THE UNIVERSITY OF KANSAS · LAWRENCE, KANSAS · 66044

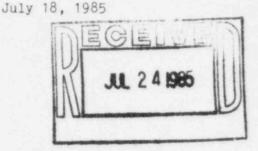


DEPARTMENT OF CHEMICAL AND PETROLEUM ENGINEERING

**Chemical Engineering** 102 Nuclear Reactor Center 913-UN 4-3938

> Mr. G.L. Madsen U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive Arlington, TX 76911

Re: Docket No. 50-148



Dear Mr. Madsen:

8508090212 850718

05000148 PDR

ADOCK

PDR

In accordance with Facility License R-78 I submit the following annual report for the period July 1, 1984 to June 30, 1985.

- 1. The reactor was not operated during the period; hence no megawatt hours were accumulated.
- 2. There were no unscheduled shutdowns.
- 3. Routine maintenance has been successful in avoiding any necessity for performing special preventative and corrective maintenance having safety significance.
- 4. There have been no changes in the facility or in the procedures nor have any test or experiments been carried out without prior approval by the NRC pursuant to 10 CFR 50.59.
- 5. There was no release of any activity to the sanitary sewer system from the demineralizer regeneration effluent hold-up tank during the period stated above.
- 6. The following results were determined from 50 samples of air taken outside of the reactor building. All values were below the MPC's for uncontrolled areas. The minimum detectable activity is expressed as MDA.

alpha activity	32 samples < MDA average MDA 0 samples > MDA	0.46 $\pm$ 1.02 X 10 <sup>-14</sup> µCi/ml
beta activity	41 samples < MDA average MDA 0 samples > MDA	$0.48 \pm 1.42 \times 10^{-13} \mu \text{Ci/ml}$
gamma activity	37 samples < MDA average MDA 1 sample > MDA	0.43 $\pm$ 1.31 X 10 <sup>-12</sup> $\mu$ Ci/ml 1.65 $\pm$ 1.31 X 10 <sup>-12</sup> $\mu$ Ci/ml

Mr. G.L. Madsen July, 18, 1985 page 2

\*

11

7. The following results were determined from 50 samples of air taken in the reactor bay of the reactor building. All values were below the MPC's for uncontrolled areas. The minimum detectable activity is expressed as MDA.

alpha activity	40 samples < MDA average MDA 0 samples > MDA	$0.30 \pm 0.77 \times 10^{-14} \mu Ci/ml$
beta activity	44 samples < MDA average MDA O samples > MDA	$0.26 \pm 0.99 \times 10^{-13} \text{ µCi/ml}$
gamma activity	42 samples < MDA average MDA 1 sample > MDA	$\begin{array}{c} 0.30 \pm 0.90 \ \text{X} \ 10^{-12} \ \mu \text{Ci/ml} \\ 0.88 \pm 0.82 \ \text{X} \ 10^{-12} \ \mu \text{Ci/ml} \end{array}$

- 8. No facility personnel or visitors received any significant radiation exposure.
- 9. The membership of the University's Committee on Radiation Sources is currently:

Professor Francis Prosser, ChairpersonPhysicsProfessor Donald Robertson, Vice ChairpersonMicrobiologyProfessor Walter DixonPharmacology

Physics Microbiology Pharmacology & Toxicology Biochemistry Chemical & Petroleum Engineering

The Nuclear Reactor Committee remains the same.

Professor Robert Sanders

Professor Harold Rosson

Harold F. Rosson Professor

HFR:dm

cc: Nuclear Reactor Committee