

**Gattone, Robert**

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**From:** Gattone, Robert  
**Sent:** Monday, May 03, 2010 12:34 PM  
**To:** 'Ryan.Hill@arcelormittal.com'  
**Subject:** URGENT REQUEST FOR INFORMATION  
**Attachments:** Arcelormittal usa inc request for information.doc  
  
**Importance:** High

Ryan,

As we discussed, please see the attached request for information.

Thanks,

Bob

Ryan,

As we discussed today, we have reviewed Mark Whalen's response letter dated April 29, 2010 (response letter), and find that we need additional information to determine the adequacy of the response. **Therefore, email or fax to me a letter signed by Mark Whalen that contains the information requested below no later than Wednesday, May 5, 2010:**

1. As stated in Section 2.2.a. of NRC Routine Inspection Report No. 030-04353/2010-001(DNMS) (inspection report) regarding the apparent violation involving failure to ensure that individuals completed the required training before removing a gauge from service, ArcelorMittal USA committed to notify applicable staff that installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material must only be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training. In addition, ArcelorMittal USA committed to develop and implement a procedure that requires installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training. However, the response letter does not discuss these corrective actions. **Therefore, please confirm that ArcelorMittal's corrective actions include: (1) notifying applicable staff that installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material must only be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training; and (2) developing and implementing a procedure that requires installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training.**
2. While addressing the apparent violation involving failure to ensure that individuals completed the required training before removing a gauge from service, the response letter states that ArcelorMittal USA will be submitting a request to amend the license by June 1, 2010, to name a new Radiation Safety Officer (RSO) on the license. The context of that statement infers that the plan to change the RSO named on the license is a corrective action for the apparent violation. However, at the beginning of the onsite inspection and prior to the inspector's identification of the apparent violation, the inspector noted that the RSO was already training an individual to become the new RSO on the license. **Therefore, please verify that prior to the beginning of the onsite inspection and prior to the inspector's identification of the apparent violation, the RSO was already training an individual to become the new RSO on the license.**
3. The response letter indicates that the violation involving failure to issue whole body dosimeters was caused, in part, by a misinterpretation of Title 10 Code of Federal Regulations 20.1502(a)(1). However, as discussed in Violation 2. of the Notice of Violation (Notice) dated March 29, 2010, the violation did not pertain to 10 CFR 20.1502(a)(1). Instead, the violation pertained to Condition 29 of NRC License No. 13-03086-03 which requires, in part, that individuals who perform service activities on the

source portion of the gauge or with potential for exposure to the direct beam shall be issued a whole body dosimeter that is exchanged quarterly. As stated in Section 3.2 of the inspection report, the inspector determined that the cause of the violation was that the RSO did not consider gauge removal as service on the source portion of the gauge with potential for exposure to the direct beam. **Therefore, please verify that the cause of the violation was that the RSO did not consider gauge removal as service on the source portion of the gauge with potential for exposure to the direct beam. Otherwise, discuss what you identified as a different cause and explain why it is different from what was communicated to the inspector during the inspection.**

4. The response letter describes immediate corrective actions to address the violation involving failure to issue whole body dosimeters. However, the response letter does not discuss actions that will be taken to prevent a similar violation. **Therefore, please provide corrective actions that will be taken to prevent failure to issue whole body dosimeters to individuals who perform service activities on the source portion of the gauge or with potential for exposure to the direct beam.**
5. As stated in Section 5.2 of the inspection report and Violation 3. of the Notice, on December 7, 2009, ArcelorMittal USA discovered that a gauge containing licensed material had a stuck open shutter and it failed to notify the NRC Operations Center about the stuck open shutter event until March 3, 2010, a period greater than 24 hours after the discovery of the event. The December 7, 2009, stuck shutter event date was provided to the inspector by a member of ArcelorMittal USA staff during the inspection. In addition, on March 3, 2010, a member of ArcelorMittal USA staff notified the NRC Operations Center that it discovered the stuck open shutter event on December 7, 2010, consistent with the information provided to the inspector. However, ArcelorMittal USA's letter dated April 1, 2010, providing the written report of the stuck shutter event pursuant to 10 CFR 30.50(c)(2) states that the stuck shutter was identified on December 4, 2010. In addition, the response letter states that the stuck shutter was identified on December 4, 2010. **Therefore, provide an explanation of why: (1) the inspector was informed that the stuck shutter was identified on December 7, 2010; (2) a member of ArcelorMittal USA's staff notified the NRC Operations Center that the stuck shutter was identified on December 7, 2010; (3) ArcelorMittal USA's letter dated April 1, 2010, states that the stuck shutter was identified on December 4, 2010; and (4) , the response letter states that the stuck shutter was identified on December 4, 2010.**

