



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# **WIPP Update**

*New Mexico Legislative Finance Meeting  
June 4, 2018*

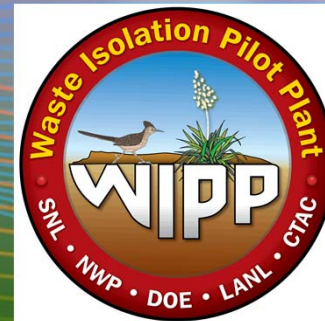
*Todd Shrader, Manager  
DOE Carlsbad Field Office*





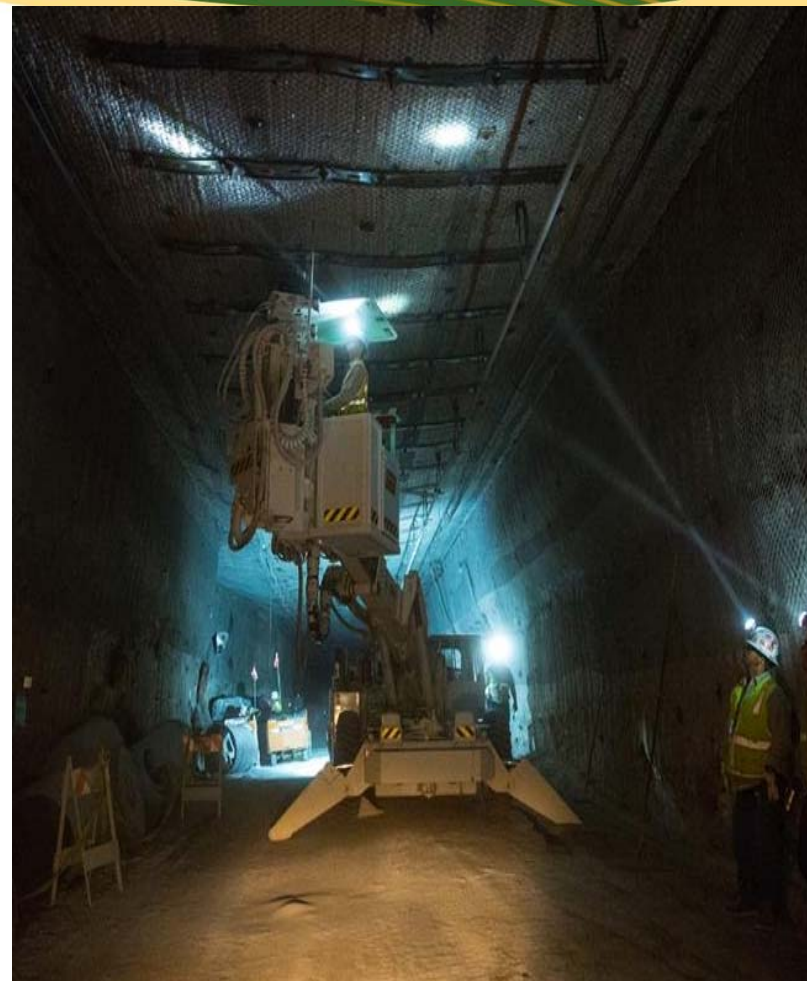
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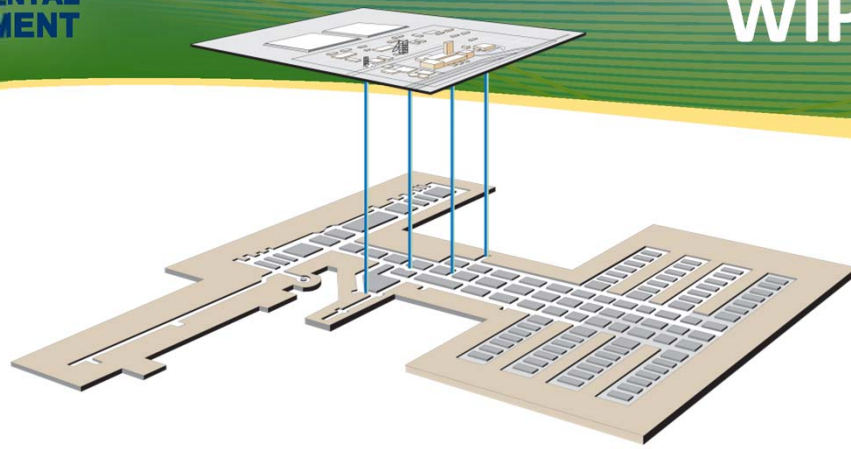
## DOE Owned Facility

