

## SAFETY EVALUATION REPORT

DOCKET NO.: 40-3392

LICENSE: SUB-526

LICENSEE: Honeywell Metropolis Works  
Metropolis, IL

SUBJECT: APPROVAL OF EXEMPTION FROM THE 24-HOUR REPORTING REQUIREMENT OF TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* SECTION 40.60(b)(3) FOR MEDICAL TREATMENT OF CONTAMINATED INDIVIDUALS AT THE HONEYWELL METROPOLIS WORKS ON-SITE MEDICAL FACILITY

### 1.0 HONEYWELL'S PROPOSED EXEMPTION

By letter dated September 7, 2017 (Agencywide Documents Access and Management System [ADAMS] Accession Number ML17255A243), Honeywell Metropolis Works (Honeywell MTW) submitted an exemption request from the reporting requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 40.60(b)(3) to the U.S. Nuclear Regulatory Commission (NRC) for its uranium conversion facility in Metropolis, IL. In particular, 10 CFR 40.60(b)(3) requires that the licensee notify the NRC within 24 hours after discovery of an event involving licensed material that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body. Honeywell MTW requested an exemption from the 24-hour reporting requirement in situations where an individual is treated at its onsite medical facility. On November 7, 2017, a conference call was held to discuss the exemption request (ADAMS Accession Number ML17325B683). Subsequently, by letter dated November 9, 2017 (ADAMS Accession Number ML17318A097), Honeywell MTW supplemented its September 7, 2017, submittal to clarify the proposed language for the license condition documenting the exemption.

### 2.0 BACKGROUND

In a letter dated December 2, 2014 (ADAMS Accession Number ML14337A180), the Nuclear Energy Institute (NEI) submitted NEI 14-14, "Regulatory Issue Protocol," for endorsement by the NRC. This protocol recommended a phased approach for identifying, evaluating, and resolving regulatory issues with generic implications for operating or future fuel cycle facilities. The protocol was endorsed by the NRC staff in a letter dated December 16, 2014 (ADAMS Accession Number ML14342A172).

By letter dated July 27, 2015 (ADAMS Accession Number ML15217A487), NEI requested clarification of the 10 CFR 40.60(b)(3) and 70.50(b)(3) provisions for reporting the unplanned medical treatment of personnel with spreadable radioactive contamination on their clothing or body, and the provisions of 10 CFR 40.60(b)(1) and 70.50(b)(1) for reporting certain unplanned events involving the contamination of radiologically controlled areas occurring within a facility. During 2015 and 2016, NEI and NRC met on six occasions: October 15, 2015; December 1, 2015; March 23, 2016; May 25, 2016; August 30, 2016; and October 12, 2016, utilizing the NEI 14-14 process to resolve issues regarding medical event reporting requirements under 10 CFR 40.60(b)(3) and 70.50(b)(3). In a letter dated October 27, 2016 (ADAMS Accession Number ML16330A146), NEI provided potential criteria that could be used in reviewing requests for exemption from the requirements of 10 CFR 40.60(b)(3) and 70.50(b)(3).

The NRC staff provided a response on January 27, 2017 (ADAMS Accession Number ML16333A297). The NRC staff concluded that issues raised in the public meetings and in NEI's July 27, 2015, letter could be resolved via an alternate approach that is within the NRC's existing regulatory framework. That is, in accordance with the exemption provisions contained in 10 CFR 40.14 and 70.17, the NRC staff would consider, on a case-by-case basis, requests seeking relief from the requirements of 10 CFR 40.60(b)(3) and 70.50(b)(3) in situations involving the treatment of contaminated workers at onsite medical facilities. The January 27, 2017, letter stated that the NRC staff would review and evaluate such requests using the following guidance:

1. The onsite medical facility is in a restricted area and not accessible to members of the public;
2. An injured worker can reach the onsite medical facility without traversing any areas accessible to the public;
3. Radiation safety personnel, who have been trained and qualified in contamination control, are readily available;
4. Equipment and facilities that may be needed for contamination control are readily available; and
5. The licensee commits to establish and maintain a log of contaminated workers treated at the onsite medical facility, and provides this information for NRC inspection upon request.

### 3.0 APPLICABLE REGULATORY REQUIREMENTS

Section 40.60(b)(3) of 10 CFR states that each licensee shall notify the NRC within 24 hours after the discovery of an event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

Section 40.14 of 10 CFR states that the Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of part 40 as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

### 4.0 DISCUSSION

#### 4.1 NRC Staff Review

The NRC staff reviewed the Honeywell MTW exemption request and its supporting justification using the guidance contained in the NRC staff's January 27, 2017, letter. Below is a summary of the application and NRC staff's conclusions related to the guidance.

