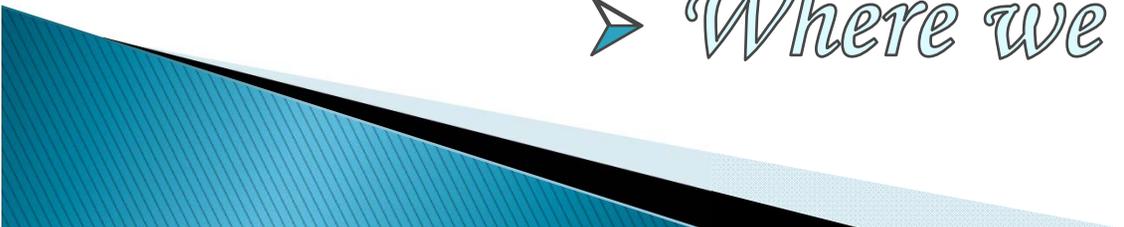


*The Roles and
Responsibilities
of the
Nevada Division of
Environmental
Protection at
Department of Energy Sites*



Questions you may ask that I will answer tonight:

- Who we are
 - What we do
 - What we do not do
 - Why we do what we do
 - When we do it
 - How we do it
 - Where we do it
- 

Nevada Department of Conservation and Natural Resources

Divisions of:
Conservation Districts
Environmental Protection
Forestry
State Lands
State Parks
Water Resources
Natural Heritage Program



Division of Environmental Protection

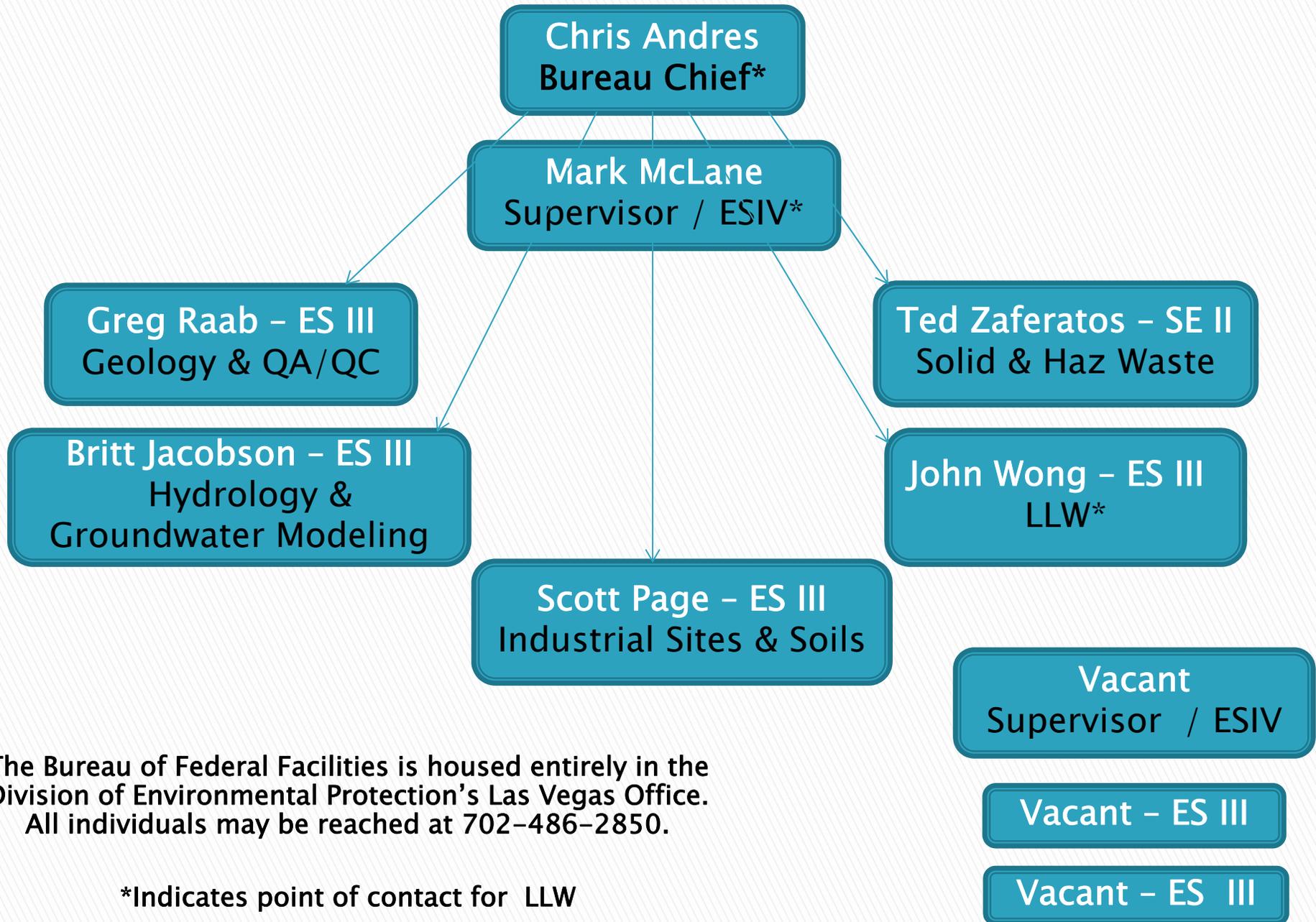
Bureaus of: Air Pollution Control
Air Quality Planning
Corrective Actions

