

June 24, 2005

EA-05-121

Gene Iannazzo  
President  
Harsco Corporation  
Heckett MultiServ Division  
P.O. Box 1071 Butler, PA 16003

SUBJECT: NRC INSPECTION REPORT NO. 030-35120/2005-001(DNMS)  
HARSCO/HECKETT MULTISERV DIVISION

Dear Mr. Iannazzo:

This refers to the routine inspection conducted on May 25, 2005, at the Harsco/Heckett MultiServ Division located in East Chicago, Indiana. The purpose of the inspection was to determine whether licensed activities were conducted in accordance with NRC requirements and license conditions. The enclosed report presents the results of this inspection.

The inspection consisted of an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, one apparent violation was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at [www.nrc.gov](http://www.nrc.gov); select **What We Do, Enforcement**, then **Enforcement Policy**. This apparent violation involves the failure to replace the Radiation Safety Officer (RSO), when the individual left the company in 2003. In addition to the apparent violation, the results of this inspection identified four potential violations of NRC requirements. The potential violations involve the failure to: (1) provide training on the lock-out/tag-out procedures for the gauges to conveyor belt operators; (2) close the shutter on a gauge when the conveyor belt was stopped; (3) replace missing, broken and illegible signs; and (4) perform the required inventory checks. The circumstances surrounding the apparent and potential violations, the significance of the issues, and the need for lasting and effective corrective actions were discussed with members of your staff at the inspection exit meeting conducted on May 25, 2005, and during a subsequent telephone conversation with Mr. Art Hamilton, Superintendent, on May 27, 2005. As a result, it may not be necessary to conduct a predecisional enforcement conference in order to enable the NRC to make an enforcement decision.

In addition, since your facility has not been the subject of escalated enforcement actions within the last two inspections, and based on our understanding of your corrective action, a civil penalty may not be warranted in accordance with Section VI.C.2 of the Enforcement Policy. The 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.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either: (1) respond to the apparent violation addressed in this inspection report within 30 days of the date of this letter, or (2) request a predecisional enforcement conference. If a conference is held, it will be open to public observation. Please contact Mr. John Madera at 630-829-9834 within 7 days of the date of this letter to notify the NRC of your intended response.

If you choose to provide a written response, it should be clearly marked as a "Response to An Apparent Violation in Inspection Report No. 030-35120/2005-001(DNMS); EA-05-121" and should include the following information: (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 violation. The guidance in the enclosed excerpt from NRC Information Notice 96-28, "SUGGESTED GUIDANCE RELATING TO DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION," may be helpful. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a predecisional enforcement conference.

In addition, please be advised that the number and characterization of the apparent violations described in the enclosed inspection report 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.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, Enclosure 1, and your response (if you choose to provide one) will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

**/Gary L. Shear Acting for RA/**  
 Marc L. Dapas, Director  
 Division of Nuclear Materials Safety

Docket No. 030-35120  
 License No. 37-26522-02

Enclosures: 1. Inspection Report 03035120/2005-001(DNMS)  
 2. Excerpt from NRC Information Notice 96-28

cc w/encls: Art Hamilton, Superintendent

See attached Distribution

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REGION III

Docket No.: 030-35120

License No.: 37-26522-02

Report No.: 030-35120/2005-001(DNMS)

Licensee: Harsco/Heckett MultiServ Division

Location: 3001 Dickey Road  
East Chicago, IN 46312

Inspection Date: May 25, 2005

Inspector: Edward L. Kulzer, Health Physicist

Exit Meeting: May 25, 2005

Approved by: John R. Madera, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

**EXECUTIVE SUMMARY**  
**Harsco/Heckett MultiServ Division**  
**NRC Inspection Report No. 030-35120/2005-001(DNMS)**

On May 25, 2005, a routine safety inspection was conducted at Harsco/Heckett MultiServ Division located in East Chicago, Indiana, to evaluate the licensee's performance and compliance with NRC regulations and license conditions.

The inspector identified one apparent violation regarding a lack of management oversight of licensed activities. This apparent violation involves the licensee's failure to replace the Radiation Safety Officer (RSO) when he left the company in 2003. Specifically, the previous RSO left the licensee's employment in 2003 and the licensee failed to designate another individual as the RSO. The licensee implemented immediate corrective action by naming an interim RSO who was qualified, and submitting a license amendment request to the NRC.

The inspector also identified four potential violations involving the failure to: (1) provide training on the lock-out/tag-out procedures for gauges to conveyor belt operators; (2) close the shutter on a gauge when the conveyor belt was stopped; (3) replace missing, broken, and illegible signs; and (4) perform the required inventory checks.

The licensee implemented immediate corrective actions that included posting new radiation signs and developing inventory records for the radioactive gauges possessed by the licensee in the plant conveyor belt operating stations. The long term corrective actions included selecting a permanent RSO and training workers on the licensee's lock-out/tag-out procedures.

