



## Materials Inspection Report

<b>1. Licensee/Location Inspected:</b> Nucor Steel Corporation Crawfordsville Mill  4537 S. Nucor Rd. Crawfordsville, IN 47933  <b>Report Number(s)</b> 2023001	<b>2. NRC/Regional Office</b>  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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<b>3. Docket Number(s)</b> 030-30835	<b>4. License Number(s)</b> 13-25975-01	<b>5. Date(s) of Inspection</b> July 20, 2023
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**LICENSEE:**  
 The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.
  - A. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy were satisfied.  
 (Non-cited violation(s) was/were discussed involving the following requirement(s))
  
  - B. The following violation(s) is/are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.  
 (Violations and Corrective Actions)

### Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Zahid Sulaiman, Health Physicist	Zahid M. Sulaiman <small>Digitally signed by Zahid M. Sulaiman Date: 2023.08.11 13:52:37 -05'00'</small>
BRANCH CHIEF	Rhex Edwards, Chief, MIB	 <small>Digitally signed by Rhex A. Edwards Date: 2023.08.17 07:12:07 -05'00'</small>



### Materials Inspection Record

<b>1. Licensee Name:</b> Nucor Steel Corporation		<b>2. Docket Number(s):</b> 030-30835		<b>3. License Number(s)</b> 13-25975-01	
<b>4. Report Number(s):</b> 2023001			<b>5. Date(s) of Inspection:</b> July 20, 2023		
<b>6. Inspector(s):</b> Zahid Sulaiman, Health Physicist		<b>7. Program Code(s):</b> 03120	<b>8. Priority:</b> 5	<b>9. Inspection Guidance Used:</b> 87124	
<b>10. Licensee Contact Name(s):</b> Shawn Aker, RSO		<b>11. Licensee E-mail Address:</b> shawn.aker@nucor.com		<b>12. Licensee Telephone Number(s):</b> Work: 765-612-2101	
<b>13. Inspection Type:</b> <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		<b>14. Locations Inspected:</b> <input type="checkbox"/> Hybrid <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Field Office <input type="checkbox"/> Remote		<b>15. Next Inspection Date (MM/DD/YYYY):</b> 07/20/2028 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	
<b>16. Location(s) Inspected List:</b> Main office: 4537 S. Nucor Road, Crawfordsville, Indiana 47933					
<b>17. Scope and Observations:</b> This was an unannounced routine inspection of a large steel mill authorized to use byproduct material in a variety of fixed process gauges to perform thickness and level measurements at its facilities in Crawfordsville, Indiana. The mill had approximately 750 employees and produced coated flat-rolled steel sheets. The licensee possessed three Co-60 gauges (two in use, one in storage) to perform level measurements and six Am-241 gauges to perform thickness measurements. Approximately 20 individuals, including the RSO, were involved with use and oversight of the gauges, and have completed a radiation worker gauge user training. The licensee utilized an outside consultant authorized to perform leak test analysis, shutter checks, quarterly and annual audits, staff training, gauge removal and relocation, and surveys.  The inspector reviewed two events, EN 53592, dated 9/10/2018, and EN 53845, dated 1/24/2019, and considers them closed. The inspector reviewed the two event reports, the licensee's corrective actions, and service vendor maintenance reports and found the licensee took appropriate corrective actions and full compliance was achieved.  <p style="text-align: center;"><b>PERFORMANCE OBSERVATIONS</b></p> This inspection consisted of a tour of the steel mill (cold mill, caster mill, and galvanize line A & B ), interviews with select licensee personnel, a review of select records, an observation of security of the materials, and independent measurements. The inspector toured the select areas of the steel mill plants where the specifically-licensed gauges were located to evaluate the licensee's measures for materials security, hazard communication, and exposure control. The inspector interviewed the licensee's staff about the leak test, shutter check, lock-out procedures, gauge maintenance, and emergency response procedures. Through these discussions, the inspector found the licensee's staff to be knowledgeable of radiation protection principles and regulatory requirements.  The inspector reviewed a selection of relevant records, including the licensee's master inventory, semi-annual shutter checks and area surveys, leak test results, initial and annual training, quarterly and annual program audits, and dosimetry report (till 5/25/2023), with no issues noted. The inspector performed independent radiation					

**Materials Inspection Record (Continued)**

measurements and found no exposures distinguishable from background.

No violations of NRC requirements were identified as a result of this inspection.

Signature and Date - Branch Chief



 Digitally signed by Rhex A. Edwards  
Date: 2023.08.17 07:11:26 -05'00'