Federal Facilities

Mining Regulation and Reclamation
Safe Drinking Water
Waste Management
Water Pollution Control
Water Quality Planning



Current Bureau of Federal Facilities Organization



Division of Environmental Protection's Mission

“To preserve and enhance the environment of the state in order to protect public health, sustain healthy ecosystems and contribute to a vibrant economy.”



Bureau of Federal Facilities

The NDEP's Bureau of Federal Facilities provides programmatic and regulatory oversight of the U.S. Department of Energy's (DOE) Environmental Restoration and Waste Management programs at the Nevada National Security Site and Tonopah Test Range, Central Nevada Test Area and Project Shoal Area



The Nevada National Security Site,
Tonopah Test Range, Central Nevada
Test Area and Project Shoal Area
ARE
Nuclear Weapons Testing Sites

Yucca Mountain

=

The proposed deep geological
repository storage facility for
spent nuclear reactor fuel



Bureau of Federal Facilities' Applicable Agreements, Laws and Regulations

- ▶ The Federal Facility Agreement and Consent Order (FFACO) – 1996
 - ▶ Resource Conservation and Recovery Act
 - ▶ Federal Facility Compliance Act of 1992
 - ▶ Agreement in Principle
 - ▶ Nevada Administrative Code, Chapter 445A – Water Controls
- 

The FFACO

- ▶ A three-party compliance agreement for U.S. DOE and U.S. Department of Defense sites within Nevada – 24 months of negotiations – effective May 1996
 - ▶ The NDEP has regulatory oversight of cleanup operations at federal facilities in Nevada
 - ▶ Specifically covers the following sites:
 - The Nevada National Security Site
 - The Tonopah Test Range
 - The Nevada Test & Training Range
 - The Central Nevada Test Area
 - The Project Shoal Area
- 

- ▶ Ensures the gov't entities work together in a cost-effective manner
 - ▶ The DOE Offices of Environmental Management and Legacy Management are responsible for remediating the sites and maintaining the sites
 - ▶ FFACO establishes a framework for identifying, prioritizing, investigating, remediating, and monitoring historically contaminated sites
 - ▶ Defines the regulations the State of Nevada will use to direct and enforce corrective action activities
- 

- ▶ Provides public involvement opportunities
- ▶ Establishes a corrective action strategy for cleanup activities
- ▶ Has six appendices:
 - I. Facility descriptions
 - II. Corrective Action Sites / Units
 - III. Corrective Action Investigations
 - IV. Closed Corrective Action Units
 - V. Public Involvement Plan
 - VI. Corrective Action Strategy



Corrective Action Strategy

- ▶ Corrective action ranges from no action to clean closure
- ▶ Corrective action sites grouped into units having common contaminants, geology, location or other factors
- ▶ These groups, called Corrective Action Units (CAUs), are prioritized based on:
 - Potential risk to workers and public
 - Available technology
 - Future land use
 - Agency and stakeholder concerns
 - Other criteria



