.</b></li> <li>2) Unauthorized entry features <b>Physical security features comply with Procedure 301 of the WSRC 7Q Manual.</b></li> <li>3) Malevolent acts prevention features <b>See answer above.</b></li> <li>4) Fire protection <b>See Section 2.6 in the KIS DSA Addendum.</b></li> <li>5) airborne release prevention features <b>See Sections 2.3.5, 2.3.13, 2.3.15, and 2.5 in the KIS DSA Addendum.</b></li> <li>6) Criticality prevention features <b>See Section 6.0 in the KIS DSA Addendum.</b></li> <li>7) Liquid/non-liquid waste processing. <b>KIS does not include any liquid waste streams. Non-liquid waste streams are discussed in Section 2.10 of the KIS DSA Addendum.</b></li> </ol>	<p>Facility Description <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) Floorplan</li> <li>2) Unauthorized entry features</li> <li>3) Malevolent acts prevention features</li> <li>4) Fire protection</li> <li>5) airborne release prevention features</li> <li>6) Criticality prevention features</li> <li>7) Liquid/non-liquid waste processing</li> </ol>
<b>Construction/modification</b>			
Land disturbed for construction (acres or hectares)	NA	NA	Construction/mods <b>Bob Bayer</b> 1) Land disturbance

Information Requested	Facility		
	KAMS	KIS	CSSC
Description of activities conducted (e.g., decontamination/removal/disposal of existing facilities/equipment, land clearing, onsite concrete plant) and modifications needed (e.g., floors, walls, support beams, roof, waste management, ventilation, new roads)	NA	NA	Construction <a href="#">Bob Bayer</a> 1) Activities description
Describe type and quantity of air pollutant emitting equipment and frequency and duration of use.	NA	NA	Construction/mods <a href="#">Bob Bayer</a> 1) Type and quantity air pollutants
Describe type and quantity of noise producing equipment and frequency and duration of use.	NA	NA	Construction/mods. <a href="#">Bob Bayer</a> 1) Type and quantity of noise poll.
Emission release parameters – For any stack releases - release location (latitude & longitude), stack height, stack diameter, stack exhaust velocity or flow rate, exhaust air temperature – For fugitive releases - release location and dimensions of source area	NA	NA	Construction/mods. <a href="#">Linda Nass</a> 1) Stacks info. 2) Fugitive releases info.
	NA	NA	
Liquid effluents - Location(s) of discharge(s) and copies of permit(s) - Rate(s) of discharge(s) (units/day) - Concentrations of contaminants (picocuries/liter or micrograms/liter)	NA	NA	Construction/mods. <a href="#">Greg Burbage</a> 1) Discharge location/permits 2) Discharge rates 3) Discharge concentrations
Employment for each year (FTEs)	NA	NA	Construction/mods. <a href="#">Bob Bayer</a> 1) FTEs per year(s) CX
Shifts	NA	NA	Construction/mods. <a href="#">Bob Bayer</a> 1) Shifts info.
Worker radiological exposure - total dose (person-rem)	NA	NA	Construction/mods. <a href="#">Bob Bayer</a> 1) Rad. Exposure.dose per person
Number of exposed workers	NA	NA	Construction/mods. <a href="#">Bob Bayer</a> 1) # of Exposed workers

Information Requested	Facility		
	KAMS	KIS	CSSC
Utilities needed - Potable water (units/yr) - Non-potable water (units/yr) - Electricity (units) - Gasoline (units/yr) - Diesel Fuel (units/yr)	NA	NA	Construction/mods. <b>Bob Bayer</b> 1) Utilities – Potable water 2) Non-potable water 3) Electricity 4) Gasoline 5) Diesel
Resources needed - Concrete (units) - Asphalt (units) - Steel (units) - Crushed stone (units) - Sand & Gravel (units) - Soil (units) - Lumber (units) - Chemicals (units) - Gases (units) - Other construction materials (units)	NA	NA	Construction/mods. <b>Bob Bayer</b> 1) Surfaces – Concrete 2) Asphalt 3) Steel 4) Crushed stone 5) Sand and Gravel 6) Soil 7) Lumber 8) Chemicals 9) Gases 10) Other
Waste generated (provide solid and liquid separately) (units/yr): - TRU - LLW - MLLW - Hazardous - Non-Hazardous	NA	NA	Construction/mods. <b>Betsy Westover</b> 1) Waste generated – TRU 2) LLW 3) MLLW 4) Haz. 5) Non-haz.
