## MDE Approval with Conditions of MPA/Honeywell – Corrective Measures Alternatives Analysis (CMAA)

## Dundalk Marine Terminal, Baltimore, Maryland – July 19, 2012

## Response to Comments:

The Department received numerous written and oral comments on the CMAA from surrounding community members, businesses who use the Port, and other stakeholders during the 2011 public comment period. After completing its review, MDE is providing both a summary of the comment and its response.

Importance of the Port operations: Several commenters stressed the importance of Port
operations to the economy and their interest in seeing a remedy approved that would both
protect human health and the environment while minimizing disruption to Port
operations.

**Response**: The Consent Decree established eight criteria the Department must consider when evaluating each remedial alternatives proposed in CMAA. Two of the eight criteria included (1) protecting human health and the environment and (2) evaluating potential disruption of port operations. The results of the Department's evaluation determined that the CMAA Alternative 3, conditioned by additional monitoring requirements, best meets the Consent Decree criteria.

2. Adoption of CMAA Alternative 3: On behalf of several local community groups, one commenter supported the adoption of CMAA Alternative 3 with an additional recommendation that Honeywell and MPA should remain responsible for all future monitoring, sampling, analysis, and remedial actions necessary to maintain Alternative 3 to ensure that it remains protective of human health and the environment.

**Response**: The Consent Decree establishes that MPA and Honeywell are responsible for the implementing the selected remedy and conducting all required long term monitoring plans and implementing any additional actions necessary under MDE's direction.

- 3. *Objections to Alternative 3*: MDE also received comments from another commentator raising several objections to Alternative 3, each of which has been considered by MDE. Specifically:
  - a. *Heaving*: The commenter stated that the chromium residue, COPR, can heave, and if not properly addressed, can result in damage to a containment remedy.

**Response**: Heaving was extensively studied in the Heave Mechanism and Mitigation Study required by the Consent Decree. On the basis of that study, MDE believes that the impact of any heaving can be controlled and mitigated and should not affect the integrity of the selected remedy.

b. *Priority drains*: The commenter stated that the focus of Alternative 3 on "priority" storm drains should be expanded to the "non-priority" storm drains.

**Response**: The Department believes the focus limited on "priority" drains is appropriate and consistent with the criteria established in the Consent Decree. "Non-priority" storm drains are those that are not located in COPR fill and, any flow from these drains should be similar to drainage from other urban areas.

c. *COPR removal*: The commenter also suggested that any remedy should include COPR removal.

Response: The CMAA discussed two different alternatives that focused on removal options. Each was evaluated against the eight criteria set forth in the Consent Decree to determine the effectiveness in meeting the objectives of the eight criteria. The selected Alternative 3 was compared with the two removal alternatives in light of current port operations and the achievement of same level of protection of human health and the environment. The Department has reason to believe that Alternative 3 best achieve the objectives established by the eight criteria established by the Consent Decree.

4. **Risks to aquifer**: The commenter maintained that Alternative 3 ignores risks to the Lower Patapsco Aquifer. The responsible parties evaluated the potential for the hazardous substances in COPR to migrate to the Lower Patapsco Aquifer. The parties used the existing groundwater monitoring well network, and the Chromium Fate and Transport Study (which incorporated the use of groundwater modeling) to evaluate whether COPR contamination could migrate to the lower aquifers.

**Response**: MDE will require the installation of a sentinel well monitoring network to ensure that the selected remedy performs and the Lower Patapsco Aquifer remains protected.

5. *Facility oversight*: The commenter stated the lack of oversight on the facility before and after the 2006 Consent Decree and urged the establishment of a community advisory group.

**Response**: Pursuant to the Consent Decree and to its statutory authority, MDE will continue to supervise the implementation of the selected remedy and long term monitoring and maintenance. Additionally, MDE supports the recommendation for a formation of community work group and understands that MPA and Honeywell have committed to the organization of such a group.

Note on Economic impact calculations: A commenter noted that the CMAA contained errors in the estimate of the economic impact of various remedial alternatives. These errors were identified during the public meeting on February 2011; subsequently, MPA and Honeywell submitted revised and corrected economic impact evaluations to MDE and they were posted on its website, during the public comment period. MDE considered the corrected information.