- ▶ Under the FFACO, NNSA/NFO and DOD propose and discuss priorities with the State
- ▶ State makes recommendations
- ▶ Recommendations presented for review by the public and NSSAB for NNSA programs
- ▶ Following public's input, the State, NNSA/NFO and DOD develop a final prioritization of units for investigation and corrective action



Three types of Activities under DOE's Environmental Restoration Project that their Environmental Management Program handles and NDEP oversees and regulates:

- Industrial Sites
- Soils Sites
- Underground Test Area Sites



- ▶ To ensure compliance with the FFACO, a specific closure approach is chosen to investigate and remediate an Industrial, Soils or UGTA Site

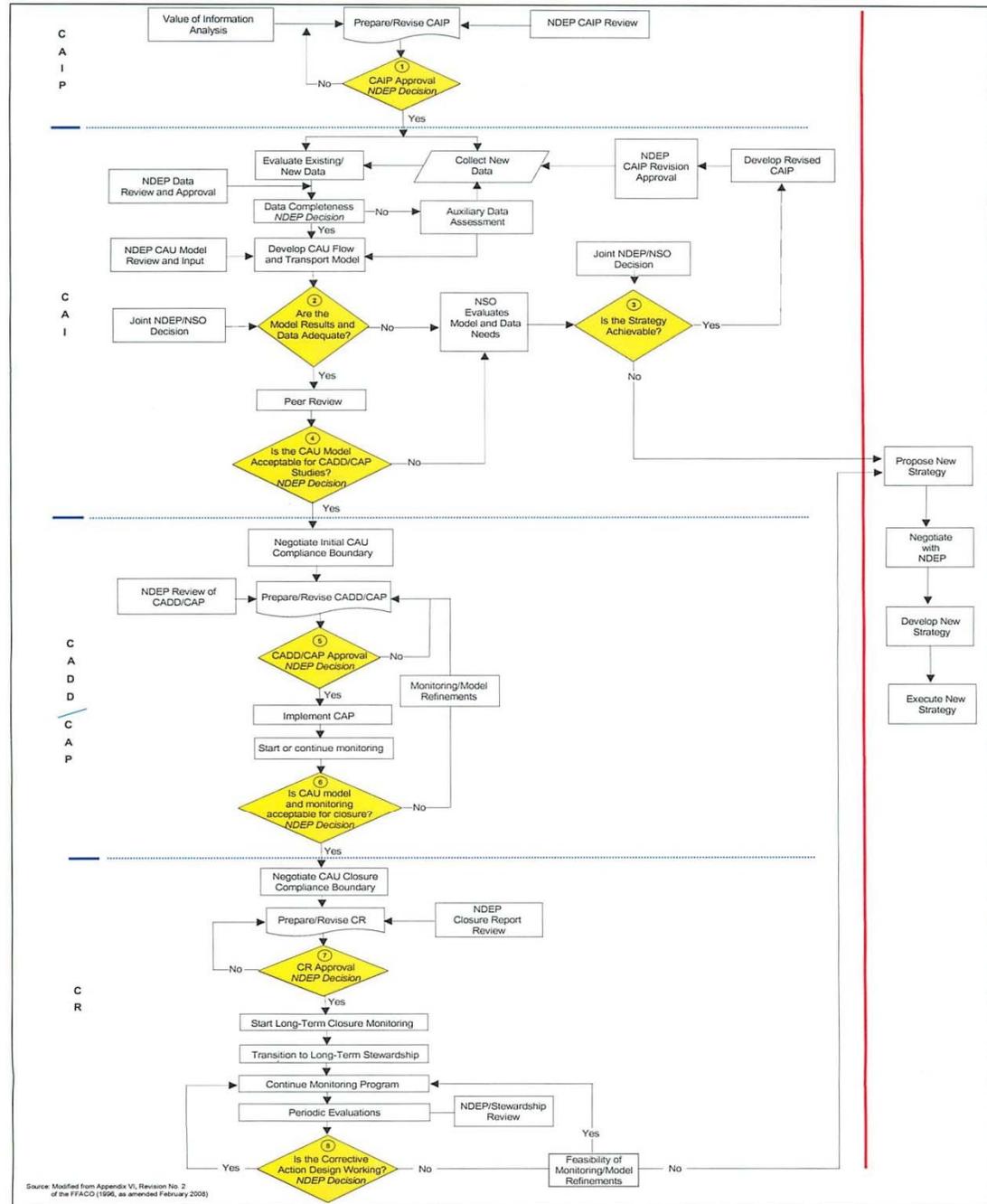
- ▶ The three methods for achieving closure are:
 1. Housekeeping

