

**Norman, Yolande**

**From:** Norman, Yolande  
**Sent:** Wednesday, February 23, 2011 10:53 AM  
**To:** Kauffman, Laurie; Roberts, Mark  
**Cc:** Chang, Lydia; Joustra, Judith; Lemoncelli, Mauri; Norman, Yolande  
**Subject:** RE: Sensitive. SLDA Update Cabrera Licensr  
**Attachments:** DCGL.forSLDA.ML1021102511.pdf

*Yolande M*  
*107/28/11*

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hi Mark and Laurie,

Attached you will find the DCGL values for the SLDA site. These DCGL values are embedded in the Record of Decision which is the framework for the USACE's CERCLA response action. Please let me know if you need any additional information in following up this morning's teleconference call for the Cabrera service License which will be utilized to dispose of <DCGL material at Energy Solutions.

(b)(5)

I will continue to keep you posted as I obtain more information on this aspect of the project.

Thanks a bunch.

Yolande

Yolande J.C. Norman,  
 Project Manager

Information in this record was deleted in  
 accordance with the Freedom of Information Act.  
 Exemptions: 276  
 FOIA 2011-0289

C-14

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**From:** Kauffman, Laurie  
**Sent:** Wednesday, February 23, 2011 10:00 AM  
**To:** Joustra, Judith; Roberts, Mark  
**Cc:** Norman, Yolande; Chang, Lydia  
**Subject:** FW: Sensitive. SLDA Update

FYI - Cabrera License attached

**From:** Norman, Yolande  
**Sent:** Tuesday, February 15, 2011 3:08 PM  
**To:** Chang, Lydia; Lemoncelli, Mauri  
**Cc:** Kauffman, Laurie; Joustra, Judith; Norman, Yolande  
**Subject:** FW: Sensitive. SLDA Update

Hi Ladies,

In a telephone conversation with Steve Schilthelm this afternoon he provided an update on the SLDA project:

(b)(5)

I also provided an update to regarding the Technical review of the SLDA project

- FSSP was completely revised by USACE to reflect the MARSSIM approach for discrete sampling (revised version emailed )
- Supplemental documents were recently submitted for the Criticality Analysis. NRC staff is currently conducting the safety evaluation report.

(b)(5)

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**From:** Schilthelm, Steve W [mailto:swschilthelm@babcock.com]  
**Sent:** Tuesday, February 15, 2011 2:21 PM  
**To:** Norman, Yolande  
**Subject:**

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multiple ROCs, the comparison to the ROD criteria will be conducted using a sum of ratios (SOR) calculation, based on the wide area average DCGL<sub>w</sub> and elevated measurement criteria (DCGL<sub>emc</sub>). The DCGL<sub>w</sub> and DCGL<sub>emc</sub> values are presented in Table 3-1.

- 2) Remove and dispose of all impacted soil and excavated waste to achieve cleanup goals, as discussed in item 1 above, for the ROCs (USACE 2007).

**Table 3-1 Derived Concentration Guideline Levels for the SLDA Site**

Radionuclide	Average Soil Background Values (pCi/g) <sup>a</sup>		DCGL <sub>w</sub> (pCi/g)	DCGL <sub>emc</sub> (pCi/g)
	Surface	Subsurface	Survey Unit Area	100 square meter (m <sup>2</sup> ) Area
Am-241 <sup>b</sup>	0	0	28	420
Pu-239 <sup>c</sup>	0.01	0	33	570
Pu-241 <sup>b</sup>	0	0	890	13,000
Th-232	1.1	1.5	1.4	5.3
U-234	0.94	1.1	96	240
U-235	0.10	0.12	35	110
U-238	0.98	1.0	120	520

<sup>a</sup> The average background values were calculated from the surface and subsurface sample results collected from 18 surface (top 6 in. [15 cm] of soil) and subsurface locations (at depths of 2 ft [60 cm] to 4 ft [1.2 m] of soil) at Gilpin/Leechburg Community Park as part of the RI (USACE 2005).

<sup>b</sup> The activity concentrations of these radionuclides (which are not naturally occurring) were below the minimum detectable activities.

<sup>c</sup> The Pu-239 subsurface activity concentration was below the minimum detectable activity. (The detected Pu-239 surface activity concentration is likely due to atmospheric fallout from previous above-ground nuclear weapons tests.)

Table 3-1 shows the DCGL<sub>w</sub> values for the SLDA site as documented in the ROD (USACE 2007). Although eight ROCs are identified in the ROD, cleanup criteria (i.e., DCGLs) are expected to be needed for only seven of the eight ROCs to meet the dose limit of 25 mrem/yr. Ra-228 is included as an ROC in the ROD, but DCGLs are not expected to be needed for this radionuclide based on site-specific considerations for the SLDA site. Table 3-1 also provides the DCGL<sub>emc</sub> for the seven radionuclides of interest in this FSSP.