<b>Operations</b>			
Land occupied by completed facilities (acres or hectares)	Operations <b>Rich Koenig</b> 1) Area of land disturbance	Operations <b>Lance Traver</b> 1) Area of land disturbance <b>None</b>	Operations <b>Bob Bayer</b> 1) Area of land disturbance

Information Requested	Facility		
	KAMS	KIS	CSSC
Description of Process including: - Flowchart - Throughput (units/yr) - Number of cans filled per year	Operations <b>Rich Koenig</b> 1) Process Flowchart 2) Throughput 3) Cans filled/year	Operations <b>Lance Traver</b> 1) Process Flowchart <b>See M-M5-K-01941</b> 2) Throughput <b>The 3013 surveillance program requires approximately 40 3013 Containers to be inspected each year. 15 of the 40 undergo DE as well as NDE. In addition to 3013 surveillance requirements, approximately 120 NDA measurements and approximately 30 repackaging operations are performed per year.</b> 3) Cans filled/year <b>Approximately 70.</b>	Operations <b>Bob Bayer</b> 1) Process Flowchart 2) Throughput 3) Cans filled/year
Emission release parameters - For stack releases - release location (latitude & longitude), stack height, stack diameter, stack exhaust velocity or flow rate, exhaust air temperature - For fugitive releases - release location and dimensions (including height) of vents or louvers from which release would occur - Emissions from emergency generators, boilers, and other ancillary equipment	Operations <b>Linda Nass</b> 1) Stacks info. 2) Fugitive releases info. 3) Emergency generators, etc.	Operations <b>Linda Nass</b> 1) Stacks info. 2) Fugitive releases info. 3) Emergency generators, etc.	Operations <b>Linda Nass</b> 1) Stacks info. 2) Fugitive releases info. 3) Emergency generators, etc.
Air emissions - Criteria Pollutants (metric tons/yr) - HAPs (kilograms/yr) - Radioisotopes (curies/yr)	Operations <b>Linda Nass</b> 1) Air - Criteria pollutants 2) HAPs 3) Radisotopes	Operations <b>Linda Nass</b> 1) Air - Criteria pollutants 2) HAPs 3) Radisotopes	Operations <b>Linda Nass</b> 1) Air - Criteria pollutants 2) HAPs 3) Radisotopes
Liquid effluents - Location(s) of outfall(s) - Rate(s) of discharge(s) (units/day) - Concentrations of contaminants (picocuries/liter or micrograms/liter)	Operations <b>Greg Burbage</b> 1) Liquids – Location 2) Discharge rates 3) Discharge concentrations	Operations <b>Greg Burbage</b> 1) Liquids – Location 2) Discharge rates 3) Discharge concentrations	Operations <b>Greg Burbage</b> 1) Liquids – Location 2) Discharge rates 3) Discharge concentrations
Employment (FTEs)	Operations <b>Rich Koenig</b> 1) FTEs	Operations <b>Lance Traver</b> 1) FTEs <b>Approximately 30</b>	Operations <b>Bob Bayer</b> 1) FTEs

Information Requested	Facility		
	KAMS	KIS	CSSC
Shifts	Operations <b>Rich Koenig</b> 1) Shifts info.	Operations <b>Lance Traver</b> 1) Shifts info. <b>KIS currently operates on a 2-shift rotation. This is being increased to a three-shift rotation. It is possible that we could go to a 4-shift (i.e., 24/7 coverage) sometime in the future. However, there are no plans to implement a 4-shift rotation at this point.</b>	Operations <b>Bob Bayer</b> 1) Shifts info.