 2. Complex Closure
 - Corrective Action Investigation Plan (CAIP)
 - Corrective Action Decision Document (CADD)
 - Corrective Action Plan (CAP)
 - Closure Report (CR)
 - Notice of Completion

 3. SAFER Plan – Streamlined Approach for Environmental Restoration (SAFER) process



Section 3, Appendix VI of the *Federal Facility Agreement and Consent Order Process Flow Diagram for UGTA CAUs*



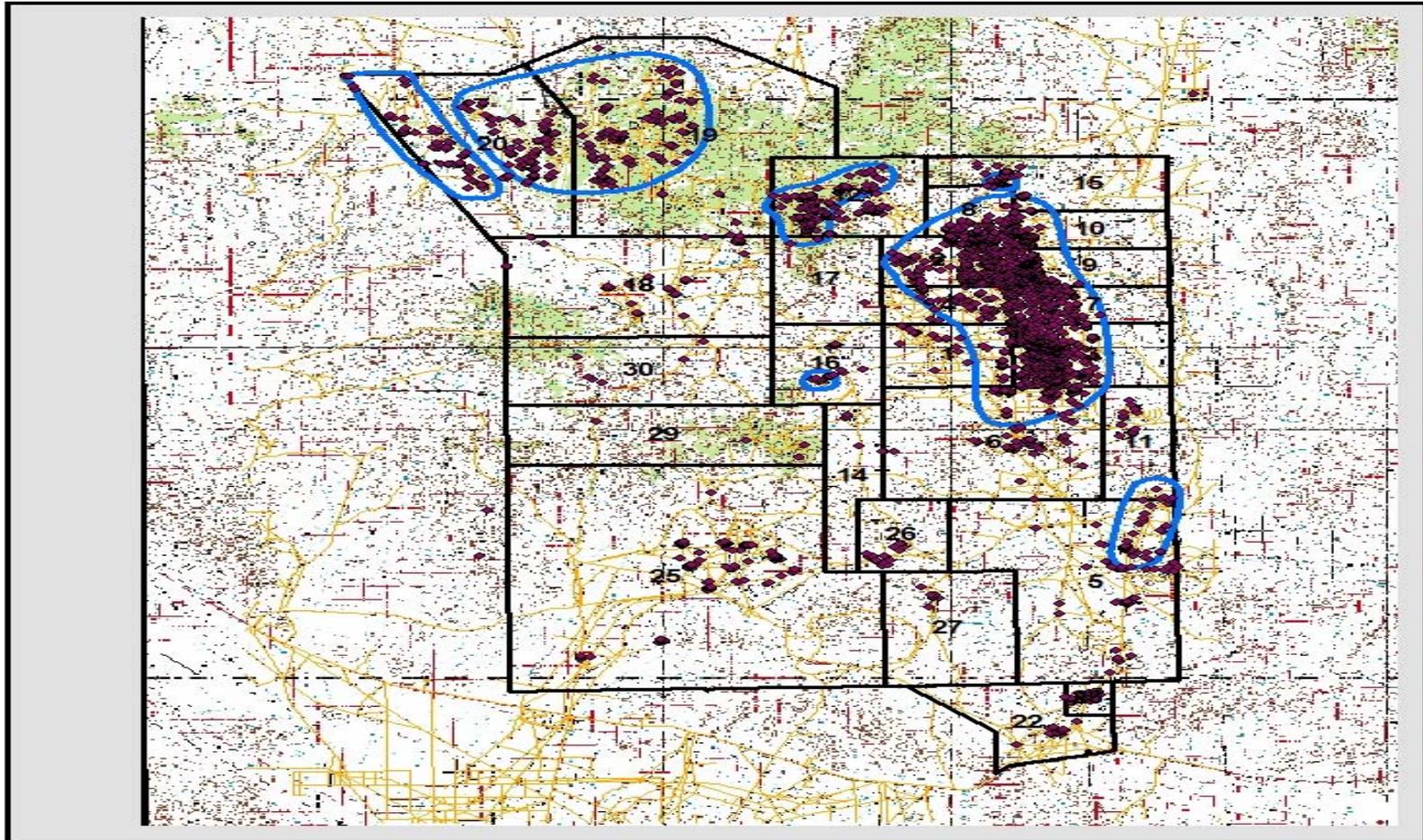
UGTA Interim Documents

- ▶ Hydrostratigraphic Model (Geology)
- ▶ Source Term
- ▶ Hydrologic Data Documentation Package
- ▶ Transport Data Documentation Package
- ▶ Modeling Approach Strategy
- ▶ Groundwater Model
- ▶ Transport Model
 - NDEP's oversight & input at every step along the way
 - Iterative process



FFACO Corrective Action Sites

Corrective Action Sites Under FFACO



0 4 8 16 24 32 Miles



Legend

- FFACO CAS Locations
- CAU UGTA Areas
- NTS Areas
- NTS Roads

Nevada Off-Sites

- ▶ Underground nuclear testing activities conducted in 5 states for various purposes
 - ▶ DOE Office of Legacy Management assumed responsibility for all activities associated with subsurface completion and long-term surveillance and maintenance at the Offsites on 10/1/06
 - ▶ The two Nevada Off-Sites are under the regulatory authority of the FFACO administered by the NDEP
- 

Agreement in Principle – 1999

- ▶ Parties to the Agreement:
 - Office of the Governor – Agency Integrator
 - DCNR through NDEP, BFF
 - Dept. of Motor Vehicles and Public Safety through Division of Emergency Management
 - NNSA/NFO

Regulatory Considerations

- ▶ At DOE facilities, the BFF implements existing State regulations for:
 - Storage, treatment and disposal of waste
 - Underground storage tanks
 - Water pollution control
 - Safe Drinking Water
 - Corrective actions



- ▶ BFF implements authorities of other bureaus in NDEP. Consistency of regulatory decisions is critical to maintain credibility.
- ▶ The original intent was to support “non-regulatory” oversight and environmental monitoring. DOE’s intent was to gain public confidence through enhanced State oversight.
- ▶ Intent is to work cooperatively to assure citizens of NV that the public’s health and safety, as well as the environment, are protected



