

April 25, 2011

Mr. Larry Smith, Plant Manager
Honeywell Metropolis Works
Honeywell Specialty Materials
P.O. Box 430
Highway 45 North
Metropolis, IL 62960

SUBJECT: APPROVAL OF REQUEST TO TRANSFER SCRAP MATERIALS UNDER TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* 40.13, "UNIMPORTANT QUANTITIES OF SOURCE MATERIAL," TO RESOURCE CONSERVATION AND RECOVERY ACT SUBTITLE C FACILITY IN GRAND VIEW, IDAHO (TAC NO. L32767)

Dear Mr. Smith:

By letter dated February 22, 2011 (Agencywide Documents Access and Management System [ADAMS] Accession Number ML110420143), Honeywell notified the U.S. Nuclear Regulatory Commission (NRC) of its intentions to transfer an additional 90,000 cubic feet (ft³) [2,550 cubic meters] of unimportant quantities of source material (i.e., industrial scrap material) to the U.S. Ecology Idaho (USEI) Resource Conservation and Recovery Act (RCRA) Subtitle C facility located near Grand View, Idaho, for disposal. The NRC staff reviewed and approved a previous request from Honeywell to transfer 90,000 ft³ of industrial scrap material to the USEI RCRA Subtitle C facility near Grand View, Idaho, by letter dated November 17, 2009 (ADAMS Accession Number ML093030377), as revised by letter dated February 2, 2010 (ADAMS Accession Number ML072690539).

The staff reviewed Honeywell's February 22, 2011, submittal regarding the transfer of 90,000 ft³ of scrap materials to USEI in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 40.13, "Unimportant Quantities of Source Material," and concluded that the proposed action is acceptable. The staff's detailed review of Honeywell's submittal is provided in the enclosed Safety Evaluation Report. Please note that once the materials at issue have been transferred, the disposition of those materials is a matter under the jurisdiction of the State of Idaho.

Neither an environmental assessment nor an environmental impact statement is required for the proposed action because the requested amendment is subject to the categorical exclusion provided in 10 CFR 51.22(c)(19), and will not have a significant impact on the human environment.

L. Smith

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In accordance with 10 CFR, Section 2.390, "Public Inspections, Exemptions, Requests for Withholding," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room, or from the Publicly Available Records System component of ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If you have any questions regarding this action, please contact Ms. Tilda Liu at (301) 492-3217, or via e-mail to Tilda.Liu@nrc.gov.

Sincerely,

/RA/

Thomas G. Hiltz, Acting Deputy Director
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

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

Enclosure:
As stated

cc: Mr. Michael Greeno, Regulatory Affairs Manager
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Mr. Gary W. McCandless, P.E.
Bureau Chief - Environmental Safety
Illinois Emergency Management Agency
1035 Outer Park Drive
Springfield, IL 62704

Mr. Brian R. Monson, Program Manager
Idaho Department of Environmental Quality
410 North Hilton
Boise, ID 83706

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ADAMS Accession No.: **ML111040452**

OFFICE	FCSS/FMB	FCSS/AFCB	FCSS/AFCB	FCSS
NAME	LAllen	TLiu	DMorey	THiltz
DATE	4/18/11	4/22/11	4/22/11	4/25/11

DOCKET: 40-3392

LICENSEE: Honeywell International, Inc.
Metropolis, IL

SUBJECT: SAFETY EVALUATION REPORT FOR REQUEST TO TRANSFER
ADDITIONAL SCRAP MATERIALS UNDER TITLE 10 OF THE *CODE OF
FEDERAL REGULATIONS* 40.13, "UNIMPORTANT QUANTITIES OF SOURCE
MATERIAL" (TAC NO. L32767)

1.0 BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) regulates Honeywell Specialty Materials Metropolis Work's (MTW) facility in Metropolis, Illinois, under Materials License SUB-526. The primary activity of Honeywell MTW is the conversion of uranium ore concentrates (yellowcake or U_3O_8) to uranium hexafluoride (UF_6). The UF_6 product is used as feed material for uranium enrichment plants. The U.S. Atomic Energy Commission first authorized operations at the site on December 17, 1958. The license was last renewed for a 10-year term, expiring May 11, 2017.

Honeywell previously requested and received approval from the NRC for disposal of scrap materials under Title 10 of The *Code of Federal Regulations* (10 CFR) 40.13, "Unimportant Quantities of Source Material," including approvals, dated August 27, 1999, and July 19, 2000. On July 23, 2007 (Agencywide Documents Access and Management System [ADAMS] Accession Number ML072150208), Honeywell requested NRC's concurrence to dispose of up to 90,000 cubic feet (ft^3) [2,550 cubic meters] of scrap material at Waste Control Specialists, Inc., located near Midland, Texas. The NRC staff approved this transfer pursuant to 10 CFR 40.13(a) on October 1, 2007 (ADAMS Accession Number ML072690539).

