

HOPEWELL DESIGNS, INC.

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REC'D MAR 29 2001

March 16, 2001

Mr. Eric Jameson
Department of Natural Resources
Radioactive Materials Program
P.O. Box 1001161
Atlanta, GA 30392

Ref: Device Registration of Model G10
Response to questions in letter dated March 15, 2001

Dear Mr. Jameson:

In response to the questions in your letter dated March 15, 2001 I have provided the following information. The following numbered paragraphs correspond to the questions in your letter.

- ✓ 1) Sealed source model CDC.PE2. The CDC.PE2 and CDC.PE3 are no longer supplied by AEA Technology. Please remove these capsules from the application.
- ✓ 2) Series designation. The designation should be G10-*-12 and G10-*-360, with * referring to either 1 or 2.
- ✓ 3) Dimensions on the inner casing. The actual dimensions are as follows: The inner diameter of the casing is 1.200". The brass bushings, which are the largest part of the source holder and which guide the holder up and down the inner casing, are 1.180". During the manufacturing process, these bushings are adjusted slightly as required to assure smooth movement of the source holder.
- 4) The maximum angle is 30 degrees. If customers request a smaller angle, as the US Army has, the irradiator can be supplied with a smaller angle without jeopardizing the radiological safety of the device. Drawing RA-1630 should state 30 degrees for the standard model.
- ✓ 5) Source activities in the table on page 6 are nominal activities with a tolerance of +/- 20%.
- ✓ 6) Timer. If an interlock is disrupted, the source returns to the storage position and the timer stops.
- ✓ 7) Emergency Off Switches. The emergency off switches are wired in series. Additional switches can be added to this circuit at the user's request.
- ✓ 8) Source position indication. The source position indication will be modified to indicate the following positions: shielded, in transit, fully exposed.

- 9) Labels. The serial number is for the device. The address will be Hopewell Designs, Inc. current address.
- ✓ 10) Labels. The labels are constructed from aluminum with silkscreened text. They are permanently affixed to the device with fasteners.
- ✓ 11) *verify calc.* The lead plug is shaped the same shape as the collimator. The thickness is at least as much as the lead shielding for the irradiator. When the plug is installed in the collimator, radiation levels around the plug would be no higher than any other location on the side of the device. Radiation levels would not exceed 5 mR/hr at 12" from the shield.
- ✓ 12) Units for table of radiation analysis on page 15. Units for the exposure rate columns (Surface, 5 cm, 30 cm, and 100 cm) are in mR/hr. Units for distance columns (Steel, Lead, Tungsten, and Distance to Surface) are in inches.
- ✓ 13) This device can be supplied with computer control even if the attenuators and linear positioning system are not supplied.
- ✓ 14) *list in unit/consider for use* Reset button. The reset button will reset elapsed time to zero whenever it is pushed.
- 15) DOT-7A certification. Attached is the revised certification for the device with the maximum activity of 360 curies. The primary difference is that all references to 200 curies has been changed to 360 curies. Please note that Section 1 of the document serves as the DOT-7A certificate.
- ✓ 16) Location of parts. All parts of the device are located above the floor surface. The base is flush with the floor.
- ✓ 17) The system manual is supplied with the device. This includes operating instructions, maintenance instructions, drawings and schematics, source certificates, DOT-7A certification, parts lists, and component manuals. At installation, a radiation survey is performed and documented.
- ✓ 18) Attached are drawings RA-1614, sheets 1 through 8, and RA-1636, sheets 1 through 5. These drawings meet the requirements of our QA Policy Manual Section 4.1.4.2.b

Thank you for your support and assistance. Please let me know if you need any additional information.

Sincerely,



R.O. Rushton
President

Encl: DOT-7A certification for Model G10-2-360
Drawing RA-1614, sheets 1 through 8
Drawing and RA-1636, sheets 1 through 5