

## End States Workshop #2 – 200 Area

August 10/11, 2004

### Buried Waste and Contaminated Soils – Breakout Group

**Question: For Solid & Liquid Waste Sites End States CERCLA requires that decisions be made using 9 criteria. In weighing these criteria:**

- **If waste is left in place under an engineered barrier, what factors affecting public acceptance must the Tri-Parties consider?**
- **If waste must be removed for treatment and disposal, what factors affecting public acceptance must the Tri-Parties consider?**
- **What other options should be considered by the Tri-Parties and when is it appropriate to consider them?**
- **How would these considerations change depending on location inside or outside the core zone and could these decisions affect how the core zone is defined?**
- **If data collection activities are purposely focused on defining the highest levels of contamination, how important is additional detailed characterization information in making these decisions? How does this change for different end states or hazards?**

**The following is the overall summary of comments including modifications discussed on August 11.**

#### *Significant Common Themes*

1. First and foremost is protecting the groundwater. Address the high risks first.
2. There should be an aggressive plan to develop technology for remediation for the contamination that could get to the groundwater (particularly the Tc-99).
3. We should allow for “nature doing its job” over reducing the footprint in certain cases (Gable Mountain as an example where there is an active and healthy ecosystem there. Also there is low risk if there is a failure in institutional controls). This includes maintaining the appropriate institutional controls during a predetermined time period. Emphasis on “certain”. Need good data and characterization. Need to consider human and ecological risk, and look holistically.

#### *Group 1 Themes*

1. Cost appears to be the main driver as displayed on the posters.
2. Mobility of contaminants could be worse than previously thought.
3. Costs: would it be less expense to do some of the work now versus later when the problems have more time to develop?
4. Do not forget the risk to cleanup workers.

5. There are many conditions for allowing keeping waste in place under a barrier.
6. When would you consider removal, treatment, and disposal of the waste? Always consider this first.
7. If you do not have control, then you have to clean it up.
8. Must define the ultimate end use will be (activities, etc.) first.
9. Do we have adequate knowledge of what contamination is really there in all areas???

### *Group 2 Themes*

1. Institutional Controls – how reliable are they and for how long???????
2. When would you consider removal, treatment, and disposal of the waste? Always consider this first.
3. For any significant risk, you should have a bias against institutional controls.
4. We are approaching the cleanup piecemeal versus looking from the site overall.
5. There is a CONSISTENCY problem with old waste versus new waste.
6. The government can not “cap it” and walk away.
7. How stable does the waste have to be to allow for “temporary storage”?
8. Need to bridge generational knowledge gaps.

### *Group 3 Themes*

1. We need to capture both chemical and radiological risks.
2. When analyzing risk, we need to include the risk to workers, ecological damage and other factors.
3. We need to know the inventory to determine the risks.
4. Cost figures should be life cycle costs.
5. Point of contamination (time, space, concentration) versus anti-degradation policy.
6. Institutional controls criteria:
  - a. Graded approach
  - b. Look at the risk after the 2<sup>nd</sup> half-life
  - c. Have to look at contamination criteria
  - d. Risk over time is reduced
7. Timeframes should be related to the level of characterization.
8. Simply “moving it down the street” does not make sense.