## Report Details

### **1 Program Overview**

License No. 37-26522-02 authorizes Harsco Corporation/Heckett MultiServ Division to possess three sources, not to exceed 500 millicuries each, in Texas Nuclear, Model 5034, 5036, or 5038 belt weight scale gauges, located at its East Chicago, Indiana facility. The licensee possessed two gauges at this facility. The licensee operates two shifts per day, five days a week.

The last two inspections of the licensee were conducted on September 29, 1994, and June 25, 1999, at the Warren, Ohio facility. These inspections did not include the East Chicago facility. When Ohio became an Agreement State in 1999, the East Chicago facility was issued NRC Licensee No. 37-26522-02.

### **2 Management Program Oversight**

#### **2.1 Inspection Scope**

The inspector evaluated the licensee's oversight of its radiation safety program. The inspector interviewed the plant superintendent, authorized users, and selected licensee staff.

#### **2.2 Observations and Findings**

On May 25, 2005, the inspector requested to discuss the radiation safety program with the Radiation Safety Officer (RSO). The plant superintendent informed the inspector that the RSO had left the company in May 2003. The plant superintendent indicated that the licensee had undergone several organizational changes during this time period. The changes included the addition of a new superintendent and the loss of the RSO and several authorized users. Due to these personnel changes, the licensee had not recognized the need to amend the license to add a new RSO. Since the licensee had not recognized the need to replace the RSO, the licensee had not assigned any individual at the facility to manage the radiation safety program to ensure that license activities were conducted in compliance with NRC requirements and license conditions. However, the licensee had three authorized gauge users working at the plant that were knowledgeable on the safe operation of the gauges and the license requirements.

License Condition 11 of License No. 37-26522-02, issued on August 31, 1999, authorized Bill Haas as the RSO. Bill Haas left the company in May 2003, and the licensee failed to appoint a new RSO and amend its license. The licensee's failure to appoint a new RSO and amend its license to reflect that change constitutes an apparent violation of License Condition 11.

#### **2.3 Conclusion**

The inspector identified an apparent violation involving the licensee's failure to appoint a new RSO following the departure of the previous RSO in May 2003.

### **3 Leak Testing**

#### **3.1 Inspection Scope**

The inspector interviewed the authorized users and selected staff and reviewed leak test records for the fixed gauges.

#### **3.2 Observations and Findings**

The licensee provided a copy of the fixed gauges leak test records to the NRC on May 26, 2005. The results of the leak test did not indicate the presence of removable contamination. The licensee conducted the leak tests of the gauges in accordance with the frequency described in the certificate of registration, which was every 3 years.

#### **3.3 Conclusions**

The licensee's leak tests were conducted within the appropriate frequency and the results did not indicate the presence of removable radioactive contamination. The inspector had no findings in this area.

### **4 Device Operations**

#### **4.1 Inspection Scope**

The inspector interviewed selected staff and reviewed the licensee's lock-out/tag-out procedure for the gauges.

#### **4.2 Observations and Findings**

On May 25, 2005, during the onsite inspection, the inspector observed the operation of both gauges. The inspector observed that one of the slag conveyor belts had stopped and that the shutter on the gauge was left in the open position. The inspector interviewed the slag conveyor belt operator who was working in the area. The individual knew how to close the shutter on the gauge, but was unaware of the requirement to close the gauge when the conveyor belt was stopped and was unaware of the licensee's lock-out/tag-out procedures. In addition, the licensee indicated that the conveyor belts were routinely shut down after the second shift each evening, and the gauges were not closed and locked-out.

The licensee's lock-out/tag-out procedure required the gauge shutter to be closed and locked when the belt was stopped and/or work was conducted in the proximity of the gauge. The procedure also required that the RSO be notified when the belt was down for an extended period of time or if work was to be done in the near proximity of the gauges.

License Condition 21 of License No. 37-26522-02 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in an application dated June 17, 1993, including any enclosures. Item 10.a.i of the application dated June 17, 1993, requires that licensee personnel close the shutter when the belt is stopped and/or work must be done in the near proximity of the gauges.

Item 10.a.ii, requires that if the belt is to be shut down for any extended period of time or if work is to be done on the gauge, the RSO must be notified to ensure that the shutter is in the closed position and remains locked during this period of time. The licensee's failure to close the shutter and implement its lock-out/tag-out procedures when the conveyor belt was stopped, constitutes a potential violation of License Condition 21.

#### 4.3 Conclusions

The inspector identified a potential violation of License Condition No. 21 associated with the licensee's failure to close the shutter on the gauge and implement its lock-out/tag-out procedures when the conveyer belt was shut down.

### **5 Radiation Warning Signs and Independent Surveys**

#### 5.1 Inspection Scope

The inspector toured the facility and observed radiation warning signs and labeling. The inspector also conducted independent radiation surveys.

#### 5.2 Observations and Findings

During the facility tour, the inspector conducted independent radiation surveys in areas near the gauges. Based on the surveys conducted using a Ludlum Model 2402 survey instrument, calibrated March 17, 2005, the inspector did not identify any radiation levels in excess of regulatory requirements.

