

Jungo Landfill Public Hearing

Winnemucca Convention Center

December 1, 2011

6:00 P.M.-9:00 P.M.



Tonight's Presentation

- Jungo Landfill Project
- Nevada Landfill Comparison
- Permitting Timeline
- Compliance with Regulations
- Additional Permit Requirements
- Current Status
- Summary



Jungo Landfill Project

- Located 25 miles west of Winnemucca
- Proposed landfill is located on a 634-acre parcel the landfill disposal footprint encompasses approximately 562-acres.
- Owned by Nevada Land and Resource Inc., operated by Recology
- Solid waste to be delivered by rail from the nine counties which make up the San Francisco Bay Area, and tributary communities along the rail route.
- Estimated average annual rate of up to 4,000 tons/day

Jungo Location Map





Nevada Landfill Comparison

- By Total Permitted Volume
 - ✓ Apex ~ 865,000,000 cubic yds
 - ✓ Rawhide ~ 298,100,000 cubic yds
 - ✓ Crestline ~ 175,625,000 cubic yds
 - ✓ Jungo ~ 111,000,000 cubic yds
 - ✓ Lockwood ~ 64,800,000 cubic yds



Permitting Timeline

- March/April 2007: Submission and approval of Conditional Use Permit (C U P)
- October 2007: City & County amend local ordinance to allow acceptance of waste outside the local landfill district
- March 2008: Recology submits Application to NDEP for review
- April 2008: NDEP finds the Application incomplete
- January 2009: NDEP finds the Application complete [predicated on a Performance Design]



Permitting Timeline, cont.

- November 2009: Humboldt County votes to uphold C U P
- February 2010: Regional Planning Commission extends the C U P
- April 2010: C U P revoked by County Commission— a stay of this action was then issued by the Court
- October 2011: NDEP completes review issues Public Notice



Compliance with Regulations

- The location of a Class I site must:
 - ✓ Conform with local land use planning
 - A Permit condition requires the permittee to show it has a valid CUP prior to construction.



Compliance with Regulations

- Additional Location standards
 - ✓ Airport safety
 - ✓ Floodplains
 - ✓ Wetlands
 - ✓ Earthquake safety
 - ✓ Setback from highway (1 000 feet)
 - ✓ Setback from the water table (1 00 feet)
 - Mitigated by more protective design and monitoring



Compliance with Regulations

- Design Standards
 - ✓ Recology proposed a single liner design which the NDEP rejected given proximity to water table
 - ✓ Draft Permit significantly exceeds minimum standards, i.e., a performance design with a double liner and robust final cover
 - Minimum design standard requires clay and single membrane liner - Jungo design includes a double liner
 - Minimum design standard requires 2 foot Landfill Soil Cover - Jungo has 3 foot Final Cover with HDPE Liner



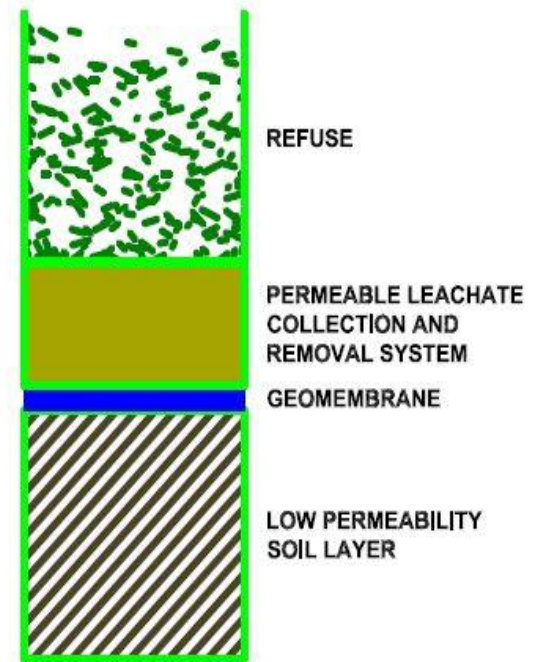
Compliance with Regulations

- Design Standards cont.
 - ✓ System to control runoff and runoff
 - ✓ Leachate & Landfill Gas Control
 - ✓ Groundwater Protection Evaluation Program
 - ✓ Performance reviews at 10 and 25 yrs
 - ✓ Settlement Monitoring Program

