



January 6, 2010

To: Director
Office of Nuclear Materials Safety and Safeguards
Nuclear Regulatory commission
Washington, D.C.

Subject: Malfunctioning Lock, INC IR-100
Event Number 45609
Materials License No.50-27667-01

To Whom It May Concern:

On January 6th a radiography crew working the Kuparuk Oil Field on the North Slope of Alaska experienced a malfunctioning locking system on an INC IR-100 exposure device.

When returning the source (Ir^{192} , 108 curies) the locking bar deployed prematurely. The crew reset the locking bar and was able to return the source to the safe and secure position. The crew was working a remote location using a Tucker (tracked machine for traveling over snow) and called for the night Foreman. They met at a Drill site where the exposure device was reconnected to the drive cables. The source was extended and then retracted. It was noticed that on the return the crank assembly became hard to turn. After the locking bar tripped, the exposure device was surveyed with no noticeable indication that the source was not in the safe and secure position. When the crank assembly was disconnected it was noted that the pig tail was not in its proper position. The exposure device was transported back to the main office.

When the lock was disassembled there the technician noted "The lock chamber had a reasonable amount of grit coated to the internals". It should be noted that the exposure device had just been received the day prior.

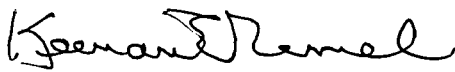
The lock assembly was cleaned and reassembled as was the crank assembly.

The weather was minus 10 degrees with a wind speed of 10 knots.

There was no exposure to the crew or the General Public during this incident.

If there are further questions or information required, please feel free to contact me.

Sincerely,


Keenan E. Remele
RSO

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