**Specialty Materials** 

Honeywell P.O. Box 430 2768 North US 45 Road Metropolis, IL 62960

August 25, 2011

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

Docket No. 40-3392 License No. SUB-526

RE: REPLY TO A NOTICE OF VIOLATION

NRC INSPECTION REPORT 40-3392/2011-003 AND NOTICE OF VIOLATION

Dear Sirs:

This letter is Honeywell Metropolis Works response to the NRC Inspection Report 40-3392/2011-003 and Notice of Violation dated July 26, 2011.

During the NRC inspections conducted from April 1, 2011 through June 30, 2011, the NRC has determined that three Severity IV violations of NRC requirements occurred. In accordance with the NRC Enforcement Policy, the violations are listed below along with information required to be included in the reply pursuant to 10 CFR 2.201.

1. License Condition 18 of NRC License No. SUB-526 states, in part, that the licensee shall conduct authorized activities in accordance with the statements, representations and conditions (or as revised by change and/or configuration management processes as described, therein), in specific documents including the License Application, dated May 12, 2006.

Section 2.6.1 of the License Application states, in part, that Honeywell shall establish a process to identify those process operations that require procedural guidance to ensure proper execution and require that these process operations be conducted in accordance with approved procedures.

Licensee procedure MTW-SOP-ENV-0002, Documentation and Compliance of Radioactive Waste Shipments, Section 5.3.3, requires the licensee to confirm that the intended recipient's license authorizes the type, form, and quantity of by-product material to be transferred.

Section 17, Management of Free Liquids, of Energy Solutions License Number Utah (UT) 2300249, issued by the State of Utah, that authorizes Energy Solutions to transfer, receive, possess, and use radioactive

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material states in part: "that solid waste received for disposal shall contain as little free standing and non-corrosive liquid as reasonably achievable, but shall contain no more free liquids than one percent of the volume of the waste."

Contrary to the above, on March 10, 2011, the licensee failed to confirm that the intended recipient's authorizes the type, form, and quantity of byproduct material to be transferred. Specifically, the licensee made a solid radioactive waste shipment to the Energy Solutions disposal facility located in Clive, Utah, that upon initial receipt inspection on March 14, 2011, was discovered to contain an amount of free liquid that exceeded one percent of the volume of the waste container.

This violation is a Severity Level IV violation (Section 6.8.d.4).

#### Reason for the Violation:

Honeywell completed a multi-faceted investigation for the event and determined that the incident resulted from loading the gondola during significant rain events, which allowed precipitation to enter the package. The gondola, which was drained prior to shipment by Honeywell, still contained water that had filled interstitial spaces and crevices in between the debris loaded inside the gondola. As a result, the water was not detected by Honeywell during its inspections of the package. (Energy Solutions reported that it also failed to detect the water during the initial inspection of the package at the Clive Radioactive Waste Facility. This inspection was performed before rolling the gondola.)

The drain plug system also appears to have been a significant contributing factor to this event. Honeywell visually inspected the drain plugs to verify that the plugs were in place prior to shipment. During Honeywell's incident investigation, Energy Solutions (owner of the gondola related to this event) revealed that the drain plug was added as a modification/retrofit of the gondola car to facilitate rapid decontamination and was not designed to be "water tight". Further inquiry revealed that no procedures had been established by the drain plug fabricator for closing or sealing the drain plugs (e.g. there was no direction to use pipe sealant compound or to apply specific torque for tightening the cap).

## **Corrective Steps that Have Been Taken and the Results Achieved:**

Honeywell revised Standard Operating Procedure, MTW-SOP-ENV-0001, *Packaging, Labeling, Marking, and Surveying of Radioactive Waste Shipments*, to specifically address the corrective actions stated below. The revised procedure has been submitted for review and approval by the appropriate Honeywell management. In the interim (prior to full implementation of the procedure revision), Honeywell promulgated an in-hand instruction related to waste shipments. On May 4, 2011, Honeywell trained all personnel involved in waste handling operations to the requirements of the Corrective Action Plan listed below.

- Packages that cannot be easily closed during a precipitation event shall be:
  - o Scheduled to be loaded only during times when rain is not anticipated;
  - o Immediately closed or covered during an unanticipated rain event;
  - Lined with absorbents and drained of free-standing liquids prior to shipment;

- o Closed at the end of each shift; and
- o Inspected before waste is placed in transit to ensure the package meets strong/tight criteria and that water is not leaking.
- Packages that have a drain system, such as a plug or cap, shall have the drain plug or cap threads sealed with pipe compound (even if the drain caps or plugs have not been removed at Metropolis).
- Solid waste containing liquid shall contain as little free-standing and noncorrosive liquid as is reasonably achievable, but in no case shall the liquid exceed 1% of the volume. This includes intermediate containers utilized to store waste prior to loading into transport packages (*i.e.* hoppers).
- Railcars prepared for shipment and placed in storage for greater than 30 days shall have the contents inspected for free liquids no less than 7 days prior to shipment.