- Annual Budget Approx. \$300 million
- Management and Operations  
Contractor: Nuclear Waste Partnership  
– AECOM
  - Los Alamos National Laboratory – Carlsbad
  - Sandia National Laboratory – Carlsbad
  - Portage- Northwind - Service Support Contractor
  - Cast - Transportation Contractor
  - 1100 employees





# WIPP Configuration



# Transuranic Waste Cycle



TRU waste was generated during the production of nuclear weapons at DOE facilities across the country

After 1970, transuranic waste was put into containers such as 55-gallon drums and stored in above-ground and shallow-burial facilities for eventual retrieval and disposal





# WIPP Routes



# Emplacement Considerations





# Factors Affecting Shipping

Shipping priorities are based on many factors, including:

- Need to mix waste streams from around the complex to avoid concentration of VOC generating waste in one location
- Need to mix waste types to manage curie limits for the Waste Handling Building during processing
- Need to receive packages that can be stacked in a manner that maximizes use of limited disposal area



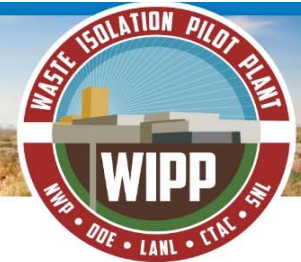




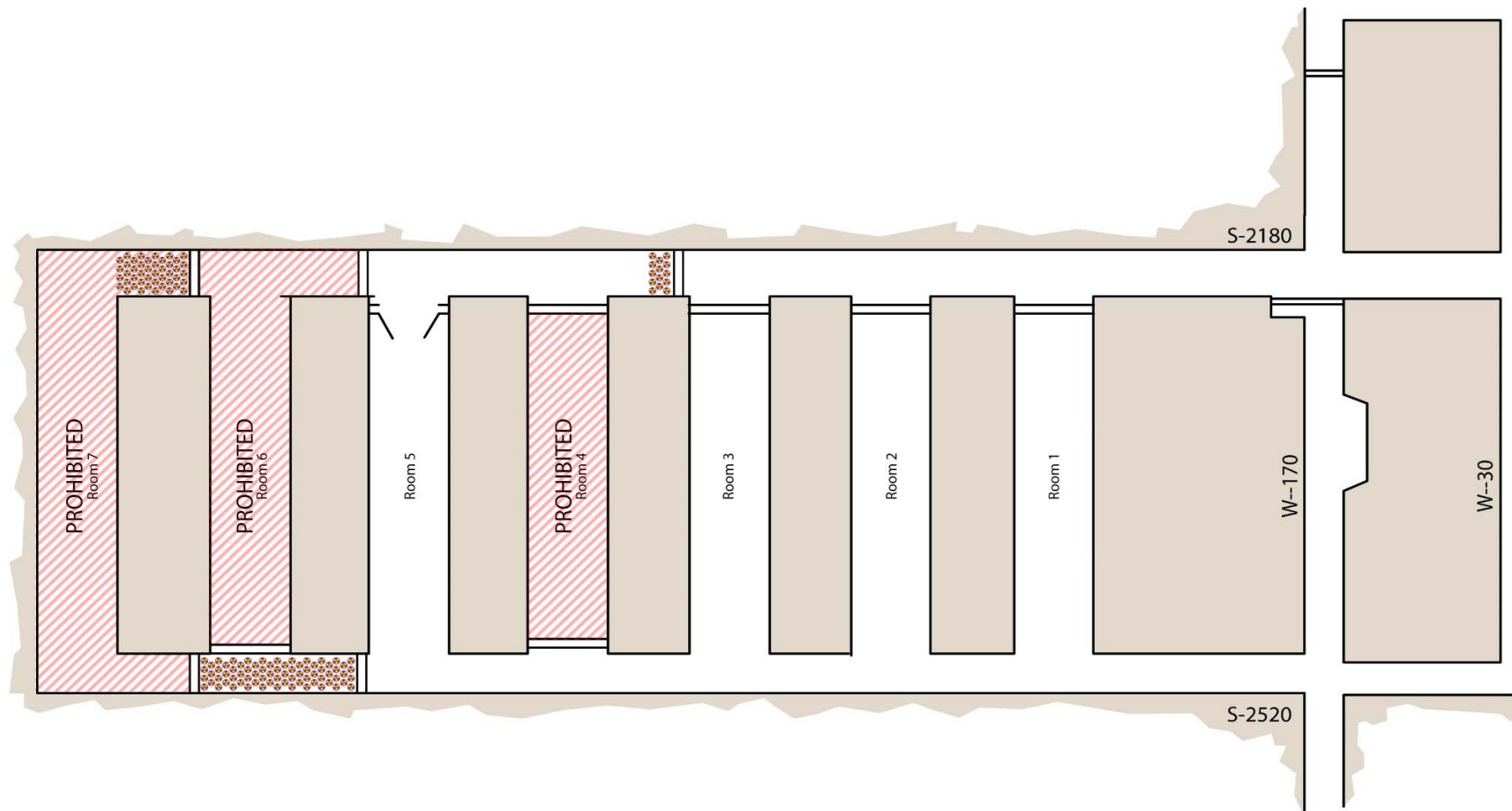
## Panel 7 Status

- Bulkhead were placed at both ends of Room 7 to isolate waste following events – remains closed
- Rock fall occurred in Room 4 on November 3, 2016 – fall was predicted and room was already prohibited
- Room 6 is prohibited due to ground control – also contains abandoned equipment
  - Room 6 Rock Fall predicted to occur in a few weeks
- Rooms 1, 2, 3 and 5 are safe and usable for waste emplacement
- Currently available disposal capacity in Panel 7 should last approximately 3-4 years, depending on shipping rates