Compliance with Regulations

- Minimum Liner Design

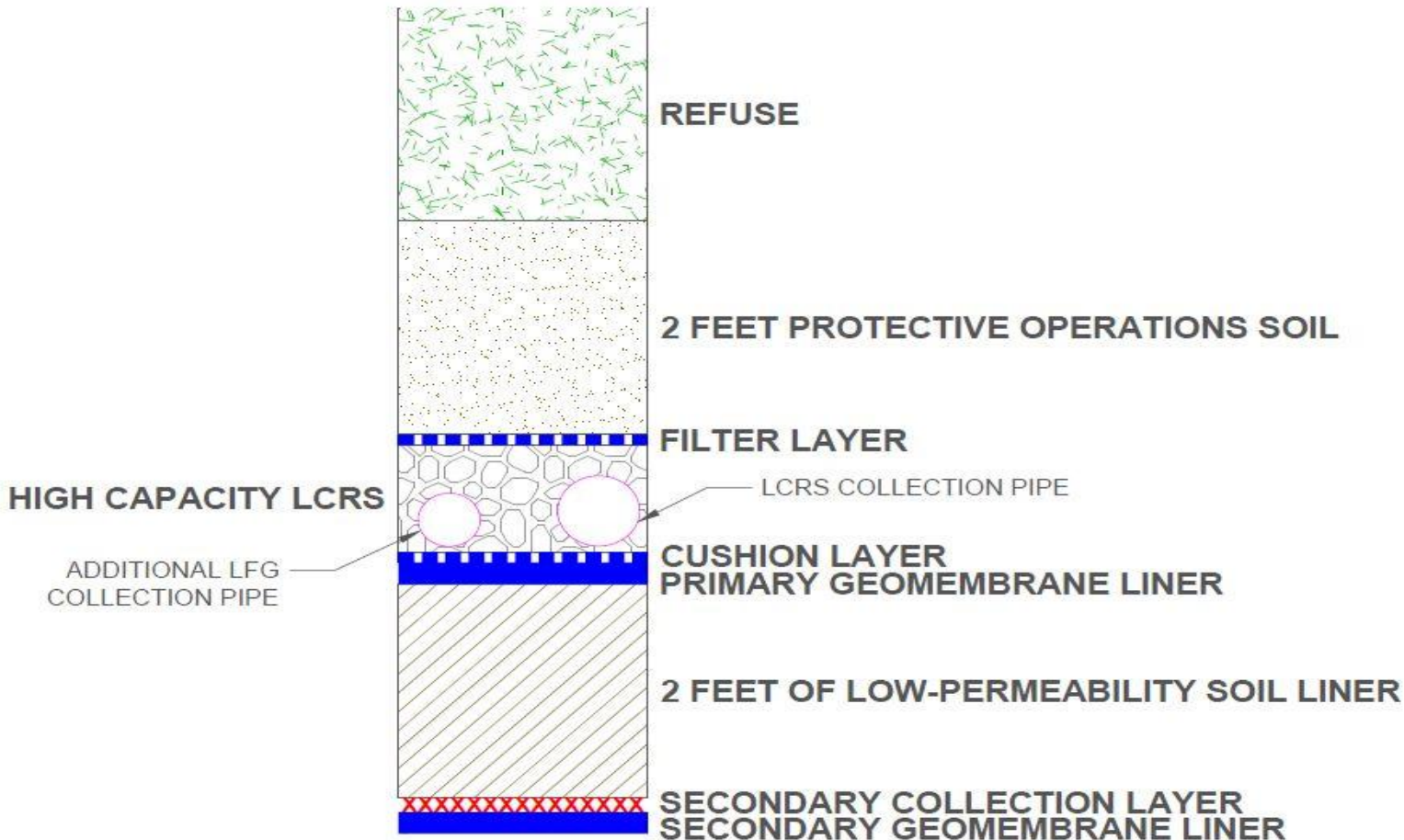
- ✓ An upper layer of an HDPE membrane
- ✓ And a lower layer of compacted soil [Clay]



