

## **Dimarzio Data Request dated 9/16/10**

Subject: Additional Questions on Data Call Response  
Questions: See following response.

Response: Bayer dated 9/16/10

### **Immobilization Response-090310 (RHS Inputs Draft Immobilization Data Request.pdf)**

1. p. 6, liquid effluents. The response from Greg Burbage (from 2008) discusses liquid releases during Pu vitrification operations, but does not provide any numerical estimates. Are numerical estimates now available? No. The project was cancelled prior to generating this information. [This information could be compared to the PDC effluent numbers, as the usage requirements are essentially the same and PDC should bound the Vit needs.](#)
2. p. 7, Utility use. The response from P.K. Hightower references a Power Services Utilization Permit (G-PSU-K-00017). Is this still current or is an update available? [Since the project has been cancelled use this estimate. It was for Vit.](#)
3. p. 7, Resources needed. The response from P. K. Hightower discusses use of compressed gases included argon, helium, oxidation gas, and regeneration gas. Are significant quantities of other gases expected? The question arises because the SPD EIS estimated annual use of 290 cubic meters of hydrogen gas and 990,000 cubic meters of nitrogen. [The Vit glove boxes used a strategy of re-circulating the glove box atmosphere and the regeneration gas was to replenish loses. For the NEPA stay with the original estimate. For comparison look at the PDC Phase 1 gas needs. Phase 1 has a DMO glove box, a Canning glove box and a stabilization glove box. They are all inert atmospheres. The PDC are either argon \(DMO\) or helium \(Stabilization/canning\). These are comparable to the Vit DMO, Feed Prep, and Canning glove boxes in Vit. The other glove boxes used dry air or room air. The SPD use of nitrogen was a look see at replacing the argon and helium atmospheres, because Design felt it would be less expensive, and I think it was conceptually for a once through strategy \(Not a re-circulated one\). Also, in talking to Bob Bayer, he pointed out the nitrogen was from a process at the Vit facility that extracted it from the atmosphere and after passing through the glove box, returned via the confined ventilation exhaust system.](#)

### **H-Canyon Response-090310 (2010 SPD SEIS Disposition H-Canyon Data Call.doc)**

1. For the 2008 draft SPD SEIS, DOE estimated via an April 16, 2008, email from John Lint to John Dimarzio (“RE: H-Canyon HB-Line Throughput), SAIC, that processing Pu through H-Canyon/HB-Line would use about 15 percent of overall facility operations (personnel, utilities, etc.), 10% of solid waste, 10%

contribution to air emissions, and 15% of facility radiation exposure. Are these estimates still reasonable?

**PDCF Response-090310** (PDCF Data Call Response-03-508)

1. Updated construction and operations schedules are needed for PDCF for the No Action, Maximum Immobilization, Maximum MOX Fuel, and Maximum WIPP or H-Canyon Alternatives.
2. p.2, plot plan. The response states that WSRC would make drawings available. Were the plans provided? We cannot locate them. Are newer drawings available?
3. p. 7, Safety Documentation. The response references a Preliminary Documented Safety Analysis (PSDA) that was issued in 2005 (S-PSA-F-00001). Is this document still applicable or has it been updated or replaced? If so, can we get the latest safety document?

**PuP Response-090310** (2010 SPD SEIS Preparation PuP Data Call-(2) consolidated.doc)

1. General: The column headings on page 1 refer to impacts associated with processing 2.4 MT of AFS-2 feed, as well as to additional impacts associated with processing up to 6 MT of non-pit Pu. This appears to indicate that a decision has already been made to process 2.4 MT of Pu through the PuP. It may be the case that NEPA exists for 34 MT of Pu once it is received at the MOX FFF, but we do not believe that NEPA exists at this time for pre-treatment needed (before receipt at MOX FFF) for 2.4 MT of this 34 MT of Pu. Please explain.
2. p. 2, Schedule. Under the “Prepare up to 6 MT of impure Pu for H-Canyon, reference is made to increasing the Pu glass loading to 5.4 kg per cubic meter. We also note that in the “Prepare up to 4 MT to MFFF...” column, reference is made to increasing the Pu glass loading to 2.5 kg per cubic meter. Are these glass loadings still correct?
3. p. 2, Schedule. Under the “Prepare up to 6 MT of Impure Pu for H-Canyon” column, reference is made to processing up to 300 kg (0.3 MT) per year of Pu in the HB Line. The H-Canyon data call response for 090310 (2010 SPD SEIS Disposition H-Canyon Data Call.doc) indicates processing up to 350 kg (0.35 MT) per year of Pu in the HB Line. Which throughput is correct?
4. p. 5, Description (continued). When will the floor plan for pre-treatment of the 1.3 MT of Pu be available?
5. p. 9, Construction/modification. The response notes that the provided construction/modification information does not include information for the SRNL and F/H labs. Is this information available? Do the impacts for operating the SRNL and F/H labs need to be captured in the SEIS?

6. p. 15, Description of Process. The response states that the plans for processing 1.3 MT of high impurity materials are not fully developed past the pre-conceptual stage. When will these plans be available?
7. p. 20, Employee radiological exposure. Will updated dose estimates be prepared?
8. p. 23, Safety documentation. Reference is made to these three documents: the PuP CSDR (SRNS-RP-2009-00002, rev 0); PuP SDS (V-SDS-K-00001, rev 0); and KAC DSA (WSRC-SA-2002-00005, rev. 4). Can these documents be provided?
9. p. 24 and 24, Accident Scenarios. Again, the “Prepare up to 6 MT of Impure Pu for H-Canyon” references 5.4 kg of Pu per cubic meter, while the last column references 2.5 kg of Pu per cubic meter. Are these glass loadings still correct?
10. p. 26, Radiological accidents. Can you provide the referenced document S-CLC-K-00230?