# PANEL 7





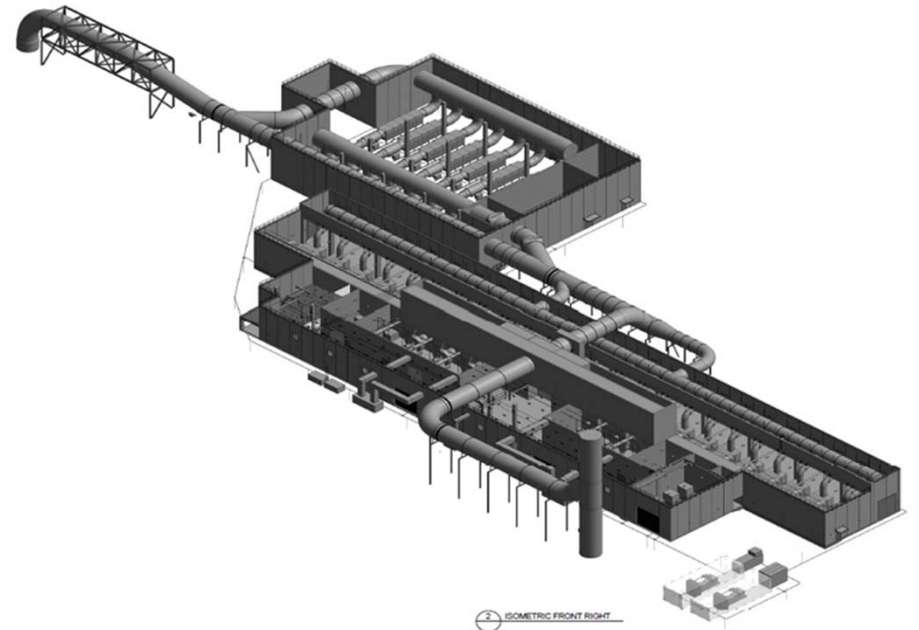
## Mining of Panel 8

- Needs to be complete before Panel 7 is full
- Emplacement will be in clean space
- Estimated Completion 2021



## New Permanent Ventilation System

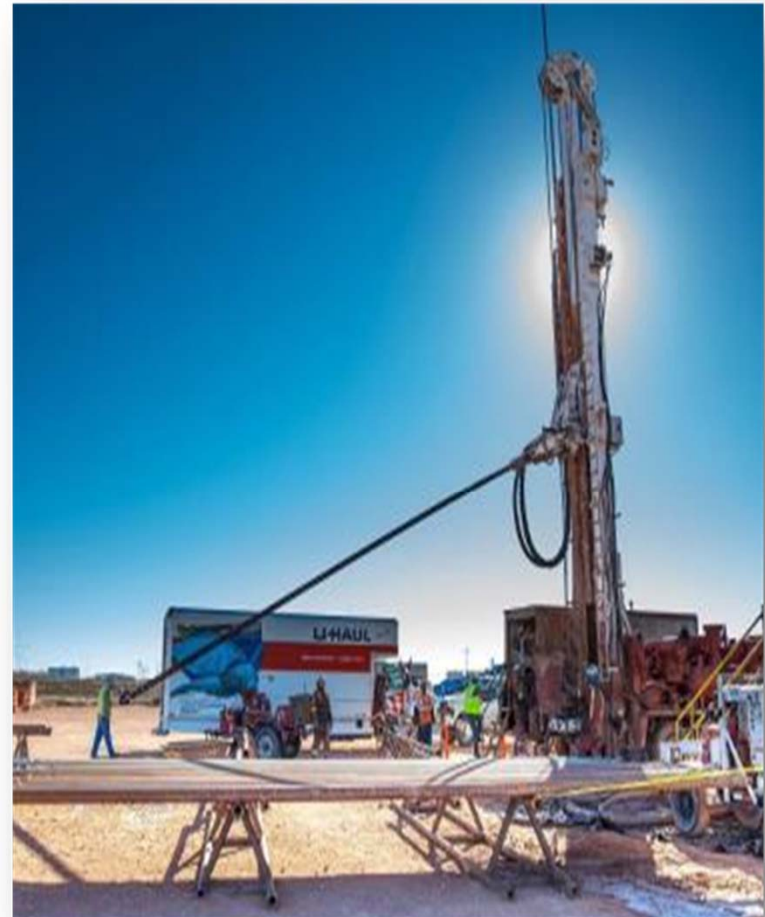
- New safety significant confinement system connected to the existing exhaust shaft through a salt reduction facility and then to a new Filter Building with HEPA filters and exhaust fans
  - 100% Design Complete
  - CD 2/3 is expected in March 2018
  - CD 4 March 2021



