WIPP Update
National TRU Program Improvements

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• **Key Concepts**
  - Governing Documents
  - Data Collection
  - Verification
  - Tracking/Auditing

• **Program Enhancements**
  - Why will future event be prevented?

• **Roles and Responsibilities**

• **Walk through Roadmap**

• **Way forward**
  - Program Updates
  - Document Updates
  - Certification
• HWFP – Hazardous Waste Facility Permit
  • Lists RCRA requirements

• DSA – Documented Safety Analysis
  • Nuclear Safety related requirements (Chapter 18)
  • Adds 4 Key Elements for NTP

• TRAMPAC – Transportation/Payload Control
  • Compiles all NRC/DOT transportation requirements

• WIPP WAC – Waste Acceptance Criteria
  • Compiles all above requirements
• eAK – Enhanced Acceptable Knowledge
  • Compiles all data associated with waste stream
• CCE – Chemical Compatibility Evaluation
  • Compares all chemicals and materials in waste
    • Better identifies incompatibilities
    • Uses specific EPA Method
• BoK – Basis of Knowledge
  • Guide for waste Sites
  • More thorough review – Based on actual testing
  • Provides guidance for resolving potentially ignitable waste that was previously remediated
• AKA – Acceptable Knowledge Assessment
  • All eAK, CCE information for previously certified containers
• Characterization to confirm AK
  • NDE – Non-destructive Examination
    • Verifies no unauthorized items in waste using non-invasive, visual techniques.
    • RTR (Real Time Radiography)
    • VE (Visual Examination)
  • NDA – Non-destructive Assay
    • Verifies container meets the WAC radiological parameters
  • FGA – Flammable Gas Analysis
    • Verifies headspace gas meets NRC limits
• **IWMDL – Interface Waste Management Document List**
  - Lists all Generator Site documents that must receive specific approval by CP and CBFO for **ANY** change.

• **WSPF – Waste Stream Profile Form**
  - Summary of key waste data by waste stream to meet Permit

• **WDS – Waste Data System**
  - Tracks WAC important data – record of waste from characterization to disposal
  - Automated WAC verification
  - Provides vehicle to place HOLDS on waste

• **GSTR – Generator Site Technical Review (CBFO/NWP)**
  - Independent program review of sites’ waste processing

• **Recertification Audit**
  - Primary audit on Characterization Program
## Program Enhancements

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| Repackaging and Treatment | • Review of site operations by CP and DOE  
• Site informed CP of changes                                      | • All sites must be recertified – Ensures all new requirements in place prior to resumption of waste remediation and shipping to WIPP  
• IWMDL – Prevents creating a procedure that allows mixture of incompatible components  
  • Clear list of procedures  
  • Every technical change reviewed and approved – Prevents future change that adds an incompatibility  
  • No processing until procedure approved – Prevents use of incorrect procedures |
| Training and Qualification | • Resumé based  
• No formal qualification program in place                            | • New qualification program and cards – Ensures NTP oversight personnel are specifically certified to know ALL requirements and expectations |
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| AK process            | • Compiled documents                                                 | • Enhanced AK – **Significantly increased rigor/detail**  
|                       | • Incompatible components reported to site                           | • Reverification of previously certified waste – **Ensures this waste meets new requirements prior to shipment to WIPP**                      |
|                       | • High reliance on no liquids                                         | • Includes commercial product names – **Ensures personnel do not miss some incompatible compounds**                                      |
|                       | • WSPF only approved by CP                                            | • Review of National Lab experts – **Higher pedigree of review**                                                                     |
|                       |                                                                      | • CCE                                                                                                                                                                                              |
|                       |                                                                      |   • Uses specific EPA method – **More rigor. Adds more objectivity when looking for incompatibilities**                                 |
|                       |                                                                      |   • Uses IWMDL and checks revision delta for every waste/packaging procedure – **Ensures ALL waste was not prepared incorrectly**      |
|                       |                                                                      |   • Checks compatibility of ALL constituents – **More comprehensive**                                                                                                                             |
|                       |                                                                      | • BoK – **Prevents receipt of ignitable waste**                                                                                                                                                    |
|                       |                                                                      |   • Extra review on chemical– **Stops primary cause**                                                                                                                                             |
|                       |                                                                      |   • Provides resolution for remediation                                                                                                                                                           |
|                       |                                                                      | • WSPF reviewed/approved by CBFO (DSA) – **Higher pedigree**                                                                                                                                      |
## Program Enhancements

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<td>Management and Oversight</td>
<td>• Review of CP documents and procedures</td>
<td>• NTP Oversight Office at HQ – Provides more program rigor</td>
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<td>• Site visits with oversight personnel</td>
<td>• CBFO restructured – Separates program and oversight responsibilities</td>
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<td>• GSTR</td>
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<td>• DSA Key Element – higher pedigree to ensure this control remains in place and robust</td>
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<td>• Focus on Operations – Physically observes CONOPS to ensure Site is following procedures correctly</td>
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<td>• Separate from QA recertification – Independent review with independent group of assessors</td>
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<td>• No shipments until complete – Prevents shipment until each site program has been verified to meet new requirements</td>
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**Roles and Responsibilities**

**DOE EM**

- Receives Waste
  - Verifies waste meets WAC
  - Reviews WSPFs
  - Approves data in WDS
  - Approves shipment
  - Emplaces Waste

**CBFO/NTP**

- **Verifies Waste**
  - Certified by CBFO
  - Ensures Sites have properly prepared the waste
  - Reviews documentation
  - Characterization
  - Prepares WSPF
  - Data input into WDS

- **Prepares Waste**
  - Packages and treats
  - Must follow WAC
  - Provides new information and critical to CP

**NWP**

- **Prepares Waste**
  - Packages and treats
  - Must follow WAC
  - Provides new information and critical to CP

- **Verifies Waste**
  - Certified by CBFO
  - Ensures Sites have properly prepared the waste
  - Reviews documentation
  - Characterization
  - Prepares WSPF
  - Data input into WDS

**GENERATOR SITE**

- **Prepares Waste**
  - Packages and treats
  - Must follow WAC
  - Provides new information and critical to CP
Way Forward – Update Program

- Program Self Assessment
- New CBFO Organization approved
- Enhanced Implementation Plan
- BoK incorporated
- New NTP Qualification Program
• New WAC - Done
• New NTP Description Document
• In-Process review team in place - Done
• Update Procedures at CP and Sites
• Developing shipping plan
• NTP personnel complete qualification
• Complete NTP Independent Implementation Review (equivalent to DOE O 425.1D)
• Recertification Audit at each site
• Complete GSTR at each site