

July 29, 2016

U.S. Nuclear Regulatory Commission, Region III
Attn: Materials Licensing Section
2443 Warrenville Rd.
LISLE, IL 60532-4352

RE: **NRC License #21-04515-01**

Event #: 52134 (Previously reported by telephone on 7/29/16 under 10 CFR 35.3067)

It was reported an I-125 seed in a breast tissue specimen had been damaged during extraction from the specimen. Following is a follow up written report in compliance with 10 CFR 35.3067.

- (i) **Licensed Material:**
- | | |
|-----------|--|
| Quantity: | 1 |
| Type: | I-125, solid sealed (encapsulated in Tungsten), 4.5 mm Long and 0.5mm diameter |
| Strength: | 0.185 mCi |
- (ii) **Description of circumstances:** Pathology received a single specimen containing two ¹²⁵I seeds. In the process of preparing the specimen, one of the seeds was found to be in pieces. There was evidence that the contents of the seed had been spilled. The parts of the broken seed along with the other intact seed were removed from the specimen, placed in a plastic vial with a cap. The vial was then placed in a lead pouch and placed in the radioactive storage cupboard. The specimen was then surveyed and found to be active. The specimens were placed in sealed containers with formalin. The containers were then placed in a lead pouch and stored in the radioactive material storage cupboard. An area survey was conducted with negative results. Regardless, the area, and equipment used to process the sample were abandoned and the area labeled 'Do Not Enter'. The following morning wipe tests were performed and the area decontaminated. The sources were taken from the pathology radioactive storage cupboard to decay in storage in the radiation oncology hot lab.
- (iii) Two ¹²⁵I seeds were implanted into a patient. Each seed had a separate written directive which accompanied the two seeds (two written directives). After implantation the patient went to surgery where both seeds were removed and contained within a single tissue specimen.
- (iv) Radiographs of the tissue sample obtained in the operating room indicate both seeds were present and intact within the tissue specimen when removed from the patient.
- (v) A thyroid bioassay was performed on the Pathology assistant working on the specimen and the results were negative.
- (vi) Both the damaged and undamaged radioactive seeds will be held for decay in the radiation oncology hot lab.
- (vii) The tissue specimen will be stored in a lead sealed pouch in the radioactive storage cupboard in pathology until it is processed in a manner similar to the processing of radioactive tissue from lymphoscintigraphy.
- (viii) Contaminated pathology tools and equipment will be cleaned and returned or held until decayed and disposed of
- (ix) It is our conclusion that no one received or will receive any additional exposure due to the radioactive seed being damaged.

If you have any questions, please contact **Michael Arsenault at (313)-359-7650** or michael.arsenault@beaumont.org. We appreciate your prompt attention to this matter.

Sincerely,

Michael Arsenault.
Radiation Safety Officer
Oakwood Hospital and Medical Center
18101 Oakwood Blvd.
Dearborn, MI 48123

Sulaiman, Zahid

From: Gattone, Robert
Sent: Friday, August 19, 2016 12:23 PM
To: Sulaiman, Zahid
Subject: FW: seed event #52134 "Oakwood Dearborn Hospital" (part of Beumont Health) NRC License #21-04515-01
Attachments: 2016 07 NRC damaged Source.doc

From: Lipa, Christine
Sent: Monday, August 01, 2016 1:34 PM
To: Gattone, Robert <Robert.Gattone@nrc.gov>
Subject: FW: seed event #52134 "Oakwood Dearborn Hospital" (part of Beumont Health) NRC License #21-04515-01

From: RidsRgn3MailCenter Resource
Sent: Monday, August 01, 2016 11:20 AM
To: RidsRgn3Dnms Resource <RidsRgn3Dnms.Resource@nrc.gov>
Cc: Giessner, John <John.Giessner@nrc.gov>; Lipa, Christine <Christine.Lipa@nrc.gov>
Subject: FW: seed event #52134 "Oakwood Dearborn Hospital" (part of Beumont Health) NRC License #21-04515-01

From: Arsenault, Michael, DO [<mailto:Michael.Arsenault@beaumont.org>]
Sent: Friday, July 29, 2016 7:37 PM
To: RidsRgn3MailCenter Resource <RidsRgn3MailCenter.Resource@nrc.gov>
Cc: Vella, Lindsay T <Lindsay.Vella@beaumont.org>; Bain, Lisa M <Lisa.Bain@beaumont.org>; Vargas, Timothy <Timothy.Vargas@beaumont.org>; Sebastian, Evelyn <Evelyn.Sebastian@beaumont.org>
Subject: [External_Sender] seed event #52134 "Oakwood Dearborn Hospital" (part of Beumont Health) NRC License #21-04515-01

Attached is written report as required for
10 CFR 35.3067 event #52134.

Thank you,

Michael D Arsenault, DO
Radiation Safety Officer
Radiology - Beumont Hospital Dearborn
313-593-7323
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18101 Oakwood Blvd. | Dearborn | MI | 48124