SUBTITLE D LINER SYSTEM

Compliance with Regulations

Jungo Liner System



PROPOSED JUNGO DISPOSAL SITE LINER

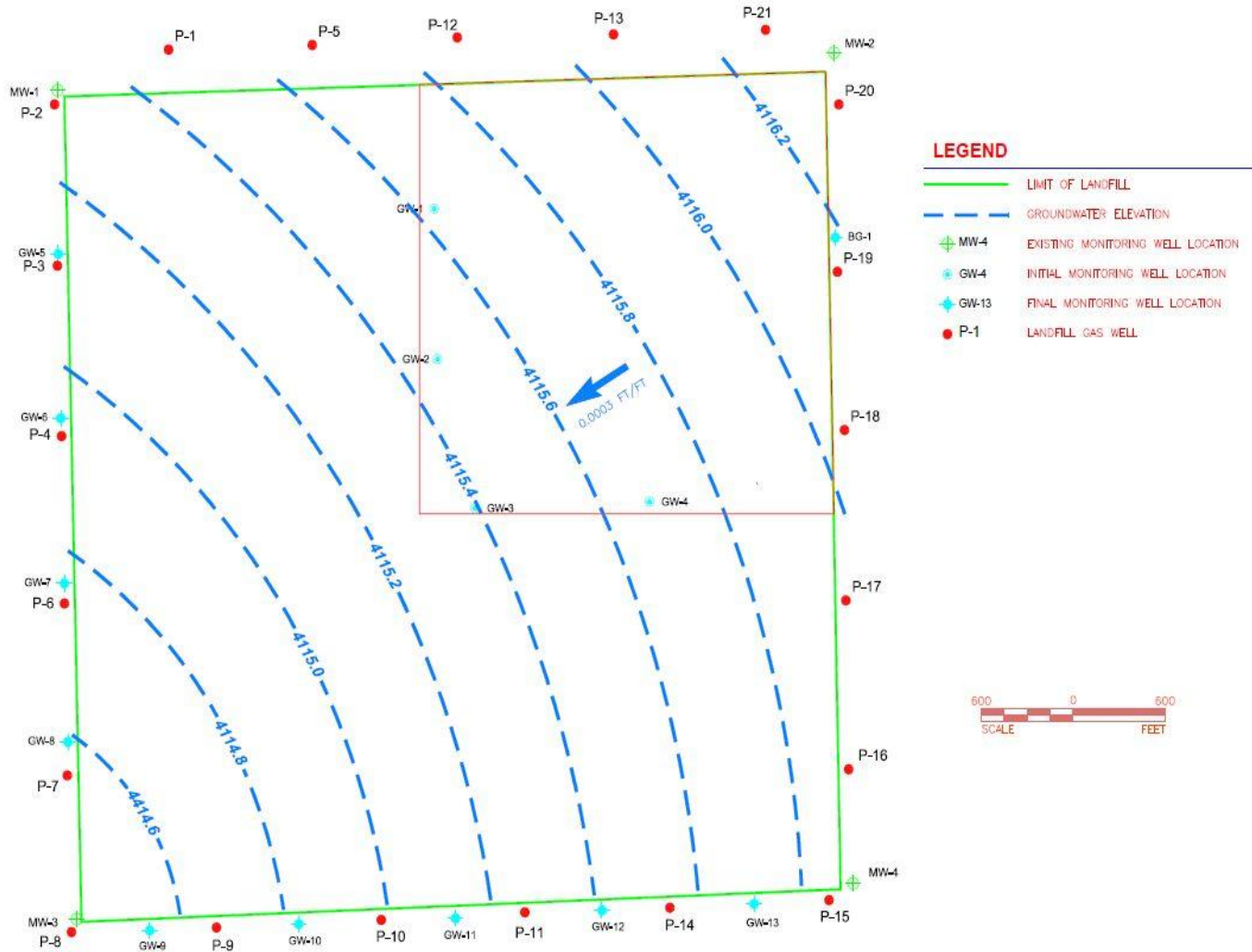


Compliance with Regulations

- Ground water monitoring requirements
 - ✓ Minimum standards require:
 - Monitoring of upgradient or background
 - Downgradient monitoring to detect leachate
 - Semi-annual sampling and reporting
- Additional requirements in Draft Permit:
 - ✓ Draft Permit significantly exceeds minimum standards:
 - An interim groundwater monitoring system, in conjunction with angled wells directly below the leachate sumps

Compliance with Regulations

Groundwater Monitoring Network (with Interim wells)





Compliance with Regulations

Angled Borings





Compliance with Regulations

- Operating Requirements
 - ✓ Monitoring and control of landfill gas
 - ✓ Hazardous waste, PCB's prohibited
 - ✓ Liquid waste prohibited
 - ✓ Daily cover
 - ✓ Litter control
 - ✓ A site specific Emergency Plan to reduce the burden on local emergency services
 - ✓ A settlement monitoring system



Compliance with Regulations

- Closure and Post-Closure Care
 - ✓ 30 years of Post-Closure Care
 - ✓ Ongoing Closure Certifications by NDEP
 - ✓ Final Cover Construction supervised by Nevada PE
 - ✓ Final Cover Maintenance & Monitoring
 - ✓ Groundwater and Leachate Monitoring
 - ✓ Landfill Gas Collection
 - ✓ Deed Restricted Land



Compliance with Regulations

- Financial Assurance Requirements
 - ✓ Financing mechanism for third party to implement Closure and Post-Closure Care
