

## Norman, Yolande

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**From:** Cloud, Paul D CIV USA [paul.d.cloud@us.army.mil]  
**Sent:** Tuesday, July 13, 2010 3:28 PM  
**To:** Norman, Yolande  
**Cc:** Skibinski, Joseph N.; Evens, Andrew B LRL  
**Subject:** RE: Status of Deliverables (UNCLASSIFIED)

**Importance:** High

Classification: UNCLASSIFIED

Caveats: NONE

Yolande: Provided below is a status you requested. Upon your review, if you have any questions please let me know.

Action #1. NRC's project manager will coordinate a teleconference call within the next few weeks with the Army, to discuss the need for sampling the till, given that only loess (i.e. soil) samples have been collected for the uranium partition coefficient study.

Status #1. A teleconference between the NRC and Army was held on 22 September 2009 and a follow-up letter was sent from the Army to NRC on 16 October 2009. A subsequent teleconference between all parties was held on 19 November 2009. Sampling was conducted during the week of 7 December 2009.

Action #2. The Army will notify the NRC within the next few weeks as to whether a second public notice meeting will be necessary in October 2009.

Status #2. The Army notified NRC during 22 September 2009 that additional meeting in fall 2009 between NRC/Army was not necessary.

Action #3. The Army will begin initial model runs in Fall/Winter-2009 for the fate and transport model and the radiation dose model. Based on these preliminary model runs the Army will review the need to collect additional site characterization data and will propose their findings to the NRC.

Status #3. The Army began and has made significant progress in fate and transport modeling. A teleconference to discuss the status and approach with personnel from NRC/Army was held on 18 March 2010. A meeting should be planned for the September/October 2010 timeframe, which is prior to concluding the modeling in November/December 2010, to discuss modeling results and the potential need to collect additional site characterization data.

Action #4. Both the NRC and the Army agreed to exchange the names and contact information for personnel who will be periodically engaged in technical discussions with the Army's contractors, during the initial model runs. NRC's project manager will provide the pertinent information to the Army within the next week.

Status #4. Names and contact information were exchanged via e-mail messages on 19 November 2009.

Action #5. The Army will continue to conduct baseline performance monitoring in accordance with the existing Environmental Radiation Monitoring Program - Standard Operating Procedure dated March 10, 2000.

Status #5. Since the August 2009 meeting, the Army conducted sampling for the fall 2009 and spring 2010 ERM event based on the existing Environmental Radiation Monitoring Program - Standard Operating Procedure (dated March 10, 2000). Future ERM sampling events will be based on the same document until a replacement has been agreed upon by NRC.

Action #6. The Army will propose revisions to the existing Environmental Radiation Monitoring Program Plan - Standard Operating Procedure in 2010, based on the site characterization collected to date (e.g. surface water/sediment sampling, stream flow gain loss run surveys, groundwater sampling, slug tests, corrosion

study, leachability tests, partition coefficient study) which will be correlated to groundwater age dating and groundwater flowmeter results.

Status #6. Although historical ERM results and some results from the site characterization have been reviewed, several of the studies (corrosion study, leachability tests, partition coefficient study, groundwater age dating tests, and groundwater flowmeter study) have not concluded. It should be noted that the stream flow gain/loss survey, slug tests, groundwater age dating tests, and groundwater flowmeter study have concluded and reports are under development. Although it is possible that the revised Environmental Radiation Monitoring Program Plan - Standard Operating Procedure can be submitted to NRC in 2010, it is more likely that it will not be submitted until early in calendar year 2011. As mentioned above, the existing Environmental Radiation Monitoring Program - Standard Operating Procedure (dated March 10, 2000) will be used until a replacement has been agreed upon by NRC and the revised Environmental Radiation Monitoring Program - Standard Operating Procedure will be used until the Army's license is terminated.

Action #7. Early 2010, the Army will provide the NRC with the Groundwater Age Dating Summary Report and Flowmeter Groundwater Flow Direction Report for review.

Status #7. Neither the Groundwater Age Dating Summary Report nor the Flowmeter Groundwater Flow Direction Report are ready to be provided to NRC. The Groundwater Age Dating report is planned for submittal to NRC in early fall 2010. It is not clear when the Groundwater Flowmeter Report will be provided, but it will follow the submittal of the Groundwater Age Dating report and is tentatively planned for submittal in late 2010.

Action #8. The Army will submit the Aquifer Hydraulic Conductivity Report as soon as it is finalized. The NRC recommended that the report include a discussion on the rationale for selecting slug tests versus that of a pump test.

Status #8. The Aquifer Hydraulic Conductivity Report is nearly ready for Army review and should be submitted to NRC in the August/September 2010 timeframe. It discusses on the rationale for selecting slug test locations and methods provides the reasons that pump tests have not been recommended.

Action #9. The Army will also follow-up on two of NRC's comments concerning; i) hydrologic and, or agricultural drought conditions potentially impacting any of the surface water and groundwater studies conducted to date (e.g. gain /loss survey); and, ii) if there is any statistical evidence as to why soil types have varied uranium concentrations. The Army's response to these comments will be included in upcoming reports to be submitted to the NRC.

Status #9i. The potential impact of drought conditions on the surface water and groundwater studies will be discussed a Site Characterization Data Report, which will include the results and analysis of the gain/loss survey. This report is tentatively planned to be submitted in fall 2010.

Status #9ii. The assessment of potential statistical correlations between soil types and uranium concentrations will be included with the soil sampling results in the Site Characterization Data Report tentatively planned to be submitted in fall 2010.

Paul

-----Original Message-----

From: Norman, Yolande [mailto:Yolande.Norman@nrc.gov]  
Sent: Wednesday, July 07, 2010 11:21 AM  
To: Cloud, Paul D CIV USA  
Subject: Status of Deliverables

Hi Paul,

I am just following-up on the status of some of the deliverables which were discussed for submittal in 2010 during our public meeting last year.

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Attached you will find the meeting summary .

Specifically Items 3, 6, 7, 8 & 9.

I am on a flexi schedule.

If you need to reach me , please call me at 40-963-8205 anytime. Or you can go ahead and e-mail me as I check my email frequently

Classification: UNCLASSIFIED

Caveats: NONE