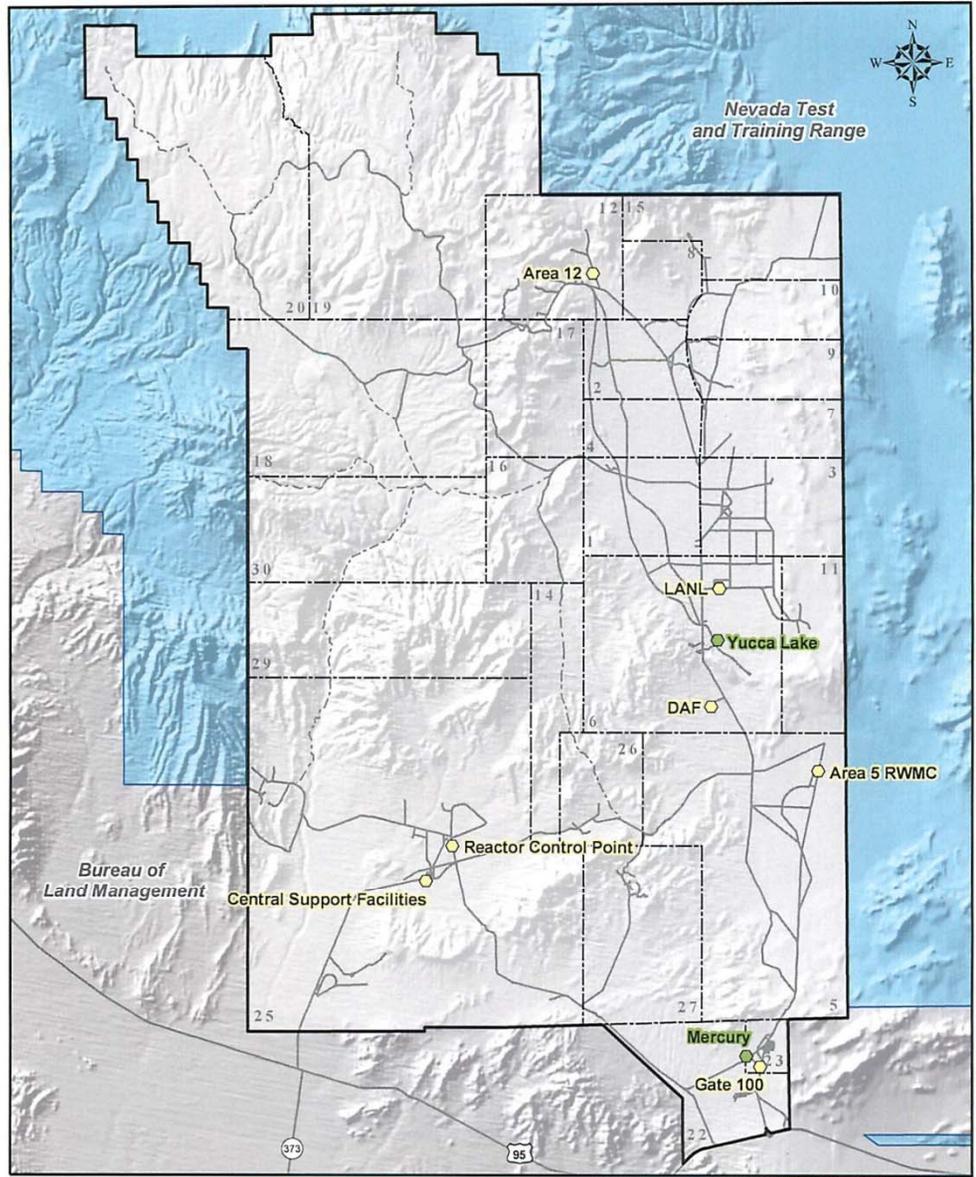
- ▶ Nevada's oversight will encompass only environmental cleanup activities that fall outside those encompassed by the scope of the FFACO
- ▶ Five Attachments describe, in part, each of NV's Agencies' commitments and activities in carrying out the AIP



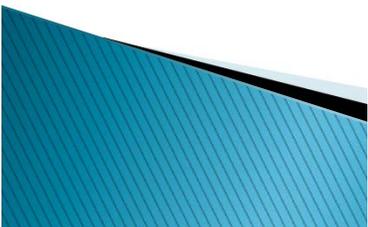
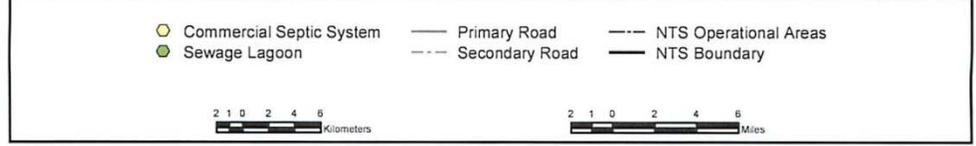
Water Pollution Control

NEVADA ADMINISTRATIVE CODE CHAPTER 445A – WATER CONTROLS

- ▶ General Provisions 445A.070 – 445A.117
 - ▶ Action Levels for Contaminated Sites 445A.226 – 445A.22755
 - ▶ Discharge Permits 445A.228 – 445A.263
 - ▶ General Permits 445A.266 – 445A.272
 - ▶ Corrective Action 445A.273 – 445A.2739
 - ▶ Use of Treated Effluent 445A.274 – 445A.280
 - ▶ Treatment Works 445A.283 – 445A.292
 - ▶ Notification of Release of Hazardous Substance 445A.345 – 445A.348
 - ▶ Permits for Facilities 445A.390 – 445A.420
 - ▶ Operation and Design of Facilities 445A.424 – 445A.447
- 