Thank You,

Bob Gattone  
Email: [robert.gattone@nrc.gov](mailto:robert.gattone@nrc.gov)  
Fax: 630-515-1259

## Gattone, Robert

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**From:** Hill, Ryan D [Ryan.Hill@arcelormittal.com]  
**Sent:** Wednesday, May 05, 2010 7:43 AM  
**To:** Gattone, Robert  
**Cc:** Huckins, Benjamin R; Shuble, Michael; Emery, William R  
**Subject:** Amended Response to NOV  
**Attachments:** 2010-05-05 NOV Response (Amended).pdf

Bob,

Please see attached the amended response letter to inspection report no. 030-04353/2010-001 (DNMS); EA-10-044. This letter has been re-written to address the information you requested from the e-mail dated 5/3/2010. Please contact me with any questions or additional concerns.

Regards,  
Ryan

**Ryan D. Hill** | Health & Safety Engineer  
ArcelorMittal Riverdale, Inc.  
T +1 708.392.1089 | M +1 708.305.0745  
[Ryan.Hill@arcelormittal.com](mailto:Ryan.Hill@arcelormittal.com)

ArcelorMittal Indiana Harbor  
Flat Carbon, Health & Safety



ArcelorMittal

May 5, 2010

RESPONSE TO AN APPARENT VIOLATION IN INSPECTION REPORT No. 030-04353/2010-001 (DNMS); EA-10-044

DIVISION OF NUCLEAR MATERIALS SAFETY  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

Attn: Steven A. Reynolds, Director

Dear Mr. Reynolds:

This letter is in response to three cited Severity Level IV violations, and an apparent violation resulting from an inspection conducted at Indiana Harbor on February 17 and 18, 2010, and March 2, 2010. We are also addressing an un-cited violation.

**Violation - Failure to ensure annual refresher training:** The violation identified by the inspector was caused by the failure to ensure that authorized individuals had received annual refresher training as required. It was found in our investigation of the circumstances leading to the violation that the lack of training was discovered during a third party audit and reported to the RSO. The RSO attempted to contract a consultant to provide training in early 2008. However, due to scheduling problems, the training was never conducted, and senior management was not notified by the RSO.

Refresher training sessions were conducted on March 5, March 25, and April 26, 2010. 51 employees received the authorized user training as required. The training was conducted by Glenn Huber, CHP of Stan A. Huber Consultants, Inc. Additional training and retraining will be scheduled as required.

The existing Radiation Safety Manual will be amended by May 7, 2010 to include specific requirements that employees who conduct installation, relocation, removal from service, maintenance, repair and initial radiation survey of the radiation gauges containing licensed material must receive the required training. In addition, department management will be trained to these requirements by June 1, 2010. Senior management is committed to ensuring future training is conducted in compliance with license requirements.

**Violation - Failure to issue whole body dosimeters to individuals involved in service activities on the source portion of licensed gauges:** The plant has had a personnel dosimetry program as described in its application for renewal of the byproduct material license. However, because of an erroneous interpretation of "potential for exposure to the direct beam" in the dosimetry requirement contained in license condition number 29 of our materials license, the program has been voluntary as per 10 CFR 20.1502(a)(1). This was based on the fact that historical dosimetry records do not indicate potential annual doses in excess of 500 millirem would be received by authorized users.

The operating management and authorized users have been instructed that anyone conducting service activities on the source portion of licensed gauges must be issued, and wear, their assigned personnel dosimeter while conducting such activities. In addition, notification was made in an email to all applicable departments on April 28, 2010. Future compliance will be ensured by issuing dosimeter badges to all Authorized Users prior to being assigned to perform service on the source portion of the gauge with potential for exposure to the direct beam and by adhering to the amended Radiation Safety Manual.

**Violation - Failure to notify the NRC of a gauge shutter failure:** On December 4, 2009, during operations, the shutter for a fixed gauge at the IH7 blast furnace had a build up of dust and debris resulting from normal operation. This build up would not allow the gauge shutter mechanism to completely close, and the shutter could not be moved to a fully closed position. Upon making this discovery, the work area was evaluated to determine employee safety. The gauge is located behind a massive material flow control valve at the top of a chute leading into a material hopper. The source beam is approximately 15 feet away and 10 feet above the area where non-gauge maintenance work was scheduled that day, and was not physically accessible. The work area inside the chute was surveyed for radiation, and there was no radiation exposure potential. The plant RSO misinterpreted the criteria in 10 CFR 30.50 in determining whether the event was reportable. He determined that the event was not reportable because a closed shutter was not required to safely perform the planned work, and there was no potential exposure to radiation above background where the work was to be performed. Based upon the misinterpretation, the RSO decided to have the gauge evaluated before making the final decision of whether or not the shutter mechanism failed. Following this course of action, the decision was made that the event was the date of the evaluation of the gauge (December 7, 2009). The gauge manufacturer cleaned the gauge, closed the shutter, and took the gauge out of service.

