

January 3, 2014

EA-13-250

Mr. David Hollander
Radiation Safety Officer
Harrison Steel Castings Company
P.O. Box 60
Attica, IN 47918-0060

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03004335/2013001(DNMS) AND
NOTICE OF VIOLATION — HARRISON STEEL CASTINGS COMPANY

Dear Mr. Hollander:

On November 22, 2013, with continued in-office review through December 4, 2013, a U.S. Nuclear Regulatory Commission (NRC) inspector conducted a routine inspection of your facilities located in Attica, Indiana. The in-office review included receipt and review of security information that was unavailable during the onsite inspection. The purpose of the inspection was to determine whether activities authorized under your license were conducted safely and in accordance with NRC requirements. The enclosures present the results of this inspection.

During this inspection, the NRC staff examined activities conducted under your license as they relate to public health and safety, compliance with the Commission's rules and regulations, and compliance with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, apparent violations were identified and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The apparent violations are of a security-related nature. Details about the apparent violations are available in the Security Addendum to Inspection Report, enclosed with this letter. The circumstances surrounding the apparent violations, the significance of the issues, and the need for lasting and effective corrective actions were discussed with you during the inspection exit meetings on November 22, 2013, and December 4, 2013.

Enclosures 1 and 3 contain Sensitive Unclassified Non-Safeguards Information. When separated from Enclosures 1 and 3, this transmittal letter and Enclosure 2 are decontrolled.

D. Hollander

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Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) respond in writing to the apparent violations addressed in the Security Addendum to Inspection Report No. 03004335/2013001(DNMS) within 30 days of the date of this letter, or (2) request a Pre-decisional Enforcement Conference (PEC). If a PEC is held, the NRC will issue a press release to announce the time and date of the conference; however, the conference will be closed to public observation because security-related information will be discussed. The NRC normally tries to schedule a PEC within 30 days of the date of the letter. Please notify Aaron T. McCraw at 630-829-9650 of your intentions within 10 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as "Response to Apparent Violations in the Security Addendum to Inspection Report No. 03004335/2013001(DNMS); EA-13-250," and should include, for each apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. In addition, if you choose to provide a written response, please mark your entire response, "Security-Related Information-Withhold from Public Disclosure under Title 10 of the *Code of Federal Regulations* (CFR) 2.390." In accordance with 10 CFR 2.390(b)(ii), the NRC is waiving the affidavit requirements for your response to this letter. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on the apparent violation and any other information that you believe the NRC should take into consideration before making an enforcement decision. The topics discussed during the conference may include the following: information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned to be taken.

As your facility has not been the subject of escalated enforcement actions within the last two inspections, a civil penalty may not be warranted in accordance with Section 2.3.4 of the Enforcement Policy. In addition, based upon NRC's understanding of the facts and your corrective actions, it may not be necessary to conduct a PEC in order to enable the NRC to make a final enforcement decision. However, our final decision will be based on your confirming on the license docket that the corrective actions previously described to the staff have been or are being taken.

Please be advised that the number and characterization of the apparent violations may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

D. Hollander

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The NRC has also determined that two Severity Level IV security-related violations of NRC requirements occurred. The violations were evaluated in accordance with the NRC Enforcement Policy. The violations are described in detail in the attached security addendum. The violations are cited in the enclosed, non-public Notice of Violation (Notice). The NRC is citing the violations in the Notice, because the inspector identified the violations.

You are required to respond to the cited violations at this time and should follow the instructions specified in the enclosed Notice when preparing your response. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be useful in preparing your response. You can find the Information Notice on the NRC's website at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1996/in96028.html>. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and Enclosure 2 will be made available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>. Enclosures 1 and 3 contain security-related information and their disclosure to unauthorized individuals could present a security vulnerability; therefore, Enclosures 1 and 3 will not be made available electronically for public inspection.

Please feel free to contact Mr. Robert Gattone of my staff if you have any questions concerning this matter. You can reach Mr. Gattone at 630-829-9823.

Sincerely,

/RA/

Patrick L. Loudon, Director
Division of Nuclear Materials Safety

Docket No. 030-04335
License No. 13-02141-01

Enclosures:

1. Notice of Violation (Non-Public)
2. NRC Inspection Report No. 03004335/2013001(DNMS) (Public)
3. Security Addendum to Inspection Report (Non-Public)

cc w/encls: State of Indiana

D. Hollander

- 3 -

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Patrick L. Loudon, Director
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Enclosures:

1. Notice of Violation (Non-Public)
2. NRC Inspection Report No. 03004335/2013001(DNMS) (Public)
3. Security Addendum to Inspection Report (Non-Public)

cc w/encls: State of Indiana

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OFFICIAL RECORD COPY

Letter to David Hollander from Patrick L. Loudon dated January 3, 2014

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03004335/2013001(DNMS) AND
NOTICE OF VIOLATION — HARRISON STEEL CASTINGS COMPANY

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**U.S. NUCLEAR REGULATORY COMMISSION
REGION III**

Docket No.	030-04335
License No.	13-02141-01
Report No.	03004335/2013001(DNMS)
EA No.	EA-13-250
Licensee:	Harrison Steel Castings Company
Main Facility:	900 Mound Street, Attica, Indiana
Dates:	November 22, 2013, with continued in-office review through December 4, 2013
Exit Meeting Dates:	November 22, 2013 December 4, 2013
Inspector:	Robert G. Gattone, Jr., Senior Health Physicist
Approved By:	Aaron T. McCraw, Chief Materials Inspection Branch Division of Nuclear Materials Safety

Enclosure 2

EXECUTIVE SUMMARY

Harrison Steel Castings Company NRC Inspection Report No. 03004335/2013001(DNMS)

On November 22, 2013, with continued in-office review through December 4, 2013, a U.S. Nuclear Regulatory Commission inspector conducted a routine inspection. The in-office review included receipt and review of security information that was unavailable during the onsite inspection. The inspector identified apparent violations involving security issues. In addition, the inspector identified additional violations involving security issues. The apparent violations and the additional violations involving security issues are documented in the Security Addendum to Inspection Report. No safety-related violations were identified during this inspection.