On July 16, 2009 (ADAMS Accession Number ML092040490), Honeywell notified the NRC of its intention to transfer the previously approved 90,000 ft^3 of unimportant quantities of source material (industrial scrap material) to the US Ecology Idaho (USEI) Resource Conservation and Recovery Act (RCRA) Subtitle C's facility located near Grand View, Idaho, for disposal and requested NRC's approval. The staff approved Honeywell's July 16, 2009, 10 CFR 40.13(a) request by letter dated November 17, 2009 (ADAMS Accession Number ML093030377), as revised by letter dated February 2, 2010 (ADAMS Accession Number ML100220407).

2.0 PROPOSED ACTION

By letter dated February 4, 2011 (ADAMS Accession Number ML110420143), Honeywell International notified the NRC of its intention to transfer a second shipment 90,000 ft^3 of unimportant quantities of source material (i.e., industrial scrap material) to the USEI RCRA Subtitle C facility located near Grand View, Idaho, for disposal. This request is identical to a previous request from Honeywell, dated July 16, 2009, to ship a separate 90,000 ft^3 of unimportant quantities of source material to USEI which the NRC approved by letter dated November 17, 2009, as revised by letter dated February 2, 2010.

Enclosure

3.0 STAFF EVALUATION

According to 10 CFR 40.13(a), persons are exempt from regulations if source material is by weight less than 0.05 percent of the mixture, compound, solution, or alloy. In this case, a 0.05 percent by weight limit for natural uranium is equivalent to 12.5 becquerels per gram (i.e., 338.5 pico-curies per gram) total uranium. In addition to meeting the requirements stated in 10 CFR 40.13(a), Commission policy (*Federal Register*, August 28, 2002 [Volume 67, Number 167], Proposed Rules, Pages 55175-55179) dictates that the NRC will review potential use and disposition scenarios on a case-by-case basis to ensure that the exposure limits in 10 CFR Part 20 are not exceeded.

The NRC staff reviewed the submittal and found that the concentrations reported by Honeywell are below the regulatory limit defined in 10 CFR 40.13(a). The NRC staff also determined that the assumptions and information provided in this new request were identical to the information evaluated for the previous request.

As discussed in the Safety Evaluation Report for the previous shipment, multiple scenarios were evaluated to assess the risk of the waste material to workers and members of the public. The staff evaluated doses to workers and the public from transportation, handling and disposal at the site, and long-term impacts to groundwater—as well as possible impacts if a member of the public inadvertently intruded into the site after closure. The use of a multi-modal transportation approach would minimize the dose associated with the transportation of the scrap material to USEI, such that it is not considered to be an issue. The limiting scenario for workers at the facility is an industrial scrap metal disposal scenario, which includes the inspection of the waste upon arrival at USEI, transporting the material to the disposal cells, and disposing of the material. The mean dose to workers using this scenario was 4.13 micro-sievert per year ($\mu\text{Sv/yr}$) [0.41 milli-rem per year (mrem/yr)]. Further evaluation of the dose associated with the groundwater pathway indicated that the maximum projected annual dose, 7.6×10^{-23} milli-sievert (mSv) [7.6×10^{-21} mrem], would occur after 1000 years. An independent screening analysis performed by NRC staff of an inadvertent intruder scenario, which assumes that an individual constructs a house with a basement on the site and resides there, resulted in a dose of 0.0731 mSv/yr [7.31 mrem/yr]. All the scenarios are below the 0.25 mSv/yr [25 mrem/yr] dose threshold set by policy for the review of impacts to the general public from 10 CFR 40.13(a) disposals. The NRC staff evaluated the potential for cumulative impacts due to successive years of disposal and found, based on current USEI disposal practices for the disposal of other non-radioactive wastes, that the only scenario with a potential impact is the groundwater pathway. However, since the groundwater dose is so small, the cumulative impacts will not create an issue; and the disposal of these materials can continue for an indefinite period of time without creating a significant effect on the post-closure dose.

4.0 FINDINGS

Based on the analyses summarized herein, the NRC staff finds the transfer of an additional 90,000 ft³ of scrap materials to USEI in accordance with 10 CFR 40.13, “Unimportant Quantities of Source Material,” and acceptable in accordance with current Commission policy. The staff notes that once the materials at issue have been transferred, the disposition of these materials is a matter under the jurisdiction of the State of Idaho.

5.0 PRINCIPAL CONTRIBUTOR

Adam Schwartzman, Technical Reviewer, FSME/DWMEP