



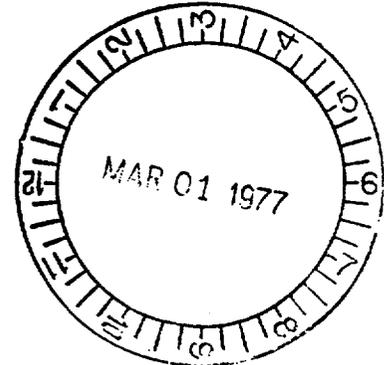
0683

JONES & LAUGHLIN STEEL CORPORATION

3 GATEWAY CENTER**ANDREW A. MAMMARELLI, JR.**
MANAGER, INDUSTRIAL HEALTH ENGINEERING**PITTSBURGH, PA. 15230**

February 25, 1977

Director of Nuclear Material
Safety and Safeguards
Radioisotope Licensing Branch
U.S. Nuclear Regulatory Commission
Washington, D.C.-20555



ATTENTION: Mr. Frederick Combs

Gentlemen: RE: CONTROL NO. 85823

In reference to our telephone conversation of February 23, 1977, the following additional information is forwarded for your consideration in reviewing our Byproduct License Application dated 1-21-77, for the Pittsburgh Works facility:

Item 12, para. 2, p.1

In reference to the area of 10-15 mr/hr referred to in this paragraph, please be advised that this area will be inside the locked expanded metal enclosure, behind the detector housing, when no product (coal) is on the conveyor belt. During normal operations, when coal is on the belt, this radiation level will be less due to further attenuation by the product.

This aforementioned area is at a distance of 8 feet from the source, in the attenuated primary beam, which will have a diameter of 9 inches at this point. The locked expanded metal cage enclosure has an outside diameter of approximately 5½ feet, and the air gap under this enclosure is approximately 5". (See Drawing PF-4935). Therefore, personnel whole body exposure is not physically possible.

Considering the "extremely remote" possibility of a workman lying on the concrete floor, with his shoulder directly against the side of the enclosure, with a normal arm length of 28 inches, the "tip" of his fingers would still be outside the primary beam (10-15 mr/hr). There is no need for a workman to assume this position at any time.

A "corrected copy" of the previously submitted "sketch" is enclosed as further illustration.

Information on primary radiation beam intensity and diameter was supplied by Texas Nuclear health physics personnel.

**COPIES SENT TO OFF. OF
INSPECTION AND ENFORCEMENT**

C/4

Director of Nuclear Material Safety and Safeguards

February 25, 1977

ATTENTION: Mr. Frederick Combs

RE: CONTROL #85823 (Continued)

- Page 2 -

Item 13, para. 1, p.1

The Texas Nuclear Model 5157 device should be Model 5176.

Item 14, para. F, 4, p.3

Please add the following:

At such times that the nuclear device will be removed from its fixed location for only short periods of time. (1 work shift or less), the nuclear device with its shutter mechanism in a locked, closed position, will be under the direct surveillance of the R.S.O. or his authorized representative at all times.

Item 15

Please add the following:

Procedures for removal of the nuclear device from its fixed locations will be as those as outlined in item 14, para. F.

Packaging and shipping instructions will be provided by Texas Nuclear Corporation or other persons authorized by the Commission for disposal of radioactive materials, and will be in accordance with applicable regulatory requirements; i.e., DOT, NRC, etc.

If you should have any further questions, please do not hesitate to contact me.
Telephone number - 412-565-3622.

Your consideration in expediting the processing of this license application will be greatly appreciated due to the urgency to implement this process control device.

