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February 26, 2018

Mr. Frank Tran
Health Physicist/License Reviewer
Nuclear Regulatory Commission
NRC Region III
Division of Nuclear Materials Safety

RE: License No. 42-32507-01, Crimped source tube, P66 Refinery, Billings, MT

Dear Mr. Tran,

I wish to notify you of the following incident that took place at the Phillips 66 Refinery in Billings, Montana.

On the 19th of February 2018 a radiography crew consisting of Mr. Dalton Keesecker (carded radiographer) and Mr. Andrew Marquez (assistant) were working with a QSA 880D exposure device loaded with Iridium 192 in the Phillips 66 lay down yard. While moving the source into the open position they heard a loud noise originating from the exposure set up area. They immediately attempted to crank the source back into the fully shielded position but the attempt was unsuccessful and they moved the source back into the open, collimated position. After verifying the radiation levels were within the acceptable limit, the local RSO, Mr. Isaiah Murphy, was notified by the radiographer at 12:02 pm, who then notified myself after he talked to the radiography crew.

Upon his arrival on site, Mr. Murphy established that the part to be inspected had tipped over and fallen onto the source tube, resulting in a crimp which prevented the source to be retracted into the fully shielded position. Mr. Murphy and I communicated and set in action a recovery plan, the source was shielded with lead plates, the crimp reduced and the source successfully retracted into the fully shielded position. No members of the general public were exposed to any radiation and neither the radiography crew, nor the RSO received a dose exceeding the limit for personnel working with radiation sources.

The source tube involved in this incident has been removed from service and destroyed. The exposure device involved in this incident has been inspected and checked for proper functionality, found to be in working order and returned to service. A notification was communicated company wide and a radiation safety stand down and refresher training were held at all company locations to ensure all radiographic personnel is aware of this incident. The focus of the training was to emphasize the importance of pausing for only a few minutes and thinking about what could go wrong with a particular set up to have preventive measures in place to stop it from occurring and minimize the impact.

If you have any questions please feel free to contact me at (281) 884-5142 or (832) 741-5289.

Respectfully,

A handwritten signature in black ink.

Matthias S. Kraneiss
Corporate Radiation Safety Officer
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