



# Environmental Impact Statement for Remediation of Area IV and the Northern Buffer Zone

S a n t a   S u s a n a   F i e l d   L a b o r a t o r y




## Cleanup Alternatives

SOIL

### NO ACTION

Radionuclides naturally decay  
  
Some chemicals naturally decompose

### CONSERVATION OF NATURAL RESOURCES

 Remove **148,000 yd<sup>3</sup>** of soil that presents a risk to human health  
  
 **11,100 truckloads** to remove soil  
  
 Use **8 million gallons** of water



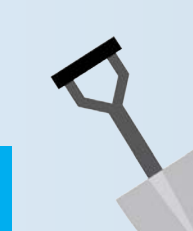


OR

### CLEANUP TO REVISED LUT VALUES

 Remove **148,000 yd<sup>3</sup>** of soil that presents a risk to human health  
  
 Remove an additional **44,000 yd<sup>3</sup>** of soil based on risk-based levels for chemicals  
  
 **14,400 truckloads** to remove soil  
  
 Use **8.3 million gallons** of water

OR

### CLEANUP TO AOC LUT VALUES\*

 Remove **148,000 yd<sup>3</sup>** of soil that presents a risk to human health  
  
 Remove an additional **44,000 yd<sup>3</sup>** of soil based on risk-based levels for chemicals  
  
 Remove an additional **741,000 yd<sup>3</sup>** of soil that is below risk-based levels but chemicals are above AOC LUT values; Radionuclides are at or below AOC LUT values  
  
 **70,000 truckloads** to remove soil  
  
 Use **40 million gallons** of water

OR

2 Years

2.5 Years

10 Years


GROUNDWATER

### NO ACTION

Limited monitoring

OR




### MONITORED NATURAL ATTENUATION

 Active monitoring for:

- Trichloroethylene (TCE) plumes—**10-50 years**
- Strontium-90 source—**up to 150 years**
- Perchloroethylene (PCE) plume—**20 years**
- Tritium plume—**8 years**

OR

### TREATMENT & MONITORED NATURAL ATTENUATION

 Onsite treatment for TCE & PCE plumes  
  
 Dig down to bedrock to remove strontium-90 source  
  
 Closely monitor small TCE and tritium plumes

BUILDINGS

### NO ACTION

18 buildings remain onsite

OR

### BUILDING REMOVAL

Remove 18 buildings  
  
1,500 truckloads to remove material

2 Years



\*AOC LUT Values: The 2010 Administrative Order on Consent (AOC), established that each soil sample would be compared against a Look-Up Table (LUT) Value for each chemical and radionuclide. These values were set following the AOC agreement and generally include more aggressive cleanup values than Risk-Based Screening Levels.