

DATA SHEET

Attached N/A

Appendix A ☐ ☐

Appendix B ☐ ☐

Appendix C ☐ ☐

DOCKET NO. _____

FACILITY FOME OX IncINSPECTION NO. 7601CITY, STATE Parsippany, N.J.DATE/S 7/28/76

SUBJECT - RADIATION SAFETY

LICENSE NO/S. 29-15364-01

PHONE # FTS _____

LOCAL 201-887-9700INSPECTOR C. F. Stearns & Robert O. M. GontchREVIEWER R. D. McQuate

TYPE OF INSPECTION:

☒ REINSPECTION☒ SPECIAL
☐ ROUTINE☒ ANNOUNCED
☐ UNANNOUNCEDDATE OF LAST INSPECTION: 10/22/75RECOMMENDED DATE, NEXT INSPECTION: ~ 8/15/76☒ SPECIAL
☐ ROUTINE

TYPE OPERATION: _____

SCOPE OF OPERATION

☐ SMALL
☒ MEDIUM +☐ LARGE

PRESENTLY CLASSIFIED CAT/PRI _____

AS OF AMENDMENT NO. _____

☐ NO CHANGE REQUIRED☐ CHANGES TO CAT/PRI _____☐ PER ATTACHED MEMO DATED _____SUMMARY OF FINDINGS

☐ NO NONCOMPLIANCE NOTED

☐ 591 ☒ ROL ☐ OTHER

☒ NO SPECIAL PROBLEMS

☐ SEE APPENDIX A FOR NONCOMPLIANCE ITEMS☐ SEE APPENDIX B FOR PROBLEM AREAS
RELATIVE TO _____PERSONS CONTACTED*

NAME	TITLE	ORG	NAME	TITLE	ORG
#1. George R. Dietz	President	RPO	6.		
#2. John Massfield			7.		
3. William R. Korman	Operator		8.		
4. William Owens			9.		
5. Dr. Dwight Glenn	Consultant		10.		

* MANAGEMENT MEETING ATTENDEES

Memo to File

Special Inspection 7/28/76

REPORT DETAILS

This was a special inspection, limited primarily to determining whether adequate radiological safety ~~control~~ measures were taken to control such potential hazards as external and internal exposure of personnel; spread of contamination to adjacent areas; and release of activity to ground following the discovery that activity was leaking from one or more C-60 sealed sources. (See telegram and 30-day report for details of procedures followed by licensed ^{to discover} source of leaking activity, etc.)

The radiological safety activities etc were apparently being supervised by John Massfield, with help and advice from Dr. Dwight Glenn a ^{health physics} consultant.* George Dietz, President and RPO was also available for discussion of the problems involved and participating in making decisions on courses of action.

Pocket dosimeters, as well as film badges, were worn by all persons working in the restricted areas. As of the day of inspection, total exposures were reportedly approximately 100 mrem for Massfield, Owens and Glenn; less than 300 for McKim; and ~ 500-600 for Hollis. (When changing water filters, for example, levels as high as 500-600 mrem/hr were encountered near the surface of the filters.)

* (Massfield stated that many many other persons with various areas of expertise were also contacted for advice.)

Smears taken in cells indicated a build up of contamination in some areas as high as 20-30,000 c.f.m. Some clean up of hot spots was being done. Personnel entering ~~any~~ contaminated areas wore gowns, gloves, and shoe covers. No respirators had been used yet, but Glenn stated that ~~so~~ they would be prescribed for person entering hot cells.

A Stapley Type TF-1A air sampler was purchased and was received by Tuesday P.M., 7/27/76. Samples had been taken at vent to determine exhaust to roof, and results on the order of 10^{-12} to 10^{-11} $\mu\text{Ci}/\text{cc}$ were obtained.

An adaptor was made up so that the Stapley could be coupled to a pipe leading directly into the hot cell, in order to get a more nearly direct determination of the air concentration levels existing in the hot cell.

Two samples of hot cell air were taken by this method before the end of the inspection.

First sample: ~20 CFM for 5 min $\rightarrow 5.1 \times 10^{-12}$ $\frac{\text{uCi}}{\text{cc}}$
Second sample: 5-16 CFM for 7 min $\rightarrow 4.5 \times 10^{-12}$ $\frac{\text{uCi}}{\text{cc}}$

Samples were collected on Whatman 41 paper, a one-inch circle was cut from paper with total area 16 times as large as the one-inch piece and it was counted on a gas-flow detector, feeding into a Baird-Atomic ⁵³⁰ analyzer.

After discussing the problem of potential internal exposures of personnel with McClinton, Glenn stated that he would recommend ~~that he would recommend~~ that bioassays be run on 1 or more key personnel.

According to Massfield, thus far there
had been no indication of ~~toxa~~ loss
of water from the pool. Methods were
discussed for more directly determining
whether any activity might be related
to the ground surrounding the pool.

On August 2, 1976, McLintock telephoned
Massfield to determine the status
— (as Stearns had done on July 26 and 28).
No new problems had developed according
to Massfield. He reported that a
"new source" suspected of being the leaker
had been transferred into a cylindrical
capsule closed with Swagelok fittings
at each end. ~~Decrease~~ in leak
following ~~removal~~ enclosure of this
source in an essentially sealed
container was considered an indication
that the leaking source may have
been discovered. * "Neutron Products source secured 5/23/77")