

**Performance Materials and Technologies**

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May 30, 2013

UPS/Next Day Air

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**REFERENCES:**

- 1) Docket No. 40-3392; License SUB-526, Amendment 9.
- 2) Honeywell Metropolis Works' Decommissioning Cost Estimate dated August 15, 2012, (ADAMS Accession Number ML13029A103).
- 3) Summary of May 3, 2013, Telephone Conference to Discuss Decommissioning Cost Estimate, Honeywell Metropolis Works (TAC No. L30006), dated May 13, 2013, (ADAMS Accession Number ML13127A242).
- 4) Request for Additional Information Related to Calendar Year 2012 Decommissioning Cost Estimate, Honeywell Metropolis Works (TAC No. L30006), dated May 14, 2013, (ADAMS Accession Number ML13128A228).

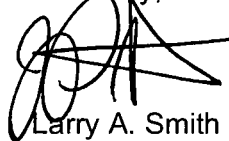
**SUBJECT:** Honeywell Metropolis Works' Response to Request for Additional Information Related to Decommissioning Cost Estimate (TAC No. L30006)

Honeywell Metropolis Works hereby submits the following response to the Request for Additional Information (RAI) Related to Calendar Year 2012 Decommissioning Cost Estimate dated May 14, 2013 (ADAMS Accession Number ML13128A228).

As it was agreed upon during the telephone conference with the NRC staff on May 3, 2013, the enclosed RAI responses provide information that is intended to supplement the Decommissioning Cost Estimate dated August 15, 2012.

If you have any questions, or require additional information please contact Mark Wolf, Nuclear Compliance Director, at (618) 309-5013.

Sincerely,

  
Larry A. Smith  
Plant Manager

(Jim Prescott for  
Larry Smith)

LMS501

Enclosure

cc:

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**RESPONSES TO  
REQUESTS FOR ADDITIONAL INFORMATION REGARDING  
CALENDAR YEAR 2012 DECOMMISSIONING COST ESTIMATE  
HONEYWELL METROPOLIS WORKS  
(TAC NO. 36006)**

The following RAI responses provide information that is intended to supplement the Decommissioning Cost Estimate, dated August 15, 2012.

**RAI 1**

Include a statement about the method and frequency of adjusting the cost estimate (Title 10 of the *Code of Federal Regulation* [10 CFR] 40.36(d)(1)(3)).

According to 10 CFR 40.36(d)(1)(3), a statement about the method and frequency of adjusting the cost estimate is a required element of the decommissioning funding plan. No statement was included in the Decommissioning Cost Estimate (DCE) describing the method and frequency for adjusting the cost estimate. To ensure that the licensee intends to adjust the cost estimate in a manner consistent with U.S. Nuclear Regulatory Commission (NRC) regulatory requirements, the staff requests the licensee include a statement describing the method and frequency anticipated for adjusting the cost estimate.

**Response:**

As required by License Condition 25 and 10 CFR 40.36(d)(2), Honeywell will update the decommissioning cost estimate at intervals not to exceed 3 years. The update will take into account the effect on decommissioning costs for the events identified in 10 CFR 40.36(d)(2). Honeywell also will take into account surveys or information obtained by the plant radiation protection department. If those surveys or other information indicate residual radioactivity in the facility and environment, including the subsurface, at levels that would, if left uncorrected, prevent the site from meeting the criteria for unrestricted use, Honeywell will update the decommissioning funding plan within one year.

Honeywell's current NRC-approved decommissioning funding plan utilizes a surety bond as the mechanism to provide decommissioning financial assurance. Honeywell will continue to rely on a surety bond as the financial assurance mechanism. To address changes in the Decommissioning Cost Estimate, Honeywell periodically revises its decommissioning funding plan by submitting an executed surety bond rider, revised standby trust schedules, and revised certification of financial assurance (collectively, "financial instruments"). As required by License Condition 25, Honeywell will submit revised financial instruments, including an executed surety bond rider, to reflect the updated Decommissioning Cost Estimate after resolution of any NRC comments on the updated cost estimate and within 30 days of the NRC approval date.

**RAI 2**

Characterize piping system contamination (10 CFR 20.1501(a); Regulatory Guide 4.22; and NUREG-1757, Volume 3, Appendix A, Section A.3.5).

Paragraph 20.1501 of 10 CFR (a) requires licensees, including those licensed under 10 CFR Part 40, to perform surveys of the licensed facility, including the subsurface, to evaluate "(i) The magnitude and extent of radiation levels; and (ii) Concentrations or quantities of residual radioactivity; and (iii) the potential radiological hazards of the radiation levels and residual radioactivity detected." Regulatory Guide 4.22 explains this requirement stating that licensees should, "periodically conduct surveys that are reasonable under the circumstances in

accordance with 10 CFR 20.1501(a) to identify the horizontal and vertical extent of significant residual radioactivity throughout the site taking into consideration the temporal distribution of radioactive contaminants. The survey design should consider areas likely to contain residual radioactivity, such as, but not limited to subsurface media, especially around building footers, subsurface pipes and conduits, pipe tunnels linking building that process radioactive materials, and below-grade tank." The results of these survey activities could affect the DCE. Specifically, NUREG-1757, Volume 3, Rev. 1, Appendix A, Section A.3.5 states that contamination in piping should be included in the facility description, which is the basis for a portion of the DCE.

Section 3.4.4 of the DCE states that "characterization activities excluded subsurface piping systems to eliminate disruptions to plant operations." To ensure that adequate funding is available during decommissioning, the staff requests the licensee to revise the DCE to include a description and associated costs to cover the level of contamination in subsurface piping or otherwise provide justification why it is reasonable to exclude subsurface piping from the DCE.