Whenever a gauge shutter fails to operate as intended the event will be reported to the NRC's Control Center.

**Apparent Violation:** The apparent violation identified by the inspector pertains to our failure to ensure that three employees who removed a gauge from service had completed the required training to perform such work. Plant operating management was notified by the General Manager the morning of the closing conference of the apparent violation, and its serious nature. Operating management was instructed that only personnel who had received training meeting the requirements in 8.B. of the November 16, 1995 letter to Region III are permitted to perform installation, relocation, removal from service, maintenance, repair and initial radiation survey of the radiation gauges containing licensed material.

The existing Radiation Safety Manual will be amended by May 7, 2010 to include specific requirements that employees who conduct installation, relocation, removal from service, maintenance, repair and initial radiation survey of the radiation gauges containing licensed material must receive the required training. In addition, department management will be trained to these requirements by June 1, 2010.

Compliance to licensed requirements has typically been managed by the plant RSO. Our investigation of the circumstances leading to the cited violations, and apparent violation, has revealed a need to improve management over site of the activities of the RSO, and compliance to the license requirements. As a result, the RSO will, on a quarterly basis, report to the General Manager status of compliance activities and any potential compliance issues. This will begin with a report on the second quarter of 2010. The RSO has also been instructed to immediately report any license violations, or potential violations, to the Safety Manager and General Manager.

As of April 28, the RSO made available to all departments a complete list of employees who have completed the authorized training. The RSO, or authorized representative, will on a quarterly basis, review the maintenance records of each department having licensed gauges to insure only properly trained authorized users are performing maintenance. If it is found that an unauthorized worker was used by a department to provide service activities on the source portion of licensed gauges, the RSO will notify the operating management responsible, and request a corrective action plan. In addition, the General Manager, and Safety Manager, will be notified at that time. The review process will begin May 1, 2010.

**Un-cited failure to perform a quarterly inventory of generally licensed devices in storage:**

This requirement was not understood by the plant RSO. The inventory was performed on February 18, 2010 at the time of the U.S. NRC inspection. The plant is investigating whether it is best to transfer the generally licensed devices to the plant's specific license. The devices will be inventoried on a quarterly frequency until a determination is made.

Respectfully,



Mark Whalen,  
Vice President and General Manager  
ArcelorMittal Indiana Harbor

Gattone, Robert

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**From:** Gattone, Robert  
**Sent:** Wednesday, May 05, 2010 9:23 AM  
**To:** 'Ryan.Hill@arcelormittal.com'  
**Subject:** URGENT REQUEST FOR INFORMATION  
**Attachments:** Arcelormittal usa inc request for information 2.doc

**Importance:** High

Ryan,

The attached is as we discussed.

Bob



Ryan,

As we discussed today, I have reviewed Mark Whalen's letter dated May 5, 2010 (letter) that was provided in response to the questions I emailed to you on May 3, 2010. The questions are listed below. The letter does not provide the information requested in the highlighted text below. **Therefore, email me an addendum document signed by Mark Whalen that contains the information requested in the highlighted text below no later than Thursday, May 6, 2010:**

1. As stated in Section 2.2.a. of NRC Routine Inspection Report No. 030-04353/2010-001(DNMS) (inspection report) regarding the apparent violation involving failure to ensure that individuals completed the required training before removing a gauge from service, ArcelorMittal USA committed to notify applicable staff that installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material must only be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training. In addition, ArcelorMittal USA committed to develop and implement a procedure that requires installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training. However, the response letter does not discuss these corrective actions. **Therefore, please confirm that ArcelorMittal's corrective actions include: (1) notifying applicable staff that installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material must only be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training; and (2) developing and implementing a procedure that requires installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material be done by authorized users who have completed the required training and that, prior to conducting those activities, staff will verify that individuals who will do the work have completed the required training.**
2. While addressing the apparent violation involving failure to ensure that individuals completed the required training before removing a gauge from service, the response letter states that ArcelorMittal USA will be submitting a request to amend the license by June 1, 2010, to name a new Radiation Safety Officer (RSO) on the license. The context of that statement infers that the plan to change the RSO named on the license is a corrective action for the apparent violation. However, at the beginning of the onsite inspection and prior to the inspector's identification of the apparent violation, the inspector noted that the RSO was already training an individual to become the new RSO on the license. **Therefore, please verify that prior to the beginning of the onsite inspection and prior to the inspector's identification of the apparent violation, the RSO was already training an individual to become the new RSO on the license.**
3. The response letter indicates that the violation involving failure to issue whole body dosimeters was caused, in part, by a misinterpretation of Title 10 Code of Federal Regulations 20.1502(a)(1). However, as discussed in Violation 2. of the Notice of Violation (Notice) dated March 29, 2010, the violation did not pertain to 10 CFR 20.1502(a)(1). Instead, the violation pertained to Condition 29 of NRC License No. 13-