1. *The onsite medical facility is in a restricted area and not accessible to members of the public.*

In its September 7, 2017, request, Honeywell MTW stated that its onsite medical facility is located within the site's Restricted Area (RA). Honeywell MTW also stated that the RA is a controlled area, as defined in 10 CFR Section 20.1003, is not accessible to the public, and is surrounded by an inner and outer fence. In addition, Honeywell MTW stated that access to the medical facility is restricted to employees and

employee-escorted individuals with site access badges. Based on its review, the NRC staff determined that at no time can visitors access the RA. The NRC staff also determined that Honeywell MTW adequately controls and restricts access to the RA and that, unless escorted by Honeywell badged personnel, or having a Honeywell-issued site access badge, no member of the public would have access to the medical facility and/or restricted areas of the site. Based on its review, the NRC staff has determined that Honeywell MTW's onsite medical facility is in an RA and not accessible to members of the public.

2. *An injured worker can reach the onsite medical facility without traversing any areas accessible to the public.*

In its September 7, 2017, request, Honeywell MTW stated that the onsite medical facility is located within the site's RA and is not accessible to the public. Honeywell stated that the RA is surrounded on all sides by an inner and outer fence and that access to the onsite medical facility is restricted to individuals with site access badges and individuals that are escorted by badged Honeywell employees. In its request, Honeywell further stated that at no time can visitors access the RA without being escorted by MTW personnel. In its request, Honeywell also provided a schematic drawing of its facility showing the location of its medical facility (Figure 1) which clearly depicts the site's RA and shows where the medical facility is located within this area. Based on its review, the NRC staff has determined that an injured worker at Honeywell MTW can reach the onsite medical facility without traversing areas accessible to the public.

3. *Radiation safety personnel, who have been trained and qualified in contamination control, are readily available.*

In its September 7, 2017, request, Honeywell MTW stated that it has a mature radiation protection program, employing sufficient Radiation Control Technician (RCT) staffing on each production shift to support radiological work in controlled areas. Further, Honeywell MTW stated that RCTs are trained in contamination control procedures and techniques required for responding to injured workers with spreadable contamination, and are readily available to respond to emergency conditions as needed. In addition, Honeywell MTW stated that onsite medical staff have been trained in radiological fundamentals and site-specific hazards and that the training emphasizes the responsibilities of medical staff to treat injuries and rely on the attending RCT for contamination control and radiological waste management issues. Honeywell MTW stated that RCTs have access to and manage the equipment necessary to perform these duties as well.

In addition, Honeywell MTW stated that it maintains a competent, trained emergency response organization. Honeywell MTW also stated that emergency responders attend Hazard Materials Response Training and First AID-CPR annually. Honeywell MTW further stated that the radiation protection organization is a component of emergency response, with RCTs responding along with emergency responders to provide radiological monitoring and contamination control. Based on its review, the NRC staff has determined that Honeywell MTW's RCTs are adequately trained and qualified in contamination control and are readily available in the event a worker is treated on site.

4. *Equipment and facilities that may be needed for contamination control are readily available.*

In its September 7, 2017, request, Honeywell MTW stated that its health physics (HP) staff and laboratory facilities are adjacent to the medical facility. Honeywell also stated

that, in the event a contaminated worker needs medical treatment, which will not require transport to an offsite medical facility, the MTW HP Department shift RCT will be contacted to provide support if needed. Honeywell further stated that its HP facilities (i.e., office and laboratory) contain the equipment and facilities that may be needed for contamination control (instruments, survey materials, protective clothing, decontamination basin, etc.), and that this equipment is readily available to be transported into the medical facility as necessary. Honeywell also stated that when an employee reports to the facility seeking first aid, HP staff are summoned to provide contamination control assistance as necessary.

Based on its review, the NRC staff determined that Honeywell MTW's equipment and facilities that may be needed for contamination control are readily available. The NRC staff also determined that Honeywell's HP staff will provide support, if needed, in the event a contaminated worker needs medical treatment

5. *The licensee commits to establish and maintain a log of contaminated workers treated at the onsite medical facility, and provides this information for NRC inspection upon request.*

In its September 7, 2017, request, Honeywell MTW stated that it currently logs all instances of contaminated workers treated at the onsite medical facility, and committed to continue to do so. Honeywell MTW further stated that the log is currently maintained by the medical staff and that it is available to the NRC for inspection upon request. Based on its review, the NRC staff has determined that Honeywell MTW maintains, and has committed to maintain, a log of contaminated workers treated at its onsite medical facility and that the log is, and will continue to be, available for NRC inspection upon request.