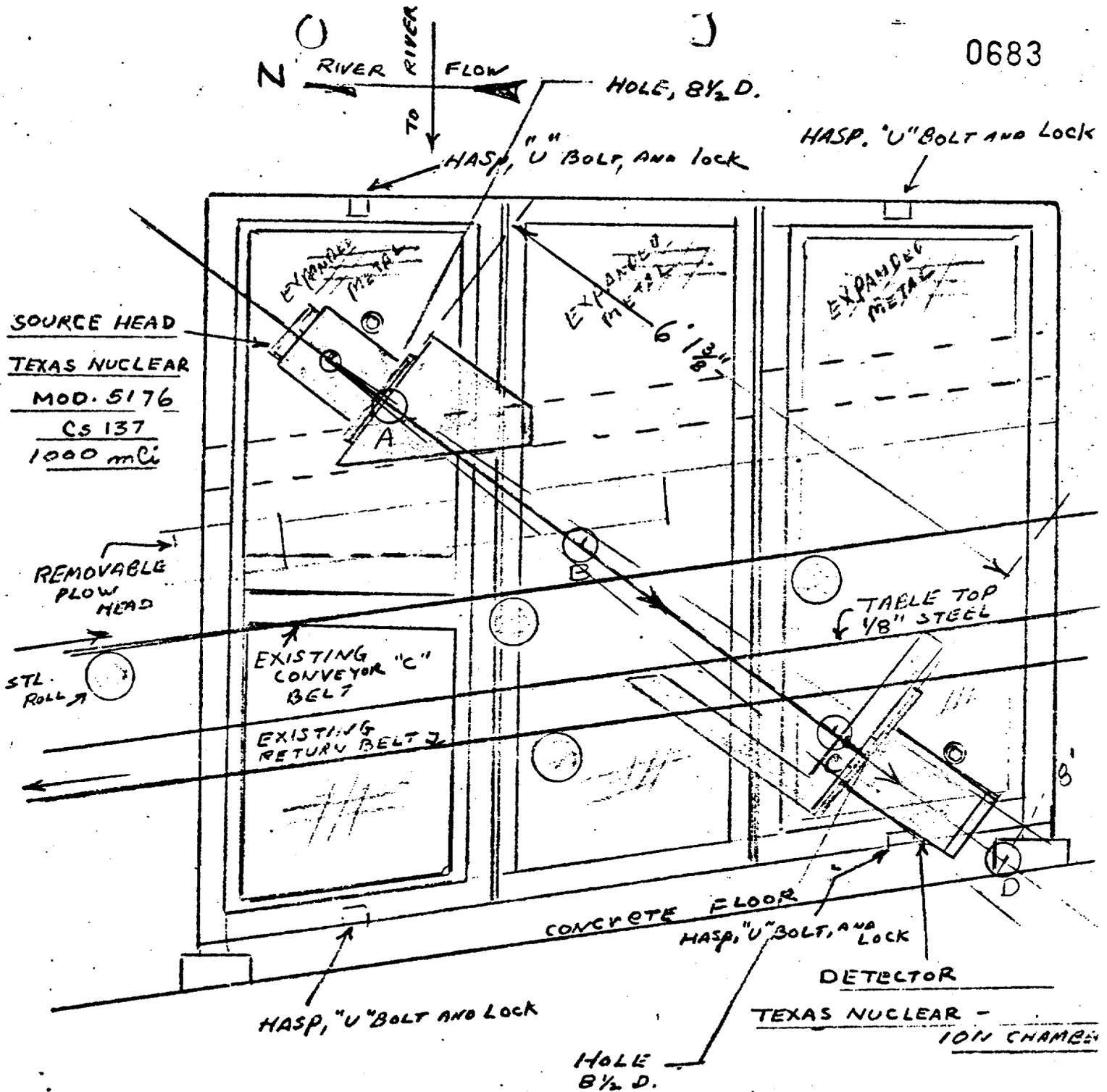
Yours very truly,

JONES & LAUGHLIN STEEL CORPORATION

A.A. Mammarelli, Jr.