# **Corrective Steps that Will Be Taken to Avoid Further Violations:**

After formal approval of the revised MTW-SOP-ENV-0001, Honeywell will again train all material handlers involved in waste management to the new requirements of the procedure. Honeywell anticipates the revised procedure will be made effective by December 31, 2011.

## **Date When Full Compliance Will Be Achieved:**

Honeywell is currently in compliance with the requirements of License Condition 18 of NRC License No. SUB-526 and Section 2.6.1 of the License Application.

2. 10 CFR 40.60(b)(2)(i) requires, in part, that each licensee shall notify the NRC within 24 hours after the discovery of an event in which equipment is disabled or fails to function as designed to prevent releases exceeding regulatory limits.

Section 4.1.1 of the license application requires that an investigation limit shall be established for each dust collector stack (usually 5,000 disintegrations per minute for secondary dust collectors). If the quantity released from the stack exceeds the investigation limit on three successive samples, an investigation shall be conducted to identify the source and required corrective actions.

Contrary to the above, on May 9, 2011, the licensee failed to notify the NRC within 24 hours after the discovery of an event in which equipment was disabled or fails to function as designed to prevent releases exceeding regulatory limits. Specifically, on May 8, 2011, at approximately 7:40 a.m. central daylight time (CDT), the licensee experienced a total power outage at the plant which disabled the vacuum pumps for the air and stack monitors. The NRC was not notified until 11:10 a.m. eastern daylight time (EDT) on May 9, 2011, a period greater than 24 hours.

This violation is an example of a Severity Level IV problem (Section 6.9.d.7).

#### Reason for the Violation:

Honeywell misinterpreted 10 CFR 40.60(b)(2)(i) which in part requires each licensee to notify the NRC within 24 hours after the discovery of an event in which equipment is disabled or fails to function as designed to prevent releases exceeding regulatory limits.

#### **Corrective Steps that Have Been Taken and the Results Achieved:**

Honeywell recognized the misinterpretation of 10 CFR 40.60(b)(2)(i) requirements and made an event report (# 46831) on May 9, 2011 at 11:10 a.m. To prevent recurrence, the Regulatory Affairs Manager coached the Nuclear Compliance Department personnel involved on the reporting requirements of 10 CFR 40.60(b)(2)(i) on May 9, 2011.

## **Corrective Steps that Will Be Taken to Avoid Further Violations:**

This violation was identified on July 26, 2011. All planned corrective steps were completed prior to the date of this response.

#### **Date When Full Compliance Will Be Achieved:**

Honeywell is currently in compliance with 10 CFR 40.60(b)(2)(i) requirements.

3. License Condition 18 of NRC License No. SUB-526 states, in part, that the licensee shall conduct authorized activities in accordance with the statements, representations and conditions (or as revised by change and/or configuration management processes as described, therein), in specific documents including the Emergency Response Plan (ERP), dated May 27, 2005.

Section 6.2.1 of the ERP requires that a public address system be capable of announcing general and emergency messages.

Contrary to the above, prior to June 11, 2010, the licensee failed to maintain the public address system such that it was capable of announcing general and emergency messages in several areas of the plant.

This violation is an example of a Severity Level IV problem (Section 6.6.d.1).

### Reason for the Violation:

The maintenance frequency of the public address system was insufficient to detect potential system failures.

## **Corrective Steps that Have Been Taken and the Results Achieved:**

In response to issues with the public address system, Honeywell has implemented the following corrective actions:

- Contracted a vendor to conduct semi-annual walkthrough of the public address system to perform necessary preventive maintenance. Completed by: September 30, 2010
- Implemented a practice to replace volume-control button speakers with hard-wired volume speakers as they reach the end of their service life. Completed by: September 30, 2010
- Replaced several amplifiers and speaker boxes. Completed by: September 30, 2010
- Reconfigured the public address system in the Feed Materials Building (FMB) by increasing the number of amplifiers, which reduced the number of components on a single amplifier and reduced the potential to overload the system. Completed by: October 31, 2010
- Added indoor and outdoor speakers to the trailer areas. Completed by: October 31, 2010
- Implemented the use of approximately 200 push-to-talk phones by site personnel to add another layer of communications and reduce traffic on the public address system. Completed by: February 28, 2011
- Communicated with site personnel the work process for reporting issues with the public address system. Completed by: September 30, 2010

## Corrective Steps that Will Be Taken to Avoid Further Violations:

This violation was identified on July 26, 2011. All planned corrective steps were completed prior to the date of this response.

## **Date When Full Compliance Will Be Achieved:**

Honeywell is currently in compliance with the requirements of License Condition 18 of NRC License No. SUB-526 and Section 6.2.1 of the site's Emergency Response Plan.

If you have questions, need additional information, or wish to discuss this matter, please contact Mr. Michael Greeno, Regulatory Affairs Manager, at 618-309-5005.

Sincerely,

Mark A. Wolf for
Larry A. Smith
Plant Manager

Larry Smith

cc: Regional Administrator
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