Employee radiological exposure - total dose (person-rem)	Operations <b>Wayne Farrell</b> 1) Exposure – dose/person	Operations <b>Wayne Farrell</b> 1) Exposure – dose/person	Operations <b>Wayne Farrell</b> 1) Exposure – dose/person
Number of exposed workers	Operations <b>Wayne Farrell</b> 1) # of Workers exposed	Operations <b>Wayne Farrell</b> 1) # of Workers exposed	Operations <b>Wayne Farrell</b> 1) # of Workers exposed
Public MEI dose (mrem)	Operations <b>Wayne Farrell</b> 1) Public MEI	Operations <b>Wayne Farrell</b> 1) Public MEI	<b>4 x 10<sup>-4</sup> mrem (DOE/EA-1538; page 20)</b>
Population Dose (person-rem)	Operations <b>Wayne Farrell</b> 1) Population dose	Operations <b>Wayne Farrell</b> 1) Population dose	Operations <b>Wayne Farrell</b> 1) Population dose
Utilities needed - Potable water (units/yr) - Non-potable water (units/yr) - Electricity (kw/hr) - Natural gas (units/yr) - Coal (units/yr) - Gasoline (units/yr) - Diesel Fuel (transportation) (units/yr) - Heating fuel oil (units/yr)	Operations <b>Rich Koenig</b> 1) Utilities needed – Potable water 2) Non-potable water 3) Electricity 4) Natural Gas 5) Coal 6) Gasoline 7) Diesel 8) Heating oil	Operations <b>Lance Traver</b> 1) Utilities needed – Potable water 2) Non-potable water 3) Electricity 4) Natural Gas 5) Coal 6) Gasoline 7) Diesel 8) Heating oil <b>See Sections 2.2, 2.7, 2.8, and 2.9 of the KIS Addendum.</b>	Operations <b>Bob Bayer</b> 1) Utilities needed – Potable water 2) Non-potable water 3) Electricity 4) Natural Gas 5) Coal 6) Gasoline 7) Diesel 8) Heating oil
Resources needed - Metals (units/yr) - Frit (units/yr) - Ceramic precursors (units/yr) - Chemicals (units/yr) - Gases (units/yr) - other materials (units/yr)	Operations <b>Rich Koenig</b> 1) Resources – Metals 2) Frit 3) Ceramic 4) Chemicals 5) Gases 6) Other	Operations <b>Lance Traver</b> 1) Resources – Metals 2) Frit 3) Ceramic 4) Chemicals 5) Gases 6) Other <b>None</b>	Operations <b>Bob Bayer</b> 1) Resources – Metals 2) Frit 3) Ceramic 4) Chemicals 5) Gases 6) Other

Information Requested	Facility		
	KAMS	KIS	CSSC
Waste generated (solid or liquid) (units/yr): - TRU - Mixed TRU - LLW - MLLW - Hazardous - Non-Hazardous	0 (Westover; 2/25/08)  0 (Westover; 2/25/08)	0.4 m3 (Westover; 2/25/08)  15-20 m3 (Westover; 2/25/08)	Operations <b>Betsy Westover</b> 1) Waste Generated – TRU 2) Mixed TRU 3) LLW 4) MLLW 5) Haz. 6) Non-haz.
