

**SANDIA NATIONAL  
LABORATORIES  
MIXED WASTE LANDFILL  
LONG-TERM MONITORING &  
MAINTENANCE PLAN**

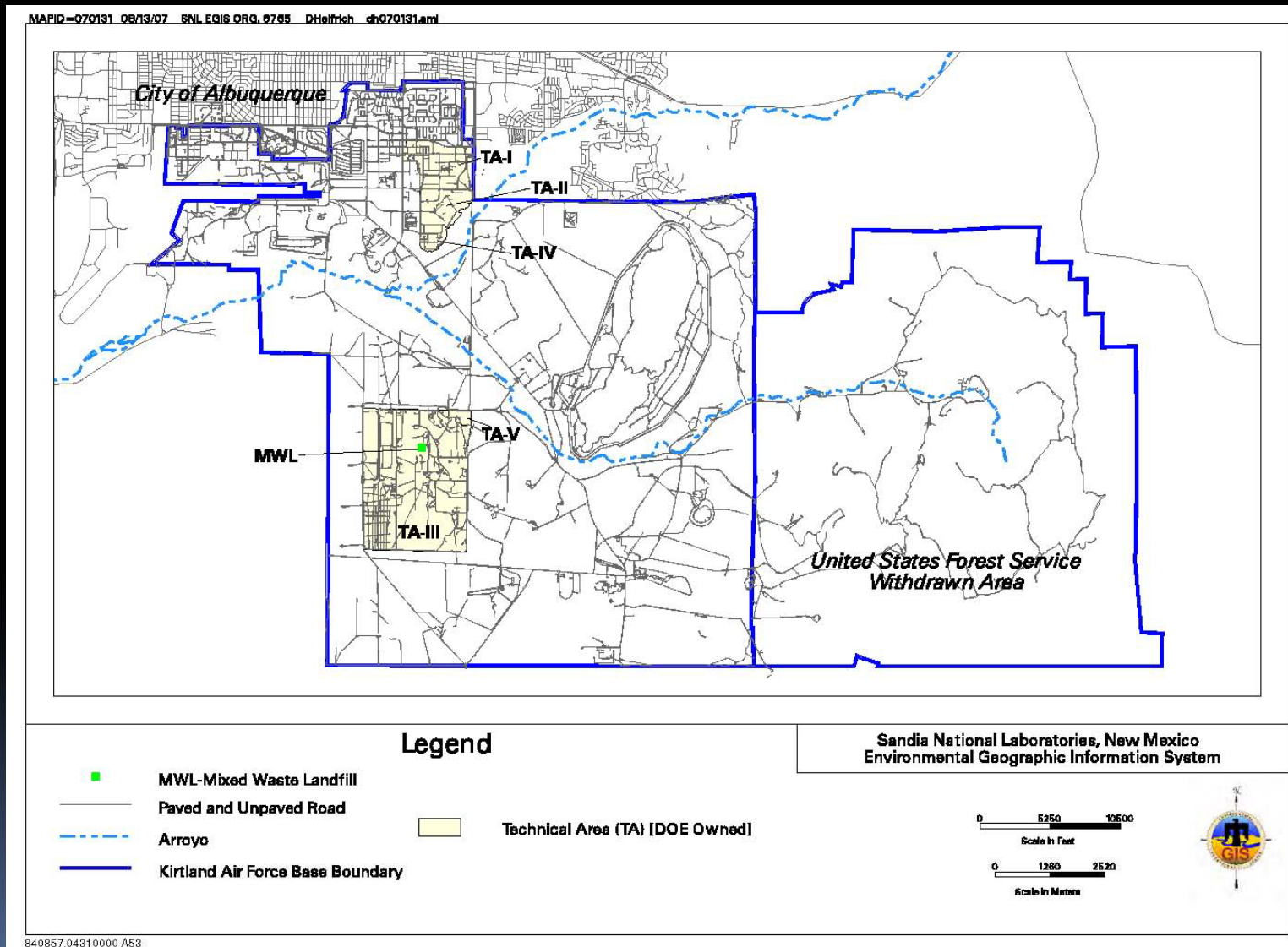
New Mexico Environment Department

*October 16, 2012*

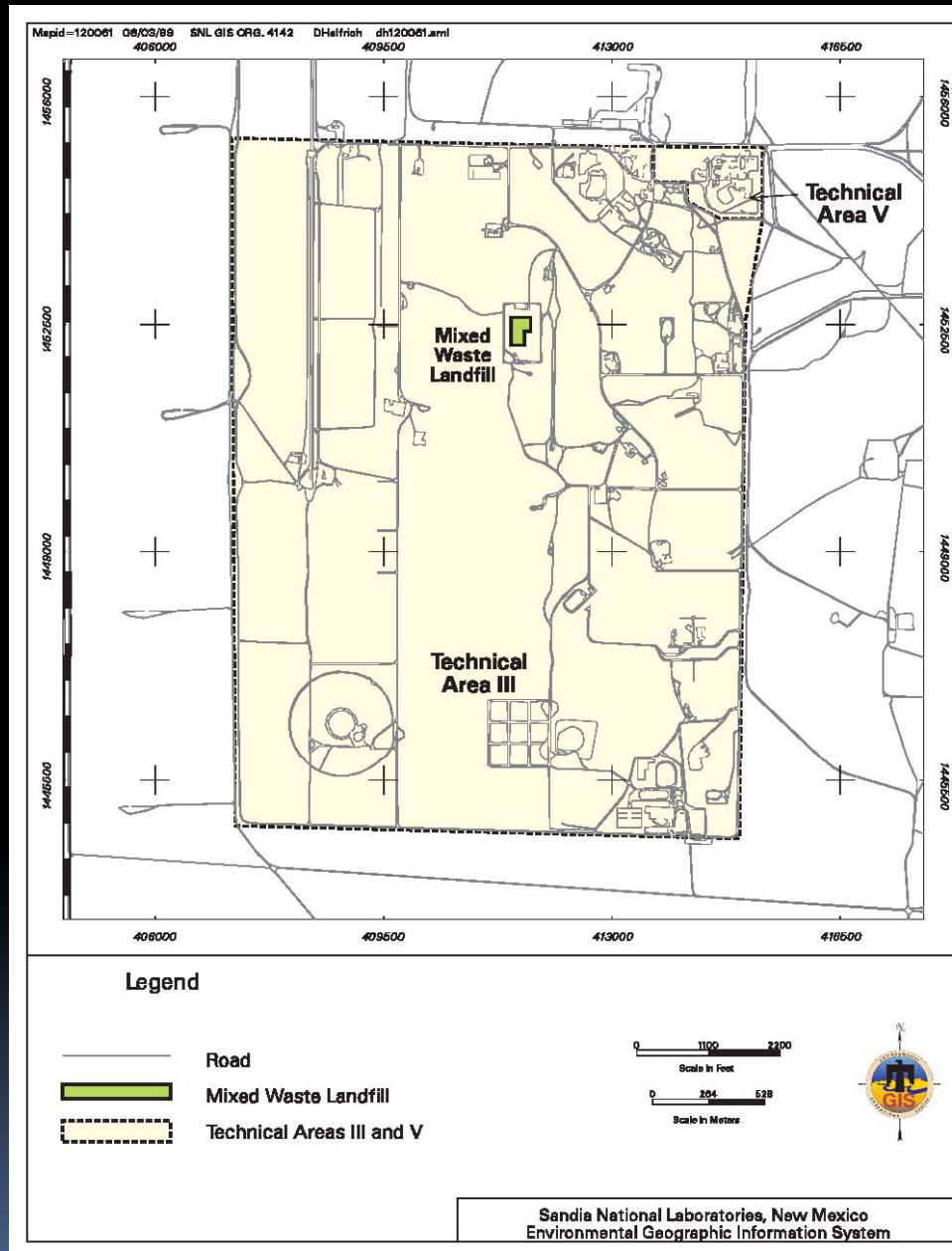
# Background Information

- MWL occupies 2.6 acres in Technical Area III at Sandia (SNL)
  - 5 miles SE of Albuquerque International Sunport
  - 4 miles south of SNL's central facilities
- Operated 1959 to 1988, low-level radioactive and mixed waste
- Groundwater monitoring began 1990
- Final Order May 2005 – install cover (with biointrusion barrier) and conduct monitoring
- Vegetative Cover (i.e., evapotranspirative [ET] Cover) installed 2009

