State-Licensed Disposal Area Update
Observed Increases in Trench 14 Leachate Elevation

Citizen Task Force

March 27, 2013
SDA Groundwater/Leachate Monitoring Locations
Recent Observations in Trench 14

• Leachate elevations have been generally decreasing since infiltration controls were installed in 1992-1993.

• An increase was noted in early 2011, followed by a slight decrease at end of 2011.

• 2012 data shows small increases continued.

• Total increase since mid-2011 is 4.3 inches.

• Change does not pose a threat to public health or safety at this time.
Leachate Elevation for Trench 14

Date

- 9/18/1992: Slurry Wall Installed
- 6/2/1993: VLDPE Installed
- 10/12/1993: Bioeng Installed
- 12/14/1995: XR-5 Installed
- 10/6/1999: Bioeng Removed

Leachate Elev. (ft. AMSL)
Evaluation of Physical Changes

- Installation of subsurface barrier wall and geomembrane cover at NDA
- Installation of new geomembrane cover on Trenches 12, 13 and 14 in 2010.
Near-Term Actions

• Notified regulatory agencies
• Working closely with DOE
• Increasing monitoring frequency from quarterly to monthly
• Conducting hydrologic analysis
• Developing mitigation plan
Possible Forward Projections

Leachate Elevation (feet above mean sea level)

- High elevation 1367.46, 10/92
- Rate increase:
  - 2.2”/yr (9 years)
  - 0.72”/yr (27 years)