DONALD F. SCHUTZ, President

TELEDYNE ISOTOPES
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31 July 1980
DFS-1294

Mr. John D. Kinneman, Chief
Materials Radiological Protection Section
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Re: Docket Nos. 30-05219)
30-14452)
License Nos. 29-00055-06
29-00055-16

Received 7/14/80

Dear Mr. Kinneman:

Pursuant to 10CFR 2.201, please be informed:

Item A (Infraction) - 10CFR 20.201(c)

The specific item cited refers to the inadequate evaluation of the data obtained concerning the release of contents of the holdup tank in our precious metal decontamination laboratory. As stated during the inspection, we did evaluate the raw data obtained from gross alpha, gross beta, uranium, and isotopic uranium by mass spectrometry, and complete Ge(Li) gamma spectral analyses which showed a positive value for the amount of U-235 in the water. This value was compared to the values set forth in 10CFR 20 Appendix B, Table II, Column 2. As it was less than the value given without any dilution whatsoever, the water was authorized for release.

Some time later a report was issued by our environmental section, which performed the gamma analysis, stating that the Ra-226 was present. As we had released the water in the holding tank, having already evaluated the preliminary data, the formal report was filed without being reviewed.

During the inspection, the formal report was brought to our attention and we had no response since we had not previously seen the positive Ra-226 values on the report. Subsequent to the inspection, the data was retrieved and the gamma spectra evaluated. The gamma line interpreted by the computer as Ra-226 was shown to be U-235. Uranium-235 was not identified by the computer because it is not included in the computer program environmental search routine. The gamma line interpreted by the computer as Ra-226 was fully accounted for by the U-235 present. This confirms our assumption that Ra-226

was not in the water because none had ever been in the laboratory. A corrected report is to be issued.

Therefore, the infraction we committed was one of documentation and not one of improper evaluation of data. Admittedly, the final report should have been reviewed before committing it to the files.

To avoid future problems in data interpretation we have, however, instituted at this time a form entitled "Alpha Lab Holding Tank Analysis and Release Authorization Form" (IWL-HP-09), which will document a complete and proper evaluation procedure. A copy is attached for your review.

Item B. (Infraction) - Condition 13 of License No. 29-00055-06

The sealed sources were leak tested on Friday, July 11, 1980. The results were negative. We will institute a monthly and annual check list system whereby we feel this should never occur again. Complete compliance is expected no later than August 15, 1980.

We hope the above material meets with your approval.

Yours truly,

Donald F. Schutz
President

DFS:mm

enclosure: Copy of Form IWL-HP-09

TELEDYNE ISOTOPES

ALPHA LAB HOLDING TANK ANALYSIS AND RELEASE AUTHORIZATION FORM

Date: _____

Date of Last Release: _____

Isotopes Used During Interval: _____

_____

_____

Analyses Required: _____

Recommended By: _____

H.P. Authorization: _____

_____

DATA: SEE ATTACHED _____ SHEETS

Isotope	MPC (uC/ml)	Positive Results	% MPC
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Gross Alpha	3×10^{-8}	_____	_____
Gross Beta	3×10^{-8}	_____	_____

_____

Review of Data: _____

_____

_____

Authorization to Release: _____ RSO

_____ Assist. RSO

_____ Dept. Head