



# 2010 Administrative Order on Consent governs Area IV and Northern Buffer Zone (NBZ) soil cleanup

## ► Soil sampling status

- USEPA has finished sampling for radiological contaminants in Area IV and NBZ
- With DTSC oversight, DOE will conclude chemical soil sampling in Spring 2014
- Final gap analysis will be completed for all of Area IV and NBZ to ensure that data gaps are filled
- DOE will describe and summarize findings for both chemical and radiological contamination in Area IV and NBZ



## ► Next step: Soil Remedial Action Implementation Plans will

- Show locations of contamination to be cleaned up
- Describe how DOE will conduct the cleanup for both chemical and radiological contamination in Area IV and NBZ

Sampling by the numbers	
Acres sampled	350+
Samples taken	6,000
Records in database	1,100,000



## ► On-going soil treatability studies help answer key question: Can alternative technologies reduce contamination, and thereby lessen volume of soil to be shipped off-site?

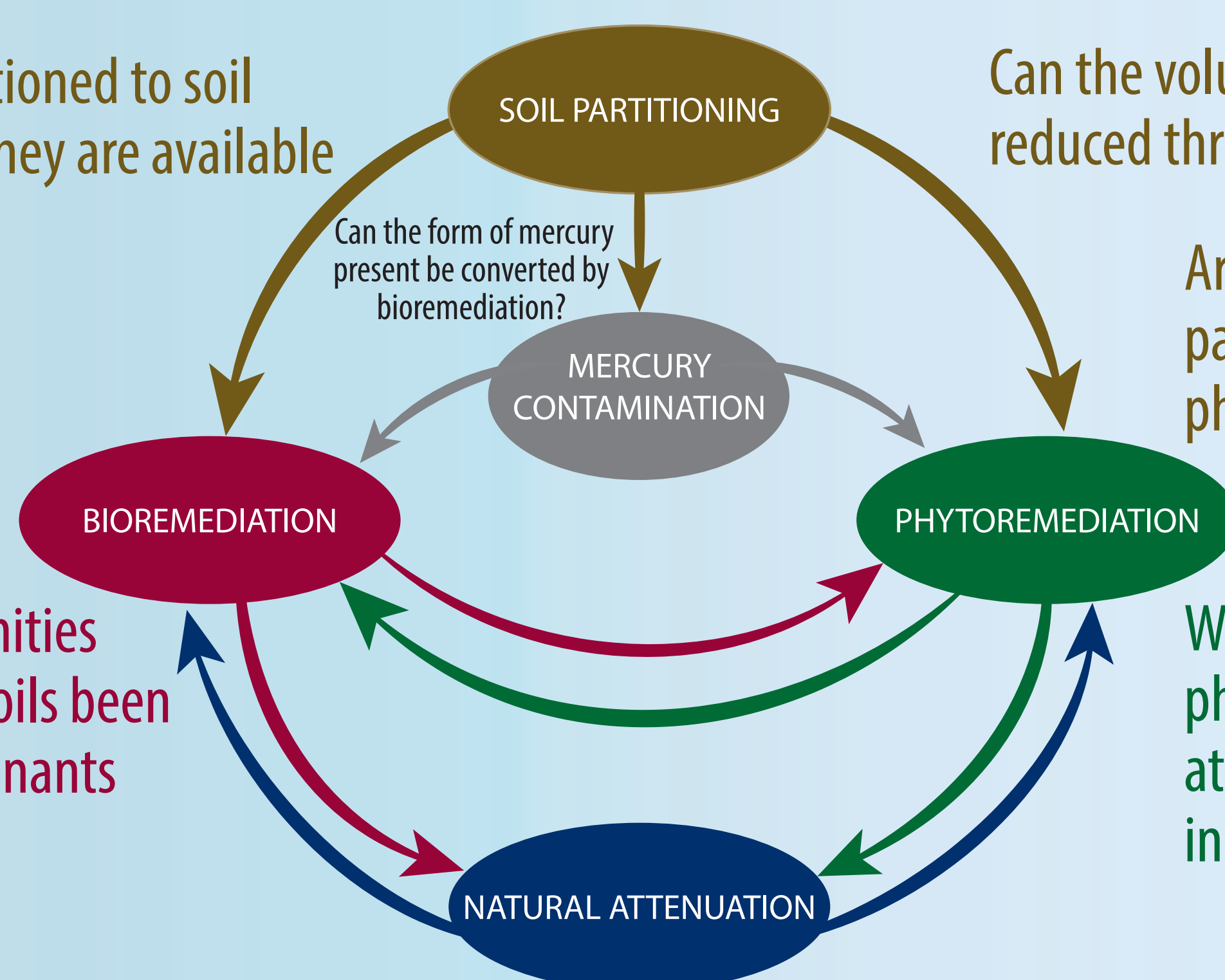
Are the contaminants partitioned to soil particles in a manner that they are available to microbes?

Can the volume of contaminated soil be reduced through separation?

Are the contaminated Area IV soil particle sizes good candidates for phytoremediation?

Have the microbial communities already present in Area IV soils been breaking down the contaminants over time?

What portion of the contaminants' phytodegradation rates can be attributed to the microbial communities in the plant root zones?



How can microbiological, biological, and weathering degradation processes be optimized?