HAB Advice Page 1 of 2



INFORMATION SHEET ON INSTITUTIONAL CONTROLS

Background:

The issue of institutional controls and their potential use at Hanford was first raised as part of the discussion on Strategic Planning and the initial draft of the Hanford Remedial Action-Environmental Impact Statement (HRA-EIS). As the discussion developed it became apparent that further work was needed to better define what institutional controls are and how they may be applied over time at Hanford. The following information is provided to help further the boards discussion on institutional controls.

Definition: (from Model Toxics Control Act WAC-173-340-440)

Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of an interim action or cleanup action or result in exposure to hazardous substances at a site. Such measures shall be required to assure both the continued protection of human health and the environment and the integrity of an interim action or a cleanup action. In general, institutional controls are required when residual concentrations of hazardous substances remain onsite above cleanup standards or when the regulatory agencies determine such controls are needed to protect human health or the environment or the integrity of the cleanup action.

Institutional controls can take the form of physical measures, or legal and administrative mechanisms. Examples of physical measures include signs and fences. Examples of legal mechanisms include lease restrictions, deed restrictions, land use designations and zoning, building permit process. Also when contaminants are left in place, the Superfund process requires a review of the remedy at least every 5 years. It should be noted that institutional controls can be applied to the surface, vadose, and groundwater.

Current or Potential Institutional Controls at Hanford:

The following information is provided for discussion purposes only. Actual institutional controls will be developed through the CERCLA or RCRA decision process.

1100 Area - cleanup of the 1100 Area is complete and currently 2 types of institutional controls are in place. The groundwater is restricted due to the contaminant TCE. It is expected that the levels of TCE will attenuate to below drinking water standards in the next 5-10 years. Also an engineered barrier (i.e, an asbestos cap) is in place over the Horn Rapids Landfill. The controls required are detailed in the 1100 Area ROD.

100 Area - Cleanup of the soil and groundwater is underway. Potential institutional controls envisioned in the 100 Area include restrictions on activities that disturb soils that are deeper than 15 feet below the surface. Controls will more than likely be legal and administrative in nature. Restricted use of the groundwater is envisioned until such time that contaminant levels in the groundwater drop below drinking water standards.

200 Area - It is anticipated that the 200 Area will be used for waste management activities well into the

HAB Advice Page 2 of 2

future. Institution controls will most likely be both physical and legal in nature.

300 Area - Cleanup decisions have just been made which call for cleanup of the 300 Area to industrial use standards. Institutional controls will likely be in the form of legal and administrative controls.

All Other Areas - At this time no institutional controls are envisioned due to Hanford contaminants in the soil. The groundwater will likely be restricted due to contamination.

As discussed above, it is anticipated that institutional controls will be a part of many of the cleanup decisions made at Hanford. The decision to use institutional controls will be made on a site specific basis through the CERCLA and RCRA decision process.

Land Transfer:

As long as DOE has possession of an area, it can enforce institutional controls in that area. The question becomes one of enforcing such controls once the area is transferred out of DOE control through GSA. This is a particular concern with respect to restrictions on groundwater, as envisioned for several areas.

DOE reports "excess property for disposal" to the General Services Administration (GSA). GSA then follows this hierarchy.

- Property is first made available to other federal agencies.
- Second it is made available for qualified homeless/prison/other social projects.
- Third it is made available to city/county/state government for other uses at appraised value.
- Finally, if that property is not picked up at a higher level, it is made available to the general public through a competitive sale.

There are several administrative institutional controls which can be instituted when the land transfers. First, GSA can institute deed restrictions that would be crafted to be effective in preventing intrusion. Second, GSA could transfer only the surface rights but reserve the subsurface rights to the land There are other actions which can be taken by the State or local governments to increase the effectiveness of the institutional controls. For example, the State can enforce controls through its well permit program, and cities and counties can enforce the controls through either building permits or special zoning or hazard overlays. This will require integration with state and local governments to track information on the institutional controls required for the area.

Hanford Home Page | HAB | Advice Index

For questions or comments, please send email to Hanford_Advisory_Board@rl.gov HAB Consensus Advice #63a