A.A. Mammarelli, Jr., Manager -
Industrial Health Engineering

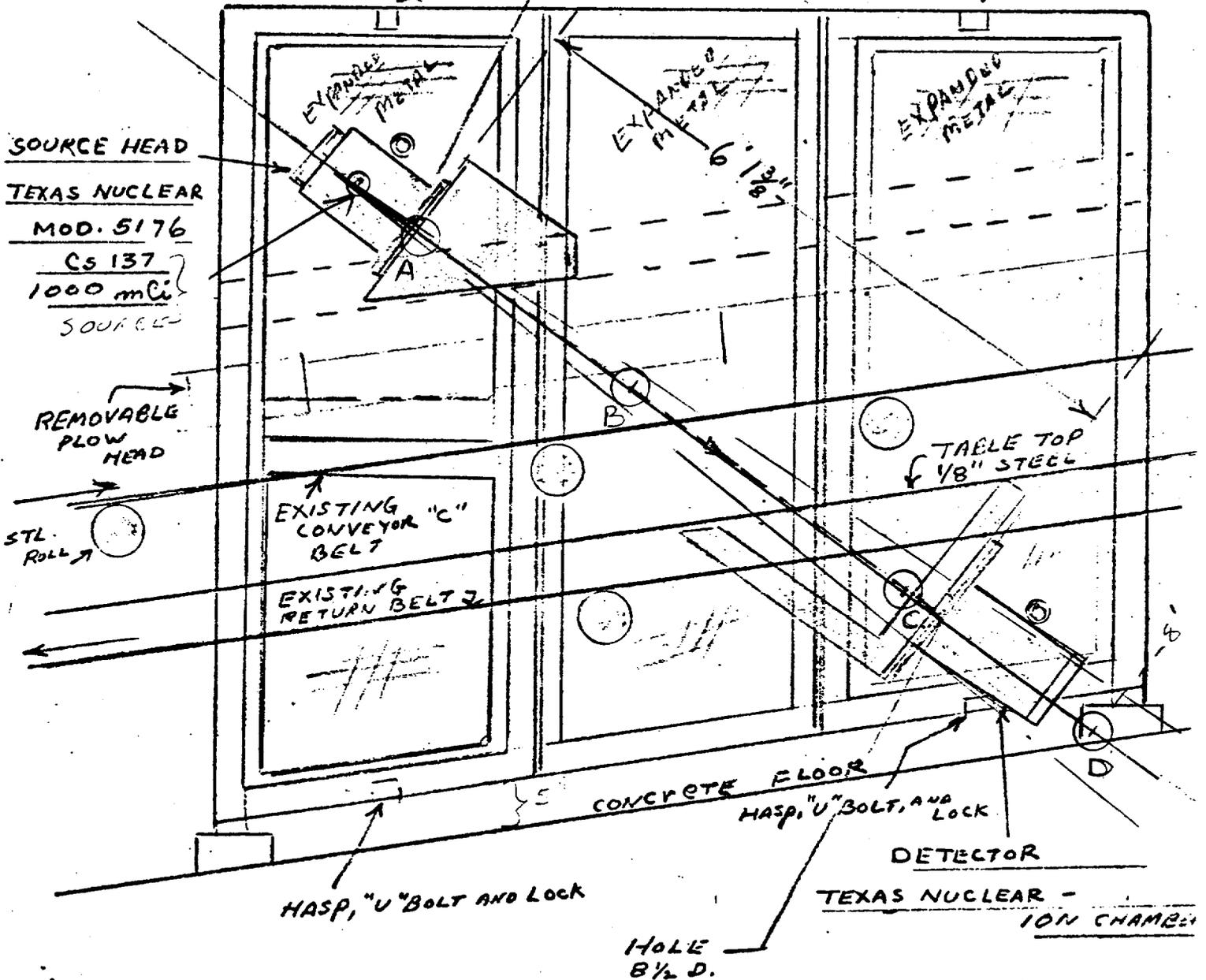
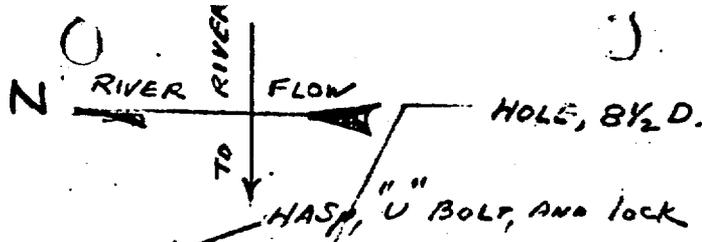
cc: J.S. Arnold, Jr.
W.J. Flaherty
R.J. Halen, M.D.
J.J. Murray
R.F. Wall



NOTE: CALCULATED
 PRIMARY BEAM DIAMETER:
 PT. A - - - - 0.5"
 PT. B - - - - 3.7"
 PT. C - - - - 7.0"
 PT. D - - - - 9.0"

SKETCH

PITTSBURGH WORKS
 BY PRODUCT PLANT
 COAL HANDLING
 42" BELT CONV. "C"
 BULK DENSITY CONTROL



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 PRIMARY BEAM DIAMETER
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