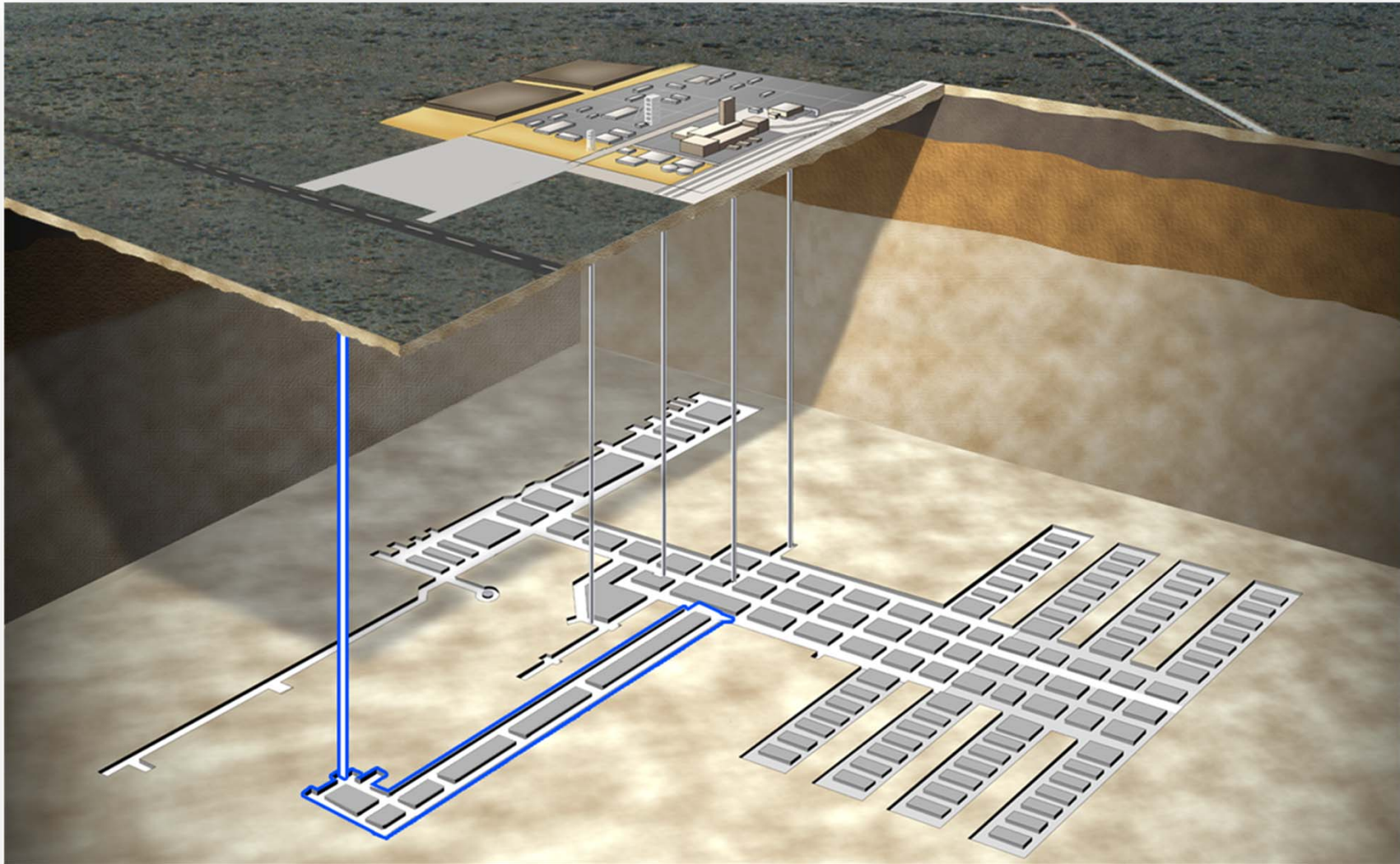


## Permanent Ventilation System

- Geotechnical core drilling to 2,300 ft. complete
- 90% Design Complete
- Using top-down drilling method
- Critical Decision 2/3 expected Spring 2018
- CD 4 forecast Spring 2021