03086-03 which requires, in part, that individuals who perform service activities on the source portion of the gauge or with potential for exposure to the direct beam shall be issued a whole body dosimeter that is exchanged quarterly. As stated in Section 3.2 of the inspection report, the inspector determined that the cause of the violation was that the RSO did not consider gauge removal as service on the source portion of the gauge with potential for exposure to the direct beam. **Therefore, please verify that the cause of the violation was that the RSO did not consider gauge removal as service on the source portion of the gauge with potential for exposure to the direct beam. Otherwise, discuss what you identified as a different cause and explain why it is different from what was communicated to the inspector during the inspection.**

4. The response letter describes immediate corrective actions to address the violation involving failure to issue whole body dosimeters. However, the response letter does not discuss actions that will be taken to prevent a similar violation. **Therefore, please provide corrective actions that will be taken to prevent failure to issue whole body dosimeters to individuals who perform service activities on the source portion of the gauge or with potential for exposure to the direct beam.**
5. As stated in Section 5.2 of the inspection report and Violation 3. of the Notice, on December 7, 2009, ArcelorMittal USA discovered that a gauge containing licensed material had a stuck open shutter and it failed to notify the NRC Operations Center about the stuck open shutter event until March 3, 2010, a period greater than 24 hours after the discovery of the event. The December 7, 2009, stuck shutter event date was provided to the inspector by a member of ArcelorMittal USA staff during the inspection. In addition, on March 3, 2010, a member of ArcelorMittal USA staff notified the NRC Operations Center that it discovered the stuck open shutter event on December 7, 2010, consistent with the information provided to the inspector. However, ArcelorMittal USA's letter dated April 1, 2010, providing the written report of the stuck shutter event pursuant to 10 CFR 30.50(c)(2) states that the stuck shutter was identified on December 4, 2010. In addition, the response letter states that the stuck shutter was identified on December 4, 2010. **Therefore, provide an explanation of why: (1) the inspector was informed that the stuck shutter was identified on December 7, 2010; (2) a member of ArcelorMittal USA's staff notified the NRC Operations Center that the stuck shutter was identified on December 7, 2010; (3) ArcelorMittal USA's letter dated April 1, 2010, states that the stuck shutter was identified on December 4, 2010; and (4) , the response letter states that the stuck shutter was identified on December 4, 2010.**

Thank You,

Bob Gattone

Email: [robert.gattone@nrc.gov](mailto:robert.gattone@nrc.gov)

Fax: 630-515-1259

## Gattone, Robert

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**From:** Hill, Ryan D [Ryan.Hill@arcelormittal.com]  
**Sent:** Thursday, May 06, 2010 3:00 PM  
**To:** Gattone, Robert  
**Cc:** Huckins, Benjamin R; Emery, William R; Whalen, Mark D  
**Subject:** 2010-05-06 Response for Information  
**Attachments:** 2010-05-06 Response Information.pdf

Bob,

Attached is the addendum to the second letter dated May 5, 2010. Please confirm that this satisfies your request.

Thanks,  
Ryan

**Ryan D. Hill** | Health & Safety Engineer  
ArcelorMittal Riverdale, Inc.  
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[Ryan.Hill@arcelormittal.com](mailto:Ryan.Hill@arcelormittal.com)

**ArcelorMittal Indiana Harbor**  
Flat Carbon, Health & Safety



**ArcelorMittal**

May 6, 2010

RESPONSE TO AN APPARENT VIOLATION IN INSPECTION REPORT No. 030-04353/2010-001 (DNMS); EA-10-044

DIVISION OF NUCLEAR MATERIALS SAFETY  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

Attn: Steven A. Reynolds, Director

Dear Mr. Reynolds:

This letter is in response to Bob Gattone's request for additional information in an e-mail dated May 5, 2010.

1. I confirm that ArcelorMittal's corrective actions include inserting a requirement into the Radiation Safety Manual for verifying that individuals who will perform work have the required training prior to conducting installation, relocation, removal from service, maintenance, repair, and initial radiation survey of gauges containing licensed material. This requirement will be inserted into the Radiation Safety Manual and communicated to applicable management by May 7, 2010.
2. I verify that prior to the beginning of the onsite inspection and prior to the inspector's identification of the apparent violation, the RSO was already training an individual to become the new RSO on the license.

Respectfully,

Mark Whalen,  
Vice President and General Manager  
ArcelorMittal Indiana Harbor