

DOCKETED
USNRC

2005 MAR -3 PM 3: 16

OFFICE OF THE SPECIAL
RULEMAKING AND
ADJUDICATIONS STAFF

U.S. NUCLEAR REGULATORY COMMISSION

In the Matter of Louisiana Energy Services, L.P.

Docket No. 70-3103 Official Exhibit No. LES 21

OFFERED by Applicant/Licensee Intervenor _____

NRC Staff Other _____

IDENTIFIED on 2/8/05 Witness/Panel Krich/Schneider

Action Taken: ADMITTED REJECTED WITHDRAWN

Reporter/Clerk Bethany Eupell

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

From: HARPER George A
Sent: Monday, November 22, 2004 11:43 AM
To: 'rod.krich@exeloncorp.com'
Subject: RE: Calcium Fluoride Disposal Summary

Rod,

The cost estimate I got for disposal was \$31/ton effective 2005. Mike (ERI) converted it to \$0.02/kgU. My quick check on the conversion yields a slightly different value. I am checking with Mike.

The existing web site for the landfill:

<http://www.leacounty.net/SWA.html>

still has the \$24/ton value that is in effect today. If you want, I can get some paperwork from the county documenting the 2005 rate.

Let me know.

George

George A. Harper, P.E.
Manager, Regulatory Compliance Programs
Framatome ANP, Inc.
An AREVA and Siemens Company
400 Donald Lynch Boulevard
Marlborough, MA 01752
Office: 978.568.2728
Cell: 508.795.9420
Fax: 978.568.3731

LES Exhibit 21

LES-05296

-----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

400 Donald Lynch Boulevard
Marlborough, MA 01752
Office: 978.568.2728
Cell: 508.795.9420
Fax: 978.568.3731
Email: george.harper@framatome-anp.com

11/19/2004

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.