# Future Expansion



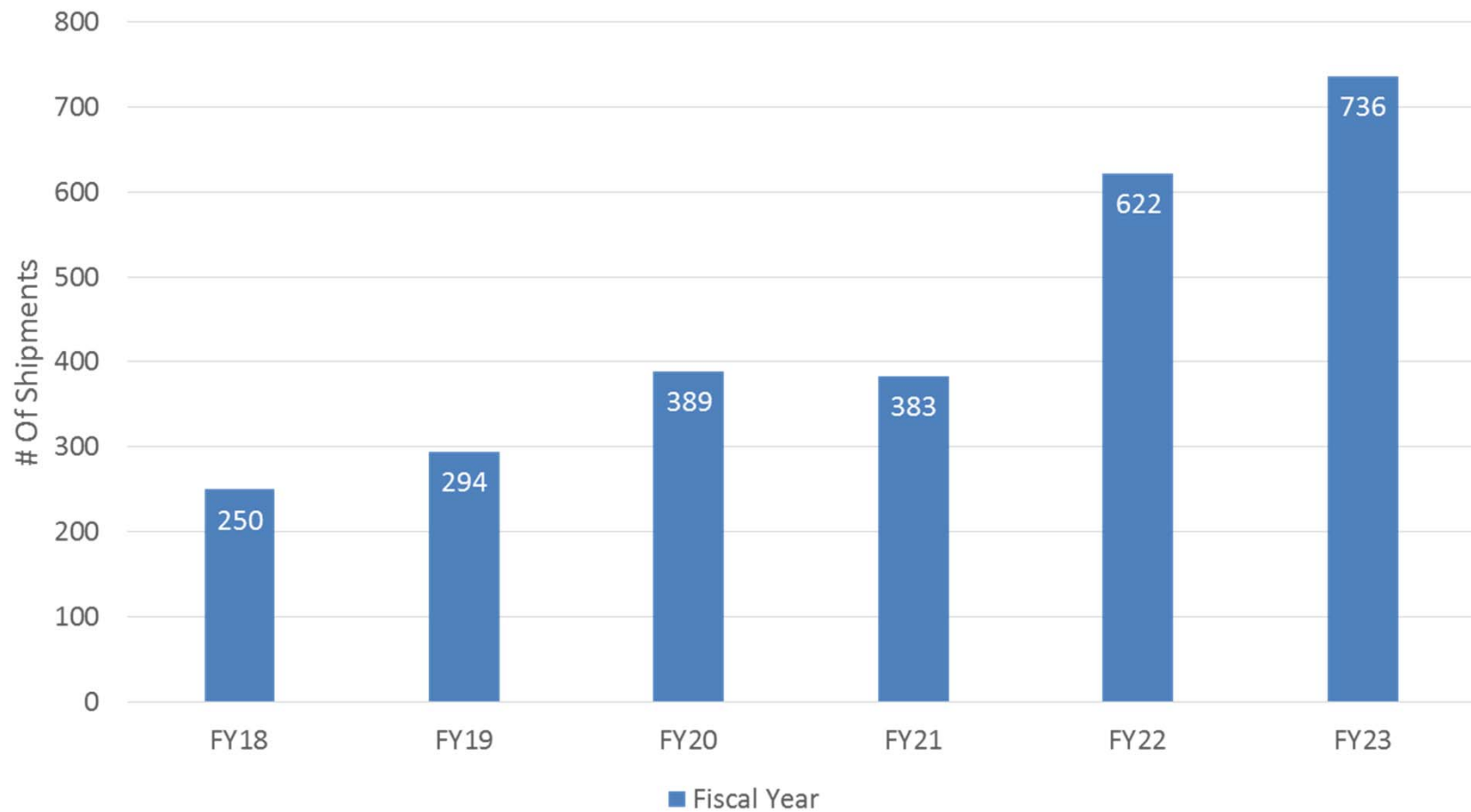


- Shipments through 11/13/17
  - Idaho Site – 70
  - Savannah River Site – 9
  - Waste Control Specialists – 15
  - Oak Ridge National Laboratory - 13
  - Los Alamos National Laboratory -1
  - EM – LANL - Future
- Additional Sites in the out-years:
  - Lawrence Livermore National Laboratory
  - Sandia National Laboratory
  - Argonne National Laboratory



# Out-Year Projected Shipments

SHIPMENT PLANNING ASSUMPTION  
(FY18 – FY23)





# Questions

