Issue managers: Dale Engstrom, Vince Panesko, Shelley Cimon

HAB (RAP) is focused on plutonium-americium contamination that will be allowed to remain after the proposed cleanup outlined in the PW-1,-3, -6, CW-5 RD/RA Work Plan.

Part One: Plutonium and Americium mobility questions

1. How are residual plutonium (Pu) and americium (Am) moved by water with various pH levels?
2. How does radiolysis change the solubility of the Pu and Am species?
3. How does the decay of Pu-241 to Am-241 change solubility?
4. How much Pu and Am are present in these sites?
5. If it moves (per the above discussion) will this contaminate groundwater away from this site above drinking water standards?
6. Will unacceptable levels of Pu and Am reach the Columbia River?

Part Two: Lateral Pathways concept. Herb Parker in 1948 recognized that crib waste was moving as much as 300 feet laterally at Hanford; the RAP Committee has concerns about the placement of observation wells and detection of contaminant plumes away from the footprint of the cribs.

1. How certain can we be that the wells are giving useful information?
2. What evidence do we have that liquid discharges stay within or close to the footprint of the crib?
3. Given the stair-stepping effect, could most or all of the volume of one crib’s disposal be directed laterally to an adjoining crib?

In the conversation that RAP had with EPA in our last meeting about the process that was to be followed in the PW-1,-3, -6, CW-5 RD/RA Work Plan, EPA responded that the final decisions about how deep the excavation would go and how much “chasing” of the contaminant mass would occur were not yet decided, and was not a part of the RD/RA Work Plan document.

In the RD/RA Work Plan, the Tri-Parties made a remedial decision (RD/RA WP) to dig deeper to further remediate the High-Salt waste group sites of the 200-PW-1, -3, -6, and CW-5 waste complex. The HAB has advised the Tri-Parties to employ the Observational Approach in the removal of contaminated soil from these waste sites, and to remove highly contaminated soil from these sites as surgically as possible to excavate only the contaminant mass and not the less contaminated soil, and to enable the eventual disposition (of TRU waste) to WIPP.

As the Tri-Parties discuss how remediation is planned to occur, the RAP committee would like to learn more about the Tri-Parties final approach to the remediation of the 200-PW-1, -3, -6, and CW-5 waste complex, especially in the case of the High-Salt sites.
What will happen if Plutonium (and Americium and other related contaminants) levels that are over the permissible PRG levels (or TRU waste limits or Class-C limits) are discovered by confirmatory sampling at the deeper proposed excavation depth?

Will Americium and other Plutonium-related contaminants be looked for?

Is there a plan to address this situation that involves all of the Tri-Parties, or will DOE and its contractors do this?

How will the excavated waste be handled; where will it be disposed?

What is the approximate schedule for getting this work accomplished?