



SSM St. Clare Health Center

January 20, 2016

United States NRC
Division of Incident Response Operations
Washington, DC 20555-0001

Re: License 24-11858-01

Subject: Report of Loss of Licensed Material

Pursuant to 10CFR20.2201 St. Clare Health Center would like to report the loss of a single I-125 sealed source used for prostate seed implants. The following is a written report in the format required by 20.2201 (b)(i-vi)

Licensed material involved: The lost material was a single I-125 sealed source Model 6711 with an apparent activity of 0.359 mCi on 9/14/2015. The specific source missing was the **calibration seed** ordered along with the implant sources, which are preloaded into needles.

Description of circumstances under which loss occurred: On 12/22/2015, during inventory and collection of seeds (from several prostate seed cases) for shipment back to the vendor for disposal, it was discovered that the calibration seed from one patients pig was missing. This seed is distinctive due to the black marking on one half of the seed. This seed is only removed from its pig in the Hot Lab during calibration, so it is hypothesized that it inadvertently flipped out of forceps unnoticed during the calibration process.

A statement of disposition, or probable disposition, of the licensed material involved: The calibrated seed is shipped in a separate pig along with the preloaded needle trays. The calibration seed is only removed from the pig in the hot lab. Therefore, our feeling is that the highest probability of loss was in the Hot Lab during calibration. While it is difficult to be completely sure of the location of the seed it is felt that it is still in the hot lab in an inaccessible location.

Exposures of individuals to radiation: Since the seed was not discovered on survey (at the lowest setting of the meter) in the hot lab nor the OR suite the best estimate of exposure to personnel is minimal. With the low energy of I-125 and the low activity of 0.359 mCi on the day of the implant (Sept 24, 2015) it would not take much in the way of attenuating material to mitigate exposure to others.

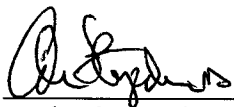
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Actions that have been taken to recover the material: The L-Block shielding and supplies were all dismantled, moved and searched, however the seed was not found. Storage carts and stored supplies around the hot lab were also moved and surveyed, the seed however was still not recovered. Although the OR suite was surveyed at the time of the implant as a part of our policy, we returned to the same OR suite upon discovery of the missing source to survey again. The seed was still not recovered.

Procedures or measures that have been, or will be, adopted to ensure against a recurrence: Several specific actions are warranted to reduce potential loss in the future. The highest likelihood of loss would seem to be when sources are being handled outside of their respective storage location. i.e. During movement of seeds from the pig to ion chamber and consolidation of unused seeds from the extra needles ordered for each implant. **First**, when the calibration seed is being removed and returned to the pig, use of reverse action forceps will be mandated. **Secondly**, when the seed is returned to the bottle and the cap replaced, the bottle will be inspected to verify it contains the calibration seed. **Third**, the practice of "pushing out" seeds from unused needles into the pig following each case, in the OR suite, will no longer be allowed. **Fourth** and finally, the calibration source and the pig it is stored in, will remain in the hot lab. An extra pig with an empty bottle will be taken to the OR in the event a seed must be retrieved from a patient and must be stored.

If you have any questions or need further information, please contact Mark Pohlman, PhD. His contact information is below.

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