**Response:**

Table 4-1 in the DCE includes costs to remove and dispose of subsurface piping. The estimate of impacted subsurface piping is based on information gathered during the characterization that was performed in 2009. Subsurface characterization was not completed immediately adjacent to subsurface piping due to the potential to impact on-going operations. This approach is allowed under the exception stated in 10 CFR 20.1501(a)(2) "Are reasonable under the circumstances to evaluate...". It was concluded during planning of this work that it was not prudent to perform subsurface characterization immediately adjacent to subsurface piping. Based on characterization data gathered, engineering judgment was used to estimate the quantity of impacted subsurface piping. Costs to decommission subsurface piping were then included in the current DCE. Since these costs have been included, no further characterization is planned. Taking into account the 25% contingency required, there is approximately \$4.64 million to decommission subsurface piping. Details are as follows.

Prior to starting the characterization, a historical site assessment (HSA) was performed to evaluate available historical information relevant to radiological impacts, and clarify the locations needing characterization. After the HSA was completed and reviewed, the characterization activities were performed based on this assessment.

Approximately 1,700 soil samples were collected as part of the characterization. Samples were collected from the surface (0" to 6") and subsurface (depths of 36" and 72" below grade). Characterization was performed in advance of the NRC Decommissioning Planning Rule being finalized and was forward thinking in its approach.

The quantity of impacted soil and piping was based on the data collected during characterization and on engineering judgment. Site drawings were reviewed as part of this evaluation. The engineering evaluation included the following subsurface piping systems:

- Sanitary drain lines;
- Process drain lines; and
- Storm water drain lines.

### Sanitary Drain Lines

Based on the information in the HSA, sanitary drain lines were considered as a low risk. The decommissioning cost estimate did not consider any sanitary drain lines as being radiologically impacted.

### Process Drain Lines

The HSA noted there was a high potential for historical impacts to the process drain lines. It was conservatively assumed based on engineering judgment that the entire length (approximately 2,567 linear feet) of process drain line was impacted (this basis is noted in Table 5-1). The cross section of impacted material was assumed to be 3 feet by 5 feet. This cross section was consistent with the DCE submitted in 2006 to the NRC. The volume of impacted material calculated for process drain lines is 38,505 cubic feet. Because a portion of the cost to decommission process drain lines were accounted for in the 2006 submittal as part of decommissioning specific plant areas, those costs remain included for those areas.

### Storm Water Drain Lines

The HSA estimated that approximately 11,415 linear feet of subsurface storm water drain lines are located at the site. It was conservatively assumed based on engineering judgment and characterization data that approximately 10,445 linear feet was impacted. The cross section of impacted material was assumed to be 3 feet by 5 feet. This cross section is consistent with the assumption in the DCE submitted to the NRC in 2006. The volume of impacted material (soil and subsurface piping) calculated for the storm water drain lines is 156,675 cubic feet.

The storm water drain lines under the parking lot (approximately 790 feet) were not considered to be radiologically impacted. This portion of the storm water drain line is located upgradient of the plant operations. An additional 180 linear feet of storm water piping located in the site maintenance area was not considered to be radiologically impacted. This portion of the storm water drain line is also located upgradient of the plant operations.

A portion of the costs associated with the remediation of the storm water drain lines (4,270 linear feet) is accounted for in the DCE as part of the remediation in specific plant areas. For example, the costs associated with the remediation of the storm water drain lines in the Ore Storage Pad area are included with the remediation of the Ore Storage Pads.

The remaining 6,175 feet of storm water drain lines is accounted for as a separate decommissioning line item in Table 5-1 of the DCE.

Overall, the 2012 DCE allocates \$3.71 million dollars to decommission subsurface piping. Including the required 25% contingency, the 2012 DCE allocates \$4.64 million dollars to decommission subsurface piping. This total does not include the cost to decommission subsurface piping included in plant specific areas, such as the Ore Storage Pads, which is considered separately in the DCE.

In the next triennial estimate, language will be added to the decommissioning cost estimate to update the volume of subsurface piping if additional data becomes known.

**RAI 3**

Provide additional detail regarding administrative fees (NUREG-1757, Volume 3, Appendix A, Section A.3.6)

NUREG-1757, Volume 3, Rev. 1, Appendix A, Section A.3.6 states that administrative fees should be included in the estimated costs for decommissioning planning and preparation. Administrative fees (cited in NUREG-1757, Rev. 1, Volume 3, Appendix A, Section A.3.6) include, but are not limited to, "procurement fees for third-party contractor, legal fees, local permits, utilities, financial assurance fees, and NRC staff review of these items." Section 4.0 of the DCE states that costs for "Honeywell Oversight & Licensing" are estimated to be \$2.2 million. The DCE does not provide further detail explaining what activities were included under "Honeywell Oversight & Licensing." To ensure that adequate funding is available during decommissioning, the staff requests the licensee provide additional detail to verify the estimated costs of administrative fees are included in the DCE.

**Response:**

Honeywell has allowed for administrative fees expected to be incurred during decommissioning such as procurement fees for third-party contractor, legal fees, local permits, utilities, financial assurance fees, and NRC staff review. Honeywell estimates, based on its engineering judgment and historical cost data, the breakdown of these fees to be as follows:

Procurement fees for third party contractor	\$167,020
Legal fees	\$249,373
Local permits	\$102,781
Utilities	\$199,139
Financial assurance fees	\$1,156,290
NRC staff review	\$321,191
	\$2,195,794