# Location of Kirtland Air Force Base, SNL Technical Areas, and the Mixed Waste Landfill



# Location of the MWL Within Technical Area III

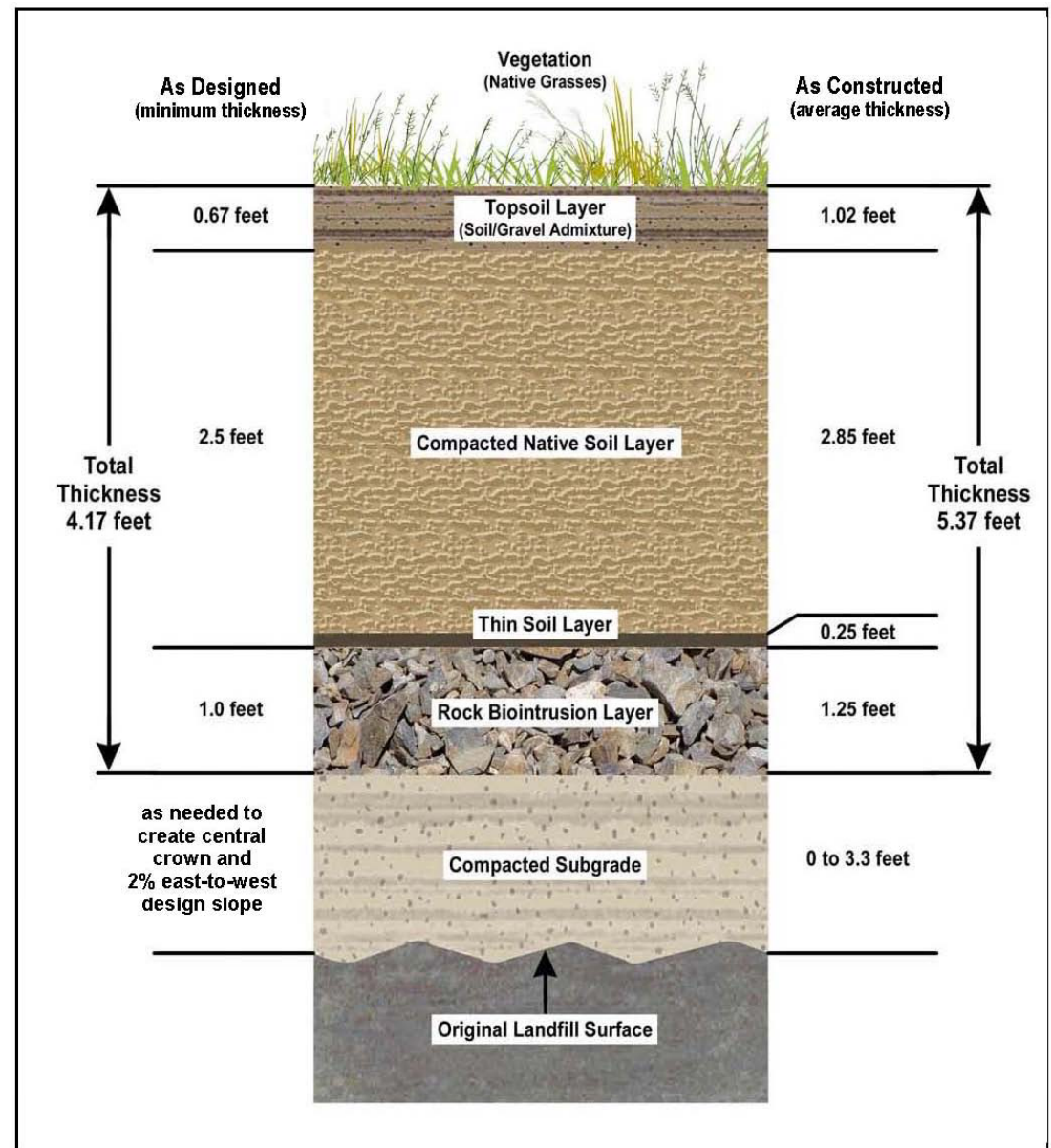


# Current Conditions

- Cover 4.1 acres (with side slopes), 4 engineered layers (barriers) above original ground surface
- Surface water diverted around Cover and to west, as with surrounding land
- Security fence surrounds cover, locked gates at north and south ends of fence

## Profile of MWL Cover

- Main layers thicker (more protective) than design specifications
- Total thickness ~5.4 feet, not including Subgrade



