

U.S. NUCLEAR REGULATORY COMMISSION

In the Matter of Louisiana Energy Services, L.P.
 Docket No. 70-3103-MC Official Exhibit No. LES 97
 OFFERED by Applicant/Licensee Intervenor _____
 NRC Staff Other _____
 IDENTIFIED on 10/24/05 Witness/Panel LES Deconversion
 Action Taken: ADMITTED REJECTED WITHDRAWN
 Reporter/Clerk Bethany Engel

DOCKETED
 USNRC
 2005 DEC 21 PM 3:30
 OFFICE OF THE SECRETARY
 OF THE NUCLEAR REGULATORY COMMISSION
 ADJUDICATIONS STAFF

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

From: rod.krich@exeloncorp.com [mailto:rod.krich@exeloncorp.com]
Sent: Sunday, November 21, 2004 5:44 PM
To: Curtiss, James
Subject: FW: Calcium Fluoride Disposal Summary

Jim,

Here is information relating to the disposal of CaF2 at the Lea County landfill. Based on the costs given by George, he and I estimate that the cost will be about \$0.02/kgU in 2004 dollars.

Rod

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

From: HARPER George A [mailto:George.Harper@framatome-anp.com]
Sent: Friday, November 19, 2004 3:58 PM
To: 'rod.krich@exeloncorp.com'; 'schwartz@energyresources.com'
Subject: Calcium Fluoride Disposal Summary

Rod / Mike,

Attached summarizes my discussions earlier this week regarding CaF2 disposal at the landfill. Addresses classification of waste, disposal cost and landfill capacity.

George

<<CaF2 Disposal.doc>>

George A. Harper, P.E.
 Manager, Regulatory Compliance Programs
 Framatome ANP, Inc.
 An AREVA and Siemens Company

LES Exhibit 97

LES-05297

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CaF₂ Disposal Option**Objective:**

Evaluate feasibility of disposing of calcium fluoride (CaF₂) at the Lea County Landfill. Include considerations of landfill disposal, cost and available landfill capacity.

Evaluation:

Framatome ANP (FANP) first contacted Dennis Holmberg on 11/15/04. Admin. Assistant informed us that Holmberg had resigned. Recommended we contact J.D. Norby, Lea County Public Works Director (Office: 505-396-8609, Cell: 505-370-4772). Contacted Norby on 11/15/04. Norby will be leaving his position 12/16. He recommended we contact his Admin. Assistant (Cristene at office number) after that date for new contact name.

FANP explained that we were exploring the option of disposing CaF₂ at the landfill. He asked for an approximate time frame and FANP stated that disposal could commence in the 6 to 10 year time frame. He noted that landfill is permitted for industrial waste. He further recommended speaking with Keith Gordon of Gordon Environmental to ascertain if CaF₂ could be disposed at the landfill. Cost to dispose is presently \$24/ton, which will rise to \$31/ton in the beginning of 2005. He recommended that we could escalate disposal cost 4% per year beyond 2005. Landfill capacity was quoted by Norby as sufficient for 100 years.

Subsequently spoke with Keith Gordon on 11/16/04 (Office: 505-867-6990, Cell: 505-301-2026). Following main points:

Discussed that aqueous HF would be neutralized with lime to produce CaF₂. FANP explained that it could contain trace amounts of uranium. The CaF₂ would need to be classified as a "Industrial Solid Waste" in order to be considered for disposal at the landfill. The criteria to determine if the CaF₂ could be disposed at the landfill include:

- It cannot become hazardous when wet – based on our discussion this condition is met.
- It needs to be dry when disposed – this condition should be able to be met.
- It cannot be low level waste, byproduct material, transuranic, or spent fuel – this condition is met.

The landfill will need a "Disposal Management Plan" (DMP) to dispose of the CaF₂ which would be approved by NMED. The DMP is required when a new waste stream is identified for disposal. Gordon noted that NMED has approved all of their DMP submittals to date. The DMP specifies waste stream, form, packaging, handling requirements, etc. of the waste stream.

Gordon confirmed disposal cost (\$31/ton in 2005) and landfill capacity (80 to 100 years or 20 million cubic yards).

Based on an assumed disposal cost of \$31/ton for CaF₂ as a bulk powder (density approximately 100 lbs/ft³), FANP estimates that the disposal cost of the CaF₂ powder would be about \$1.55/ft³, or \$41.85/yd³. This does not include any allowance for the container package.

In addition, the cost associated with the weight of the disposal container should be included. Based on a typical package size of a 55-gallon drum, the container weight could add about 10% to the total disposal weight of the CaF₂. Therefore, the total weight of CaF₂ should be increased by 10% when estimating total CaF₂ disposal costs based on weight.