



rec'd 8/15

95-95

August 12, 1996

Michele Burgess
U.S. Nuclear Regulatory Commission
Mail Stop T8F5
Washington, DC 20555

Re: Additional information requested for Amendment to Registration for
Registry #NR-122-D-101-S

Dear Ms. Burgess:

This is the response to your request dated August 9, 1996 for additional information for the amendment to the above referenced documents. Each item is addressed in the same order as your letter.

1. Attachment #1 is a copy of our Service Manual. Attachment #2 is a copy of our Operation Manual as would be provided to generally licensed customers. Attachment #3 is a copy of the amendment to the operations manual that will be provided to customer changing from a specific licensed device to a general licensed device. Our manuals are specific to a customer and as a result the examples provided are typical of all manuals. Pages and information that pertains to different isotopes will be appropriate for the particular customer.
2. Tamper resistant "torx" fasteners will be used to secure the collimator plate as indicated in Attachment #4. In addition to using "torx" fasteners these fasteners are located under the cover film. Also, Attachment #5 is a revised QA checklist that add the requirement to check for proper tamper-resistant fasteners. This checklist will only be performed by a *betacontrol* technician.

3. Attachment #6 is a listing of *betacontrol's* customers world-wide and many of these customers operate multiple systems. The current source housing, source holders and mechanisms has been in use since 1985 on over 700 units. There have been no problems or failures of any safety components or loss of source containment to date. Three gauges (sources) were involved in a fire on a self adhesive tape line where the electrical cabling was burned but there was no leakage or other damage to the source or source housings. Only a temperature exceeding the melting temperature of steel could damage the source housings. We verify that the conditions of expected use of these devices will not exceed 140°F.
4. The maximum dose rate extracted from any of *betacontrol's* dose rate tables is 8.0 mrem/hr @ 5 cm from the gap as a whole body dose. Given 10% the maximum limits of 10CFR.1201(a) worker would have to spend over 10 minutes every day during the year at this close distance to exceed the limit, however only replacement of the cover film requires a worker to be at this distance (see #5 below). Maintenance is required every 3 months to grease the scanning rails at distances of over 30 cm from the source. This operation that takes only 5 minutes. At this 30 cm distance, the maximum of any *betacontrol* dose rate is 0.2 mrem/hr. which is far below the limits listed in 10CFR1201(a). Operation of the unit is from a remote control panel many feet from the source and scanning frame.
5. Attachment #7 is a copy of the procedure for changing the cover film as provided in the service manual. This Mylar cover film provides dust and moisture protection only and is only replaced in the event of failure of the film. Unless this cover film is physically damaged it can be expected to last for many years. This film provides no additional radiation protection or screening. Changing the cover film as described in the instructions takes approximately 30 minutes and because of the tamper-resistant style collimator fasteners under the cover film of generally licensed devices, source security will not be compromised. Additionally, because the aperture in the collimator is either 10mm wide or a series of small holes in a hexagon pattern, there is no possibility for a worker to push the shutter from covering the source. The dose for changing the cover film based on the calculated 8.0 mrem/hour (see #4 above) is 4.0 mrem which is far below the limits of 10CFR1201(a).
6. Included in the above attachments is the original Agreement State listing. Your letter did not include the corrections as indicated. If you would supply the correct list I will correct the erroneous list.

Thank you for your assistance in this registration/license application. If you have any question, please contact me at 201-263-4243.

Sincerely,



Ray Santoianni
Service Manager