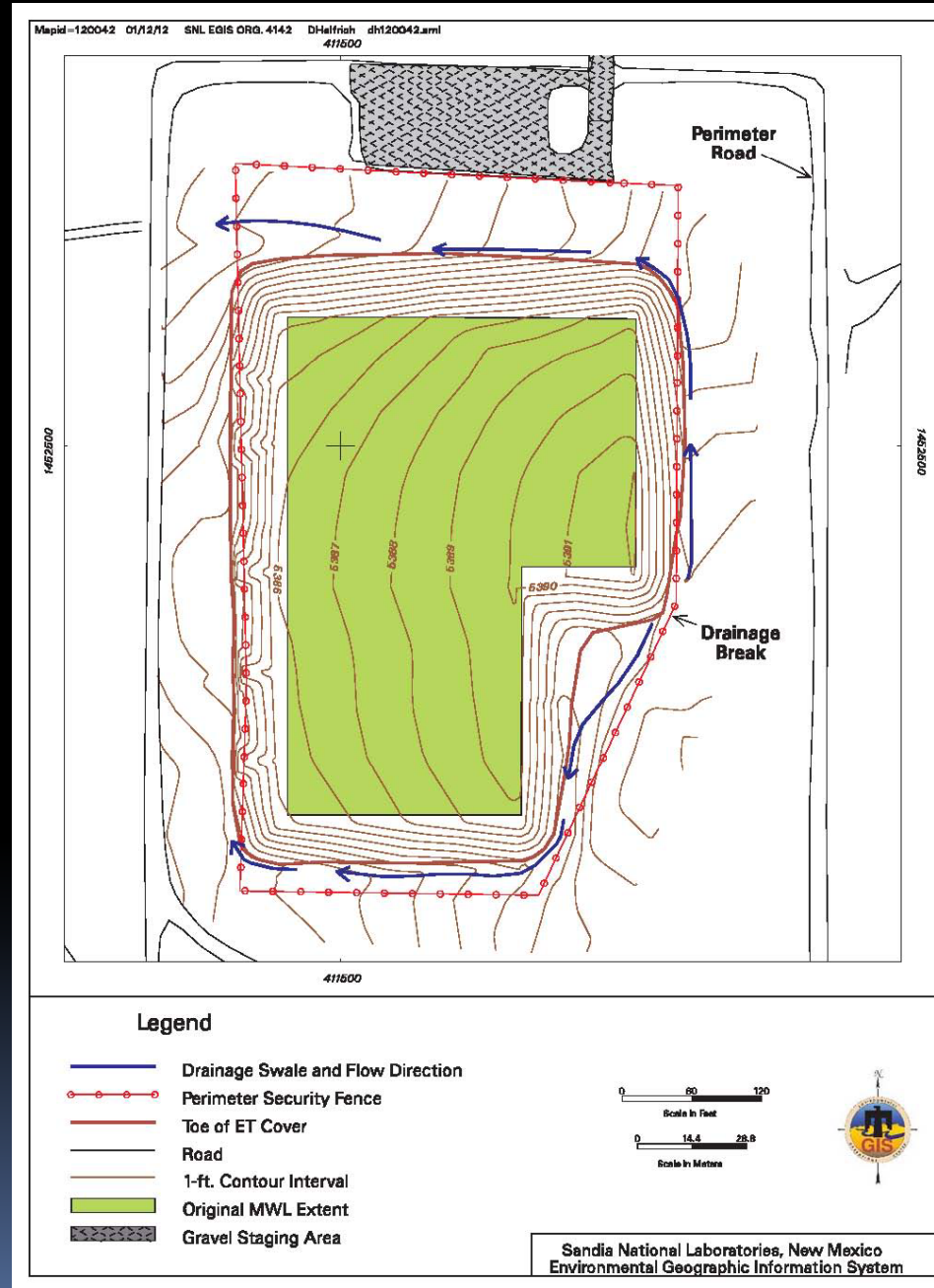


# Site Map

## Site Features

- Cover
- Site Drainage
- Security Fence
- Perimeter Road
- North Staging Area

Green area is Cover surface over original 2.6 acre boundary



## View to west showing MWL Cover





## Regulatory Background

- Corrective Measures Study (CMS) Report with recommended final remedy submitted May 2003
- Public Hearing on CMS December 2004
- NMED Final Order issued May 2005 (and Permit Modification):
  - Cover (with biointrusion barrier) and monitoring
  - Corrective Measures Implementation (CMI) Plan: design/construction specifications, fate and transport model and monitoring trigger levels
  - CMI Report: document as-built construction of Cover
  - Long-Term Monitoring and Maintenance Plan (LTMMP)
  - 5-Year Reevaluation Reports
- CMI Plan submitted November 2005, approved December 2008

## Regulatory Background

- Cover installed 2009
- CMI Report submitted January 2010, approved October 14, 2011
  - Public meeting December 14, 2010
  - 90-day comment period November 2010 – February 2011
- LTMMMP submitted March 2012
  - 60-day comment period ongoing September 14 - November 13, 2012
  - Public meeting October 16, 2012 (this meeting)

# What's Next

- Approve LTMMMP after consideration of public comment
- SNL will submit for the MWL Permit Modification Request for Corrective Action Complete with Controls
  - LTMMMP documents the controls
  - Further opportunity for public comment on MWL
- Annual reports and 5-year reevaluations
  - Further opportunity for public comment on MWL

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  - [http://www.nmenv.state.nm.us/HWB/documents/SNL\\_3-23-2012\\_MWL\\_LTMMP\\_Final\\_March\\_2012.pdf](http://www.nmenv.state.nm.us/HWB/documents/SNL_3-23-2012_MWL_LTMMP_Final_March_2012.pdf)