NUCOR STEEL INDIANA
4537 South Nucor Road
Crawfordsville, IN 47933
765.364.1323

03/31/20

Document Control Desk
Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555–0001

Re: Event #53592

Dear Sir/Madam

This is the final report concerning Event #53592, which occurred at Nucor Steel Indiana 4537 South Nucor Road, Crawfordsville Indiana 47933, Cold Mill Galvanizing Line #1. On 9/10/2018, between 1:30 am and 2:00 am, while threading sheet steel through the C-Frame assembly, the wavy edge of the steel caught the Am-241 source gauge (Model #DMC AM-5A, Activity 1.0 Ci, Serial # 2421LV) and tore it from the C-frame, damaging the airlines and electrical connections. A shift electrician, qualified as an authorized user, was called and performed survey readings in the affected area, which were reported to be below 2 mR/hr. Using standard contamination controls (gloves), the gauge was placed on the pillar next to the line and the area was roped off with “radiation” barrier tape.

At approximately 9:00 am that morning, Becky Mumper from Chase Environmental and myself performed a survey using Ludlum model 19 (#89141, cal due 8/28/19) and Ludlum model 3 w/ 44-9 probe (#157156 w/ PR169170, cal due 3/1/19). Background reading was 4 microR/hr and the highest reading on contact with the gauge was 420 micorR/hr (0.42 mR/hr). A leak test was performed on the source holder and field tested with the Ludlum model 3, which indicated no elevated activity. The gauge was then transported from the pillar at the Galvanizing Line to a cabinet in a nearby electrical room, where it was placed in the bottom shelf of the cabinet and secured with a lock. The temporary storage cabinet was posted with a “Caution Radioactive Materials” sign and the highest reading on contact with the cabinet (20 micorR/hr) was written on the sign.

On 9/11/18, Advanced Gauging came onsite to repair the gauge (replaced source holder), re-install, and verify proper operation. Upon completion of work, they performed required leak testing with satisfactory results

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Please contact me if you have any questions on concerning this event.

Regards,

Shawn Aker, RSO
Nucor Steel – Indiana
765-364-1323 Ext 6510
shawn.aker@nucor.com

From: Aker, Shawn (NSIN)
To: Draper, Jason
Subject: [External_Sender] RE: FW: Nucor
Date: Wednesday, April 01, 2020 7:22:17 AM
Attachments: NRC Report 53592.pdf

Hi Jason,

I wrote this up, let me know if you need anything further.

Thanks,

Shawn

From: Draper, Jason <Jason.Draper@nrc.gov>
Sent: Tuesday, March 31, 2020 8:55 AM
To: Aker, Shawn (NSIN) <shawn.aker@nucor.com>
Subject: [EXT] Re: FW: Nucor

Shawn,

Thank you for this information. Do you recall if you ever sent any "written report" similar to the ones you sent me for the other events back on 2/22/19? Specifically, the report that fulfills the criteria in 10 CFR 30.50(c)(2):

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to the NRC using an appropriate method listed in § 30.6(a); and a copy must be sent to the appropriate NRC Regional office listed in appendix D to part 20 of this chapter. The reports must include the following:
(i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
(ii) The exact location of the event;
(iii) The isotopes, quantities, and chemical and physical form of the licensed material involved;
(iv) Date and time of the event;
(v) Corrective actions taken or planned and the results of any evaluations or assessments; and
(vi) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

I'm able to pull out some of the information we're looking for from these documents you had sent to Kevin back in 2018, like Make/Model/Isotope/Activity, but some of the other more narrative information, like the description of the event, the probable cause, and the corrective actions, either aren't included or aren't necessarily clear.

If possible, please provide this additional information, along with a summary of the other details listed above. This would enable us to have an account of the incident in your words rather than us drawing conclusions based on pieced-together information. This written

report can be emailed to me and I will ensure it is entered into our records database.

Thank you, and let me know if you have any questions.

Jason

From: Aker, Shawn (NSIN) <shawn.aker@nucor.com>
Sent: Monday, March 30, 2020 1:03 PM
To: Draper, Jason <Jason.Draper@nrc.gov>
Subject: [External_Sender] FW: Nucor

From: Aker, Shawn (NSIN)
Sent: Monday, September 17, 2018 4:37 PM
To: kevin.null@nrc.gov
Subject: Nucor

Hello Kevin,

Please see the attached information regarding our incident on 9/10/18. Included is our leak test certification from Chase received today, this was the last piece of information I was waiting on. If you have any questions, please contact me for any additional information.

Regards,

Shawn

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