Report Details

1 Program Overview

Harrison Steel Castings Company (licensee) is authorized under the U.S. Nuclear Regulatory Commission (NRC) Materials License No. 13-02141-01 to conduct industrial radiography of heavy steel castings in permanent radiographic installations at a specific location in Attica, Indiana. The licensee employed four radiographers and a radiographer's assistant that conducted over 100 radiographs per month. Licensed activities were often conducted 24 hours per day.

The NRC conducted a routine inspection of the licensee on October 13, 2011, and no violations of NRC regulatory requirements were identified. In addition, the NRC conducted a routine inspection of the licensee on September 15, 2009, and no violations of NRC regulatory requirements were identified.

2 Industrial Radiography Safety

2.1 Inspection Scope

The inspector reviewed the licensee's industrial radiography safety program by interviewing selected licensee staff members, including the Radiation Safety Officer (RSO); reviewing selected records; observing demonstrations of how industrial radiography was conducted; taking independent radiation surveys; and observing licensee staff conduct facility safety feature checks.

2.2 Observations and Findings

a. Certificate of Compliance Expiration

On June 30, 2013, Certificate of Compliance (CoC) No. 9283 for the SENTINEL™ Model 660 Series radiographic projectors expired. The CoC applies to the SENTINEL Models 660, 660E, 660A, 660AE, 660B, and 660BE. The inspector noted that the licensee no longer possessed its Model 660 radiographic projector. The inspector reviewed a letter from the manufacturer to the licensee dated April 12, 2012, acknowledging that the manufacturer had received the licensee's Model 660 radiographic projector and the sealed source within it.

b. Audits

The licensee conducted quarterly audits of its radiography staff members and the licensee maintained the records of them. The audit criteria were adequate.

The licensee conducted annual audits of its Radiation Protection Program as required. The licensee maintained adequate records of the Radiation Protection Program audits that were conducted since the last NRC inspection.

c. Sealed Source Inventories

The licensee conducted sealed source inventories quarterly. All licensed material was accounted for. Inventory records were maintained by the licensee.

d. Radiographer Training

Based on interviews of selected radiographers and demonstrations of how radiographers conducted licensed activities, the radiographers were adequately trained. For example, a radiographer demonstrated his appropriate response to a scenario posed by the inspector involving conflicting radiation safety indicators. In addition, selected radiographers provided their current, valid radiographer certification cards per the inspector's request which showed that they were certified to conduct industrial radiography with radioactive material.

e. Facility Safety Features

The facility where licensed activities were conducted was equipped with appropriate safety features. For example, the inspector observed that source position indicators operated as required. The inspector observed that an automated device used to mechanically move the source to the exposed and shielded positions was operable, including the device's source position indicators. The licensee posted the areas with "Caution Radioactive Materials", "Caution Radiation Area", and "Caution High Radiation Area" signs, as required. The facility was equipped with fire extinguishers that were charged and checked at the frequency stated on the tags affixed to them.

f. Radiation Surveys

The inspector observed a radiographer demonstrate how he had done survey instrument operability checks prior to first use on a given day. The checks included verifying that the instrument was calibrated based on review of the calibration date affixed to the instrument, testing the battery, and measuring the exposure rate of a shielded source to verify proper survey instrument response to radiation. The inspector conducted a confirmatory survey by using his NRC-owned, calibrated survey instrument to compare his survey result with a radiographer's survey results taken with a calibrated licensee survey instrument, and the licensee's survey result was within 12 percent of that obtained by the inspector. During a demonstration of how licensed activities had been conducted, the inspector noted that a radiographer conducted all required radiation surveys, including the survey conducted after a source is retracted to the shielded position.

g. Dosimetry

The inspector observed that radiographers donned dosimeter badges as required. The inspector noted that selected radiographers had zeroed their direct reading dosimeters at the beginning of their shift. Dosimeter badge results showed that the annual highest whole body dose received by radiographers between 2011 and 2013 (through October 14, 2013) was well below the regulatory dose limit.

2.3 Conclusions

No violations of NRC regulatory requirements were identified relative to industrial radiography safety.

3 Exit Meeting Summary

On November 22, 2013, the inspector presented preliminary inspection findings following the onsite inspection. The licensee did not identify any documents or processes reviewed by the inspector as proprietary. A telephonic exit meeting was conducted on December 4, 2013. The licensee acknowledged the findings presented.

PARTIAL LIST OF PERSONNEL CONTACTED

Lee Eller, Radiographer's Assistant
*^Dave Hollander, RSO
Shane Rogers, Information Technology Director
Brian Stultz, Radiographer

* Attended preliminary exit meeting on November 22, 2013

^ Participated in the telephonic exit meeting on December 4, 2013

INSPECTION PROCEDURES USED

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