



KERR-McGEE NUCLEAR CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

August 19, 1977

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jack Rothfleisch
Fuel Processing & Fabrication Branch
Division of Fuel Cycle & Material Safety
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Docket 40-8027

Dear Mr. Rothfleisch:

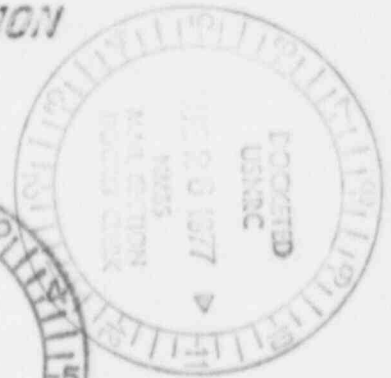
Attached, you will find certain replacement pages of our renewal application for license SUB-1010. These pages have been revised in response to your letter of August 1, 1977 and your telephone conversation with G. J. Sinke on August 16, 1977. An updated page index is included.

Within the revised pages you will find:

- 1) Page 1-6, para. 1.8b - an estimate of the Thorium content of the fluoride sludge.
- 2) Page 1-6, para. 1.8c - has been deleted.
- 3) Page 3-5.1, (top line) - refers to drawings (attached) showing the general layout of the new wet ADU receiving and storage area.
- 4) Page 4-1.1, para. 4.1.2 - reference to the small contaminated incinerator has been removed since we do not use this equipment for burning contaminated combustible refuse.
- 5) Page 4-1.2, para. 4.1.4 - has been rewritten for better clarity and typo's corrected.
- 6) Page 4-2, para. 4.2 - a listing of other environmental air sampling stations is made (besides the once line samples) for consistency with other parts of the application which also discuss the environment.
- 7) Page 4-8.1 - includes a commitment to include U-(nat), Ra-226 and Th-230 data in the reports required by 10 CFR 40.65. Th-232 is not included because its concentration in the yellowcake feed we typically use is less than Th-230 by a factor of at least 100.
- 8) Page 4-8.2 - Tables I and II have been expanded to include the reporting parameters discussed in other sections. Release volume has been added to Table I.

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- 9) Page 4-8.3 - a method is presented for determining effluent losses. A commitment is given to measure stack velocities and volumes excepting the main plant stack where the design exhaust volume is used.
- 10) Page 4-9 - additional discussion is given justifying (from data gathered) a variable sampling frequency for certain raffinate storage pond monitor wells.
- 11) Page 4-10, para 4.6 - has been rewritten for clarity and to make changes such as "NRC" (for "AEC") and add reference to EPA requirements.
- 12) Page 4-11 - has the listing of permits etc. rearranged for proper categorization. Expiration dates are now included where applicable.
- 13) Page 4-15 - the locations of all the currently used seepage monitoring wells shown on an updated sketch.
- 14) Page 4-16 - this table showed $\text{date} \times 10^{-12}$ and has been corrected to read $\times 10^{-14}$.
- 15) Page 4-16.1 - includes the reporting parameter which had been missing.
- 16) Page 5-7, para 5.7.4 - now includes a better description of our in-vivo counting program.
- 17) Page 5-8 - typo corrected.
- 18) Page 5-10, para. 5.8.3.- a list of respiratory protective equipment is provided including model numbers and approval numbers.
- 19) Page 5-11, para. 5.9.1 - additional discussion is given showing the sampling frequency to be satisfactory.
- 20) Page 5-13, para 5.14 - Sampling vegetation and soil near the beginning and end of the growing season is shown to be proper for plant up-take studies.
- 21) Appendix A, page 3-3.1 - the in-vivo program is explained.
- 22) Appendix A, page 3-4. para. 3.4.3(1) - reference is made as to when breathing zone samples are taken.
- 23) Appendix A, page 3-4, para. 3.4.3(2) - surface contamination limits for unrestricted use are such that those given for in-plant control are appropriate.
- 24) Appendix A, page 3-6 - the exceptions concerning respiratory protective equipment is withdrawn. We understand the GMR canister is now undergoing approval testing for protection against radioactive iodine which is the only parameter for which like components of this equipment has not already

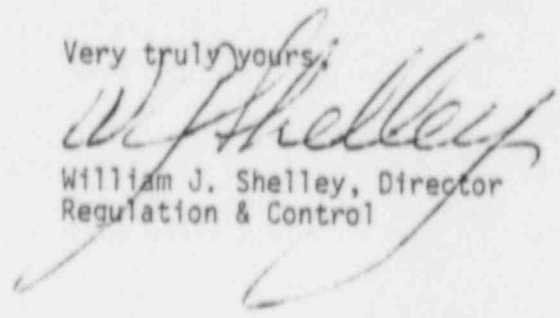
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been approved. In use (by ERDA facilities and others) this equipment has performed well for protection against low concentrations of UO_2F_2 HF. We look forward to its approval, hopefully in the near future.

- 25) Appendix A, page 5-1, para. 5.0 - a commitment to perform Ra-226 and Th-230 analysis on certain environmental air samples to be consistent with the discussion given on page 4-8.3 of the demonstration section.

Your early review of this material and approval of this renewal application will be sincerely appreciated.

Very truly yours,



William J. Shelley, Director
Regulation & Control

WJS:hw

Enclosures