NTSGIS\Cashme\AV Projects\WVO EMETS\ASER\NTSER05\Projects\6\Fig4-14.mxd 05/28/08



Safe Drinking Water Public Water Systems

NAC 445A – WATER CONTROLS

- ▶ Water Quality 445A.450 – 445A.492
- ▶ Treatment of Water: Generally 445A.495 – 445A.540
- ▶ Treatment of Water: Groundwater 445A.54022 – 445A.5405
- ▶ Certification of Laboratories to Analyze Drinking Water 445A.542 – 445A.54296
- ▶ Operation of Community Water System or Non-transient Water System 445A.591 – 445A.5926
- ▶ Permits to Operate Privately Owned Systems 445A.595 – 445A.614
- ▶ Certification of Operators 445A.617 – 445A.652
- ▶ Design, Construction, Operation and Maintenance 445A.65505 – 445A.6731
- ▶ Environmental Review of Proposed Water Projects 445A.6758 – 445A.67611
- ▶ Requirements for Water Projects 445A.67624 – 445A.67644

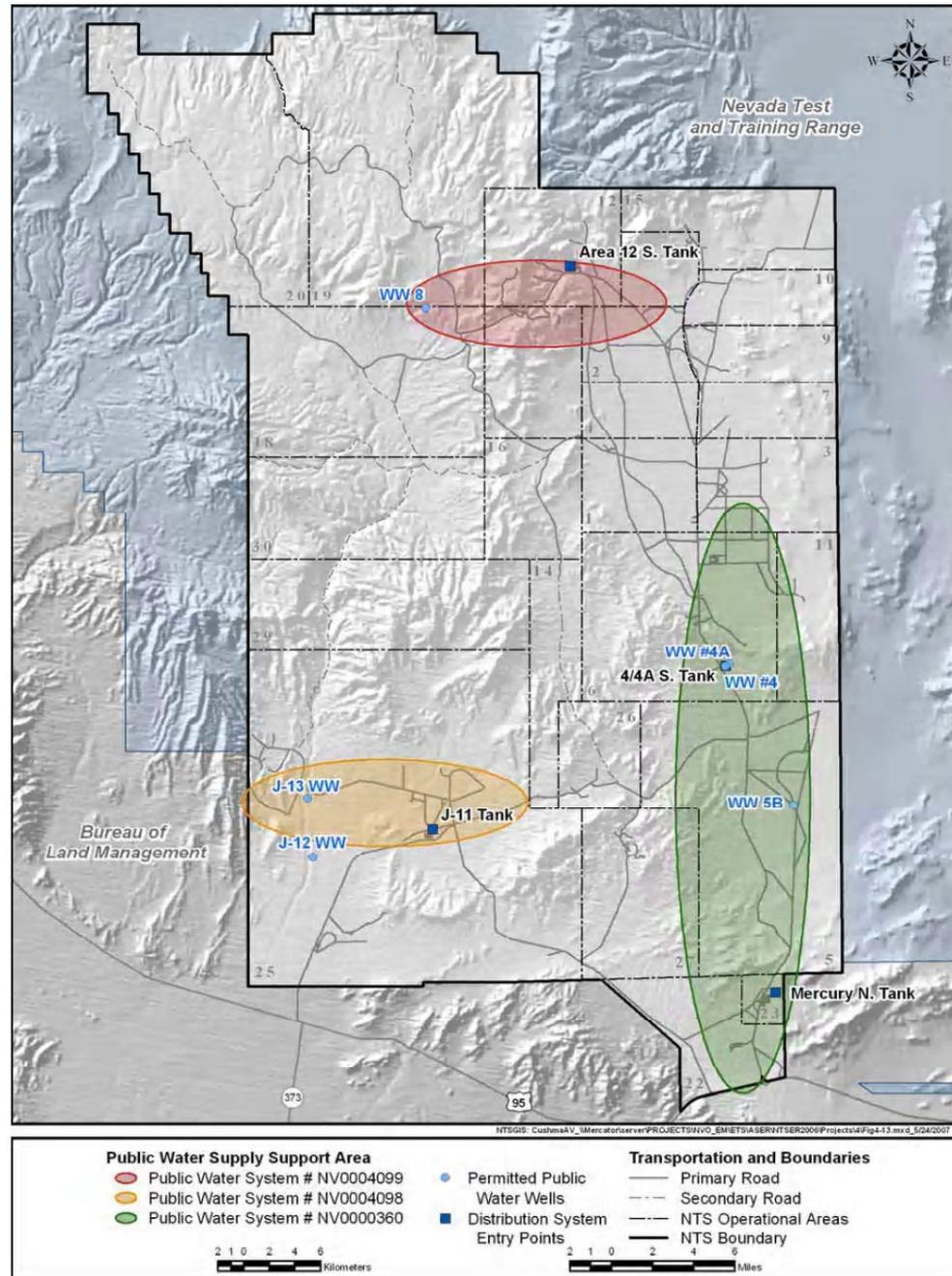


Figure 4-19. Water supply wells and drinking water systems on the NTS

Solid Waste Disposal / Resource Conservation and Recovery and Major Amendments

- ▶ The Solid Waste Disposal Act – passed in 1965 as Title II of the Clean Air Act of 1965
- ▶ The Resource Recovery Act of 1970
- ▶ Resource Conservation and Recovery Act (RCRA) – 1976
 - Subtitle C
 - Hazardous and Solid Waste Amendments of 1984
 - Federal Facility Compliance Act of 1992



Mixed Low-Level Waste Disposal

- ▶ Supports DOE Complex-wide cleanup
- ▶ LLRW and hazardous waste
- ▶ Managed separately from LLRW
- ▶ Governed by RCRA, which NV authorized to regulate
- ▶ Disposal Facility
 - “Old” mixed waste disposal cell (Cell 3)
 - Permitted by NDEP
 - Closed December 2010
 - New cell
 - Fully RCRA compliant
 - Opened Cell 18 January 2011



Low-Level Radioactive Waste Disposal

- ▶ Supports DOE Complex-wide cleanup
- ▶ Compliance with Orders and Directives
 - DOE 435.1
 - AIP
 - Stakeholder commitments (NSSAB requests)
- ▶ Disposal in several cells in Area 5



