

Hanford Advisory Board Draft Advice

Topic: “Unrestricted surface use” vs “unrestricted use” cleanup level¹

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Originating Committee: River & Plateau

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Background

The River Corridor Interim Records of Decisions (RODs) set forth proposed cleanup levels in the mid-1990’s based on “unrestricted use” of the Hanford Site after remediation. More recent Tri-Party Agreement (TPA) Agencies’ documents speak to levels of cleanup that conform to “unrestricted surface use.” There are concerns that 1) this relaxed position reduces the expected level of cleanup, 2) this position will exclude the subsurface contamination from further remediation, and 3) this level of cleanup will not be protective.

At the December 16, 2009 Baseline Assumptions Committee of the Whole meeting, a representative from the U.S. Environmental Protection Agency (EPA) explained that the concept of unrestricted surface use and the 15-foot depth of cleanup for protection of the surface originally came from the Washington State Model Toxics Control Act (MTCA). The use of the term originated in the 1992 Future Uses Working group and was mentioned in Hanford Advisory Board (Board) Advice #23, Footnote 2 (May 1995). There are places at Hanford that will require that any intrusion into the subsurface be controlled until after natural attenuation lowers risk of exposure (WAC 173-340-740(6)(d)), which includes the concept that the contaminants laying below 15 feet will be trapped by the sediments of the Vadose Zone.

The discomfort some of Board members have with the use of “unrestricted surface use” lies with the idea that this language suggests all surface uses are permitted, which may include more than the TPA intended (e.g., irrigation of crops with well water). The Board feels that a more negative term, like “limited use” with an explanation of the limitation, would be a more informative and appropriate policy.

Some Board members are also concerned that “unrestricted surface use” has implications in the notion of “how clean is clean enough” and at what contamination level threshold does cleanup of waste sites begin, which may limit the amount of cleanup of some remediated sites. We understand that there is a technical feasibility problem that sometimes limits the kinds of cleanup possible. There are members of the public and of the HAB who continue to urge the TPA to work towards a more thorough cleanup that would produce total unrestricted use for every situation possible. There is a concern with the time that will be needed for natural attenuation to work on some of these wastes because the projected period will greatly exceed our lifetimes into the future.

Advice

The Board recommends the following during development of planning, risk assessment and decision documents:

- The Board discourages the use of the term “Unrestricted Surface Use” due to the unintentional positive misunderstanding of “unrestricted” by the lay public in terms of

¹ Draft Advice generated from the Base Assumptions Committee of the Whole¹ Meeting, December 16, 2009.

allowable surface actions. The Board further recommends that a “plain talk” approach should be used to describe how use of the remediated areas would be “limited.”

- If it is found that the term “unrestricted surface use” as a part of Hanford nomenclature cannot be changed, the Board suggests that TPA Agency staff become sensitive to the use of the term, and explain in what ways the use of the area has been limited.
- Therefore, the Board recommends that the TPA Agencies adopt the term “Limited Use” (of the subsurface or groundwater) across Hanford project. The limited use term must be followed by what activities are not being allowed. For example, a limited use might not allow well drilling because groundwater continues to be contaminated. Another example might only allow recreational day use of an area that would pose risk to longer habitation. This more negative terminology for Limited Use (of the subsurface or groundwater) might be more definitive of what is being envisioned.
- The connection between anticipated land use, exposure scenarios and the remedy selection that the TPA Agencies are assuming should be clarified. The associated relationship between anticipated land use and restricted access should also be clearly made in the final RODs.