 - ✓ Yearly updates of the Financial Assurance costs to account for inflation [Closure & Post-Closure costs]
 - ✓ Monies are maintained in a State controlled Instrument [Trust Fund]



Additional Permit Requirements

- **NDOW Requirements**
 - ✓ If wildlife toxicity risks are present in the sampling results from the water impoundments, an Industrial Artificial Pond Permit will be obtained.
 - ✓ Fencing in accordance with NDOW's recommendation for protection of Wildlife and the implementation of a wildlife monitoring log during the first year of operations.
 - ✓ A Final Cover Vegetation Plan
 - ✓ A Weed Management Plan



Current Status

- Where we are in the Process
 - ✓ NDEP has completed a Technical Evaluation of the Application and concludes it meets or exceeds regulatory requirements
 - ✓ NDEP Public Noticed the intent to issue the Permit
 - ✓ The Public Comment Period will conclude in 15 days (12/16/2011)
- What's Next
 - ✓ NDEP will evaluate the comments received at this public hearing and those submitted in writing
 - ✓ NDEP is constrained to make a decision to issue or deny the permit within 30 days (1/16/2012)



Summary

- No Construction without valid C U P
- Landfill exceeds minimum standards
 - ✓ Double Liner
 - ✓ Robust Cover
 - ✓ Interim GW monitoring beneath & adjacent to waste cells
 - ✓ Two Gas Control systems
 - ✓ Focused GW Monitoring Program
 - ✓ Settlement Monitoring
 - ✓ Two design reviews of the performance of the Landfill at 10 and 25 years
- NDEP Will:
 - ✓ Evaluate and respond to public comments
 - ✓ Issue or deny the permit within 30 days [1/16/2012]