



Nucletron

11/13/2000
CET
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November 3, 2000

Mr. Douglas McAbee
Maryland Department of the Environment
Air & Radiation Mgmt. Administration
2500 Broening Highway
Baltimore, MD 21224

Re: microSelectron V2 12 Ci Source Strength Dose Calculation

Dear Mr. McAbee:

The following information is provided in response to your request for dose rate information following our request for a source strength increase from 10 Ci to 12 Ci.

Ir-192 has a specific gamma-ray constant of .48 R/hr-Ci at 1 m. A 12 Ci source would result in 5.76 R/hr at 1m. Due to the small size of our source, it behaves as a point source and the inverse square law may be applied to the distances under consideration:

<u>Distance (cm)</u>	<u>Dose Rate (R/hr)</u>
0	5,760,000
5	2304
30	64
100	5.76

The surface dose (0 cm) was actually calculated at 1 mm.

I still awaiting confirmation from Holland that the Double "TAB"/"Enter" key software fix will be included in all new TCS upgrades to the Classic. Many people have been out of that office, but I expect a confirmation shortly. Your attention and response to these matters is greatly appreciated. If you have any questions, feel free to call.

Sincerely,
Nucletron Corporation

Robert B. Applebaum, CHP
Director, QA & RA