#### 4.2 NRC STAFF REVIEW PURSUANT TO 10 CFR 40.14(a)

Pursuant to 10 CFR 40.14(a), the NRC may grant an exemption from the requirements of 10 CFR Part 40 if the staff determines that the exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

The NRC staff has determined that granting the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, other laws, or the Commission's regulations. Therefore, the NRC staff concludes that the requested exemption is authorized by law.

The NRC staff also determined that an exemption from the requirement to report within 24 hours any unplanned medical treatments at Honeywell MTW's onsite facility will not endanger life or property or the common defense and security. As discussed above, the Honeywell MTW exemption request conforms to the guidance in the NRC staff's January 27, 2017, letter. Specifically, Honeywell MTW has established radiological or contamination controlled areas that are designed to safely contain radioactive material contamination that may occur as a result of operations or maintenance activities within a restricted area with no public access. The onsite medical facility and routes an injured worker would take to get to the facility are not accessible to the public. In addition, Honeywell MTW uses trained and qualified radiation safety personnel who have appropriate equipment readily available.

While the exemption request would eliminate the 24-hour reporting requirement for events requiring onsite treatment, Honeywell MTW will continue to maintain its log of contaminated workers treated at the onsite medical facility and will provide this information to NRC for inspection upon request. The elimination of the 24-hour reporting requirement also does not

involve information or activities that could potentially impact the common defense and security of the United States. Rather, the exemption requested is administrative in nature and would reduce the number of licensee actions caused by an event that requires unplanned medical treatment of an individual with spreadable radioactive contamination at the onsite medical facility. Based on its review, the NRC staff concludes that granting this exemption request would not endanger life or property or the common defense and security.

Finally, the NRC staff determined that granting Honeywell's exemption is otherwise in the public interest because it promotes regulatory efficiency by relieving Honeywell MTW from a reporting requirement that the NRC staff has determined is not needed, given the site-specific conditions and programs described above, without undue risk to public health and safety since it does not impact Honeywell's operations and/or safety programs. The exemption would relieve Honeywell MTW from generating reports within 24 hours of certain medical events and the NRC staff from receiving and processing these reports, thereby allowing regulatory resources to be focused on other activities.

## 5.0 ENVIRONMENTAL REVIEW

Pursuant to 10 CFR 51.22(b) and 10 CFR 51.22(c)(25), except in special circumstances, the granting of an exemption from the requirements of any regulation in Chapter I of 10 CFR is a categorical exclusion, provided that (i) there is no significant hazards consideration; (ii) there is no significant increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which an exemption is sought involve, as relevant here, reporting requirements.

Because Honeywell MTW requests an exemption from a reporting requirement only, there are no effluents or offsite releases or significant increase in radiation exposure to workers or members of the public associated with this request. There are no construction activities associated with this request, so there is no significant construction impact. There is no significant increase in the potential for any radiological accidents associated with this request, because the request for exemption from reporting requirements does not affect the facility's operations and there is no significant hazards consideration. Therefore, pursuant to 10 CFR 51.22(b) and 10 CFR 51.22(c)(25), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request. For the reasons described above, Honeywell MTW's request meets the criteria for a 10 CFR 51.22(c)(25) categorical exclusion.

## 6.0 CONCLUSION

Based on its review of Honeywell MTW's September 7, 2017, request, as supplemented by letter dated November 9, 2017, the NRC staff has determined that granting Honeywell MTW an exemption from the requirements in 10 CFR 40.60(b)(3) is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Accordingly, the NRC staff concludes that Honeywell MTW's request to be exempted from the 10 CFR 40.60(b)(3) requirement that it shall notify the NRC within 24 hours after the discovery of any event involving licensed material that requires unplanned medical treatment at Honeywell MTW's onsite medical facility of an individual with spreadable contamination on the individual's clothing or body is acceptable. Honeywell MTW is still required to report unplanned medical treatment at an offsite medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

Materials License SUB-526 has been revised to incorporate the following License Condition (LC) to document the exemption:

LC 31: Notwithstanding the requirements of 10 CFR 40.60(b)(3), the licensee is exempt from the requirement to notify the NRC within 24 hours of an unplanned medical treatment of an individual with spreadable contamination on the individual's clothing or body at the onsite medical facility. The licensee commits to continue to maintain a log of contaminated workers treated at the onsite medical facility.

In addition, LC 18.L. revised to include the date of Honeywell's exemption request (i.e., September 7, 2017) and the supplemental submittal's date (i.e., November 9, 2017).

PRINCIPAL CONTRIBUTOR

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