Sealed Source Files LER: IB: JMB JUL 23 1963 F & M Scientific Corporation Starr Road and Route 41 Avendale, Pennsylvania Attention: Mr. J. Peters Gentlemen: The following information should be submitted with respect to your gas chromatography detector cells described by your letter of May 28, 1963: The manufacturer's name and model number for the Hydrogen 3 foil to be used in the cells. Clarification of the amount of Hydrogen 3 to be used in the cells. Your "Instruction Manual" states in different sections V that both 200 millicuries and 250 millicuries will be used. Certain of the drawings submitted with your letter show that 200 millicuries will be used, The specific activity (curies per square inch) of the Hydrogen 3 foil to be used. The manufacturer's name and model number, the total activity and the specific activity of the foil tested as described in Appendix III of your "Instruction Manual," Since your feil test data indicate that a sharp increase in Hydrogen 3 release can be expected above a certain temperature (approximately 150°C, in your test), we would appreciate receiving any additional data, in the form of curves as shown by your "Figure I", which will serve to define the temperature at which the increased release of Hydrogen 3 may be expected; and which will indicate the variation of this "release" temperature from foil to foil as a result of variations in specific activity, foil coatings or other constructional variations. Sealed Source Files 9504200208 950410 PDR RC SSD PDR

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- 5. Confirmation that the label on the device containing the Hydrogen 3 feil will specify the presence of Hydrogen 3, the activity of the feil and date of measurement of that activity, in addition to the information described in drawing 1-2841.
- 6. The model number(s) to be assigned to each of your cell(s) and the gas chromatography device in which each cell is to be used.
- 7. A description of the method to be used to secure the Hydrogen 5 foil in the cells so as to prevent its coming in contact with the cell anode, resulting in shorting of the cell and damage to the foil.
- Correlation of the drawings you have submitted, by number, with
  - 1. The micro cross-section cell, and
  - 2. The electron capture cell.

Some of the drawings submitted with your letter contain the following statement:

"This drawing is the property of F & M Scientific Corp. and must be returned upon request. Information and know-how bereen may not be used nor the drawing reproduced without the written permission of F & M. All reproductions in whole or in part, including vendor's shop drawings, shall bear or refer to this stamp."

Any information used as a basis for evaluation of your devices must remain in our files for reference purposes. You should make a determination at this time as to which crawings may be retained indefinitely by the Commission so that we may evaluate your devices on the basis of these drawings only.

Section 2.810 of the enclosed Title 10, Code of Federal Regulations Part 2, provides for the withholding of certain information from public disclosure. Should you care to make application pursuant to

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this section of the regulations, you must adhere to the requirements of Section 2.810(b) with respect to identifying each document you wish withheld and stating the reason why the document should be withheld from public inspection.

Very truly yours,

William O. Miller Isotopes Branch Division of Licensing and Regulation

Enclosure 10 CFR 2

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