Mixed Low-Level and Low-Level Radioactive Waste Acceptance Program

- ▶ Radioactive Waste Acceptance Program & Approval Process by the WARP
 - Reviews generator programs and procedures
 - Reviews all specific waste stream profiles
 - Conducts site audits/waste generator evaluations
 - Waste verification
- ▶ At NNSS
 - Waste Acceptance Criteria
 - Inspections
 - Paperwork verification
 - Monitoring



Mixed Low-Level and Low-Level Radioactive Waste Acceptance Program

- ▶ NDEP “cradle-to-grave” oversight of evaluation & auditing & active participation & involvement (review & approval) in ALL program aspects and the process



Low-Level and Mixed Low-Level Radioactive Waste

- ▶ Performance Assessment on Area 5
 - Extensive complex modeling
 - Gauges potential risks
 - Conservative
 - Short- and long-term

- ▶ Environmental Monitoring
 - Air, groundwater and soil
 - Long term groundwater monitoring (UGTA)
 - No indication of any offsite migration

- ▶ Closure Program
 - Earthen ET cap research and development
 - Focus on erosion control



RCRA Part B Permits for Four Units at the NNSS:

- A Hazardous Waste Storage Unit
- An Explosive Ordnance Disposal Unit
- A Mixed Low-Level Waste Cell
- A Mixed Low-Level Storage Facility



RCRA Part D Permits for Solid Waste at the NNSS:

- One near Mercury
- One near CP Basin
- One at Area 9
 - These 3 are permitted for waste generated on-site only
- One Asbestos in Area 5
 - This one is permitted for waste generated on-site and LLW from off-site



Transportation

The NDEP does not regulate transportation to and from the NNSS.



State of Nevada

Department of Conservation & Natural Resources

Nevada Division of Environmental Protection NDEP.nv.gov

The Nevada Department of Transportation Statutes and Regulations would apply.



So, hopefully I have answered for you:

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