Please provide any safety documentation (e.g., safety assessments, safety analysis reports) for these facilities.	Operations <b>Rich Koenig</b> 1) Safety Doc.	Operations <b>Lance Traver</b> 1) Safety Doc. See KIS Addendum and TSRs.	WSRC-TR-2005-00392 already provided to SAIC
List any accident scenarios (in existing safety or NEPA documents) that need to be modified because of changes produced by the proposed action. For any new or modified scenarios provide the information listed below:	Operations <b>Rich Koenig</b> 1) Accident scenarios due to changes	Operations <b>Lance Traver</b> 1) Accident scenarios due to changes None	Operations <b>Bob Bayer</b> 1) Accident scenarios due to changes
Radiological accidents - Accident description (include release pathways and mitigating factors) - Accident frequency - Material at risk - Material characteristics - Source term released to environment (curies by isotope) - Release parameters: release fractions, release timing, location, release height, release duration, and heat of release - Filtration (specify efficiency) - Number of involved workers	Operations <b>Wayne Farrell</b> 1) Rad. Accidents – Descriptions 2) Accident frequency 3) Material at risk 4) Material characteristics 5) Source term released 6) Release parameters 7) Filtration 8) # of Involved workers	Operations <b>Wayne Farrell</b> 1) Rad. Accidents – Descriptions 2) Accident frequency 3) Material at risk 4) Material characteristics 5) Source term released 6) Release parameters 7) Filtration 8) # of Involved workers	Operations <b>Wayne Farrell</b> 1) Rad. Accidents – Descriptions 2) Accident frequency 3) Material at risk 4) Material characteristics 5) Source term released 6) Release parameters 7) Filtration 8) # of Involved workers

Information Requested	Facility		
	KAMS	KIS	CSSC
<p>Chemical inventory for chemical accident analysis</p> <ul style="list-style-type: none"> <li>- List chemicals, total facility inventory, and annual usage of the chemical</li> <li>- Size and location of largest tank (storage container) for each chemical. Include floor area or diked area that would contain the spill when applicable.</li> <li>- Concentration of chemical in largest tank (identify if this is the highest concentration of the chemical being stored). If not, also list the other storage locations, size of tank and concentration of chemical being stored.</li> </ul>	<p>Operations <b>Betsy Westover</b></p> <ol style="list-style-type: none"> <li>1) Chemical inventory – List</li> <li>2) Size/location largest tank</li> <li>3) Chemical concentration</li> </ol>	<p>Operations <b>Betsy Westover</b></p> <ol style="list-style-type: none"> <li>1) Chemical inventory – List</li> <li>2) Size/location largest tank</li> <li>3) Chemical concentration</li> </ol>	<p>Operations <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) Chemical inventory – List</li> <li>2) Size/location largest tank</li> <li>3) Chemical concentration</li> </ol>
Design basis earthquake frequency and intensity	<p>Operations <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) Earthquake frequency/intensity</li> </ol>	<p>Operations <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) Earthquake frequency/intensity</li> </ol> <p>See S-CLC-K-00212 and S-CLC-K-00221</p>	<p>Operations <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) Earthquake frequency/intensity</li> </ol>
Earthquake frequency that would result in loss of structural integrity	<p>Operations <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) Quake freq. loss of struc. integrity</li> </ol>	<p>Operations <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) Quake freq. loss of struc. Integrity</li> </ol> <p>See S-CLC-K-00212 and S-CLC-K-00221</p>	<p>Operations <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) Quake freq. loss of struc. integrity</li> </ol>
Other natural phenomena that would result in loss of structural integrity and their frequency	<p>Operations <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) Natural phenomena (other)</li> </ol>	<p>Operations <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) Natural phenomena (other)</li> </ol> <p>See S-CLC-K-00212 and S-CLC-K-00221</p>	<p>Operations <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) Natural phenomena (other)</li> </ol>
Aircraft crash frequency	<p>Operations <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) Aircraft crash frequency</li> </ol>	<p>Operations <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) Aircraft crash frequency</li> </ol> <p>See S-CLC-K-00212 and S-CLC-K-00221</p>	<p>Operations <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) Aircraft crash frequency</li> </ol>
<b>Deactivation and Decommissioning</b>			
General description of the D&D process and end state achieved after D&D	<p>D &amp; D <b>Rich Koenig</b></p> <ol style="list-style-type: none"> <li>1) General description</li> </ol>	<p>D &amp; D <b>Lance Traver</b></p> <ol style="list-style-type: none"> <li>1) General description</li> </ol> <p>None</p>	<p>D &amp; D <b>Bob Bayer</b></p> <ol style="list-style-type: none"> <li>1) General description</li> </ol>