

AlChemIE, Inc.

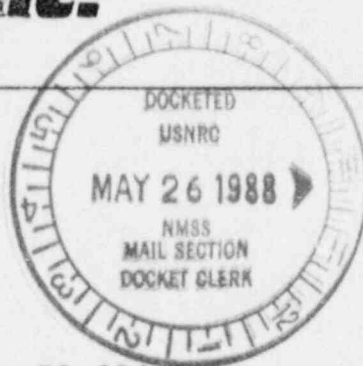
All Chemical Isotope Enrichment, Inc.

RETURN TO ~~896-SS~~
PI-137

50-603 &
50-604

May 24, 1988

Docket No's. 50-603, 50-604



Nuclear Regulatory Commission
Document Control Desk
Office Nuclear Material Safety & Safeguards
Washington, DC 20555

Attention: Mr. Hugh L. Thompson, Jr. SS396-MNSS Document
Material

Gentlemen:

In response to the NRC's letter dated May 10, 1988 requesting additional information for AlChemIE's licensing applications please find as an Attachment, hereto, our response. Should you have any questions please contact Mr. W.A. Pfeifer (615-482-0027) at AlChemIE.

Very truly yours,

ALCHEMIE, INC.

Dennis L. Bell

Dennis L. Bell
Senior Vice President

DLB/bc

Enclosure

cc: Dr. A. Thomas Clark/NRC

8806030257 880524
PDR ADOCK 05000603
A PDR

additional information

ATTACHMENT

Additional Information For AlChemIE Facility - 1 CPDF
and Facility - 2 Oliver Springs

1. NRC Request - Please confirm the planned daily use rate of liquid nitrogen, dry ice and sanitary water at both facilities.

AlChemIE Response -

	Daily Use Rate*	
<u>Refrigerant</u>	<u>Probable Max Usage</u>	<u>Expected Usage</u>
Liquid Nitrogen	450lb/day	250lb/day
Dry Ice**	240lb/day	140lb/day

*The above are based on two (2) 20 machine cascades operating on a heavy gas using liquid nitrogen to condense the product and tails stream. The dry ice usage assumes one (1) 20 machine cascade operating with a light gas.

**Dry ice is used in an isopropal alcohol bath. It is estimated that a 50 gallon drum and two (2) 25 gallon dewers will be at both facilities.

As it relates to the daily water usage, please refer to our March 15, 1988 letter to the NRC. As stated therein, the daily usage is estimated to be 5000gal/day.

2. NRC Request - Please provide your considerations with respect to the selection of the Oliver Springs site and reasonable alternatives to that site.

AlChemIE Response - AlChemIE investigated numerous possible plant sites in the Oak Ridge, Tennessee region. The three finalist sites were the chosen site in Oliver Springs, the Matlock Bend Industrial Park in Loudon County, Tennessee, and Bethel Valley Industrial Park in Oak Ridge, Tennessee.

Each finalist site was in the general region affected by the DOE termination of the Gas Centrifuge Program. Each finalist site met necessary criteria regarding accessibility, environmental suitability, location, size and cost considerations.

The Oliver Springs site was chosen over the other finalist sites primarily for the following major considerations:

- a. Its location on the developing Tennessee Technology Corridor.
 - b. Its proximity to the Centrifuge Plant Demonstration Facility at K-25 in Oak Ridge.
 - c. The thorough and comprehensive presentations made to AlChemIE by Oliver Springs. AlChemIE felt more wanted by and appreciated by the Oliver Springs Community.
 - d. The willingness of the Oliver Springs people and Town Government to work with AlChemIE in meeting our project needs relative to services while giving consideration to our mutual goals of creating an environmentally sound, assthetically satisfactory plant facility.
3. NRC request - Please confirm the total number of truck shipments to be made for AlChemIE from the Portsmouth, Ohio, location (GCEP) to the Oliver Springs site and the total period of time for those shipments.

AlChemIE Response - It is estimated that 600 truck shipments will be made. The shipments should start in the fall of 1988 and be completed in approximately two (2) years.

4. NRC Request - Please describe your commitment for the disposal of spills of solutions contaminated with hazardous materials.

AlChemIE Response - Solutions containing hazardous materials that have inadvertently been spilled will be drummed and shipped to an appropriate waste disposal site. Additionally, and as stated in AlChemIE's response to the NRC dated February 3, 1988 all floor drains at CPDF (AlChemIE Facility - 1) will be plugged prior to operations.

5. NRC Request - With respect to your receipts and shipments of feed and product cylinders, please provide a realistic production schedule for both facilities.

The AlChemIE-1, CPDF facility will be receiving and shipping cylinders for at least two years. The maximum traffic if all 120 centrifuge machines are operating simultaneously is approximately one (1) 200 cubic foot capacity (2000 psig) cylinder per day (one in and one out)

The Oliver Springs plant would experience similar traffic for several years, but could have an increase of 4-5 times this level with eventual full plant operation at maximum capacity (600 machines).

6. NRC Request - Please provide information as to the fraction of the Oliver Springs site under your ownership and control which will be developed.

AlChemIE Response - AlChemIE has obtained an option for 25 acres for our plant project. The company will develop the entire site. Production facilities and storage facilities will require approximately 75% of the acreage. Remaining acreage will be used for necessary expansion or developed into an attractive greenbelt area. The entire planned industrial park consists of approximately 100 acres.

DOCKET NO. 50-603 & 50-604
CONTROL NO. 24346
DATE OF DOC. May 24, 1988
DATE RCVD. May 26, 1988
FCUF PDR
FCAF LPDR
I & E REF.
SAFEGUARDS
FCTC OTHER
DATE 5/26/88 INITIAL SAC