The inspector observed, during the facility tour, that at one gauge location there were no "Caution Radiation" warning signs posted and at a second gauge location, the warning signs were posted; however, the signs were illegible due to a build up of slag dust on the signs. In addition, one of the signs was broken.

License Condition 21 of License No. 37-26522-02 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in an application dated June 17, 1993, including any enclosures. Item 10 of the application requires, in part, that signs, displaying "Caution Radiation" and signs stating, "the shutter must be closed and the RSO notified prior to entering the area when working near the device," will be posted at installation and should be sufficient to prevent unauthorized entry to the radiation beam and preclude any unintentional radiation exposure. The failure to have the required signs posted at one gauge and the illegible signs posted at a second gauge constitutes a potential violation of License Condition 21.

#### 5.3 Conclusions

The inspector identified a potential violation of License Condition 21 regarding the posting of radiation warning signs. Radiation surveys in the area near the gauges did not identify any radiation levels in excess of regulatory requirements.

## **6 Physical Inventory Checks**

### **6.1 Inspection Scope**

The inspector interviewed selected licensee staff regarding physical inventories of the gauges.

### **6.2 Observations and Findings**

The inspector requested that the licensee provide the inventory records for review. The licensee staff stated that they did not maintain any inventory records and the last inventory would have been conducted on December 3, 2002, when the last leak tests were performed. The licensee's staff further stated that only two gauges were possessed by the licensee and that these gauges were permanently mounted under two conveyor belts.

License Condition 15 of License No. 37-26522-02 requires, in part, that a physical inventory of all sources and/or gauges received or possessed be conducted every six months and that records of inventories be maintained for 5 years from the date of each inventory. The licensee's failure to conduct a physical inventory every six months and maintain records of physical inventories constitutes a potential violation of License Condition 15.

### **6.3 Conclusions**

The inspector identified a potential violation of License Condition 15 regarding the licensee's failure to conduct physical inventory of the gauges, every six months and to maintain records of the physical inventories.

## **7 Training of Workers**

### **7.1 Inspection Scope**

The inspector reviewed radiation safety training records and interviewed selected licensee staff regarding the training provided to the staff.

### **7.2 Observations and Findings**

The licensee had training records of its lock-out/tag-out procedures training conducted in 1994. These were the only training records available for review during the inspection. The inspector interviewed the plant operator who left the shutter open on the stopped conveyor belt. The plant operator demonstrated that he was trained on the operation of the gauge shutter; however, he indicated that he had not received any training regarding the lock-out/tag-out procedures on the gauges.

License Condition 21 of License No. 37-26522-02 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in an application dated June 17, 1993, including any enclosures. Item 8 of the license application requires training for individuals working in or frequenting restricted areas. This training was required to include instructions on the proper precautions to be taken

while working around the gauges such as the implementation of lock-out/tag-out procedures. The licensee's failure to provide training to a plant operator, working in the restricted area, on the lock-out/tag-out procedures constitutes a potential violation of License Condition 21.

### 7.3 Conclusions

The inspector identified a potential violation of License Condition 21 involving the licensee's failure to train an individual, working in or frequenting the restricted areas, on its lock-out/tag-out procedures.

## 8 **Corrective Actions**

### 8.1 Inspection Scope

The inspector reviewed the licensee's proposed corrective actions for the apparent and potential violations. The review included interviews with selected licensee staff.

### 8.2 Observations and Findings

The licensee provided information on corrective actions to be implemented for the identified apparent and potential violations. The licensee submitted by facsimile, on May 27, 2005, a license amendment request to name an interim RSO until a permanent RSO could be selected. The license was amended on June 13, 2005, naming a new RSO. The licensee also implemented immediate corrective action regarding the failure to close the gauge shutter when the conveyor belt was stopped by closing and locking the shutter.

The licensee planned to implement additional corrective actions including: (1) training individuals working in or frequenting restricted areas on its gauge lock-out/tag-out procedures; (2) maintaining physical inventory records at the plant operator's station for each gauge; and (3) posting "Caution Radiation" signs in the vicinity of the gauges.

### 8.3 Conclusions

The licensee implemented immediate corrective actions that included submitting a license amendment to name a new RSO, and closing and locking the shutter for the gauge located on the stopped conveyor belt. The licensee was continuing to develop and implement additional corrective actions for the potential violations involving training, inventories, and posting radiation signs.

## 9 **Exit Meeting**

At the conclusion of the onsite inspection on May 25, 2005, the inspector conducted an exit meeting with plant management and staff to discuss the inspection activities and the preliminary inspection findings. Discussions were also conducted via telephone on May 27, 2005, with the plant's superintendent. The licensee did not identify any information reviewed during the inspection as proprietary in nature.

## LIST OF PERSONS CONTACTED

\* # Art Hamilton, Superintendent, Harsco/Heckett MultiServ  
\* John Hunt, Harsco/Heckett MultiServ

\* Denotes individuals attending the preliminary exit meeting on May 25, 2005.

# Denotes individual contacted via the telephone on May 27, 2005.