



U.S. DEPARTMENT OF
ENERGY




OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

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

New

- CCE – Chemical Compatibility Evaluation

- Compares all chemicals and materials in waste
 - Better identifies incompatibilities
 - Uses specific EPA Method

New

- 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

New

- 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

New

- IWMDL – Interface Waste Management Document List
 - Lists all Generator Site documents that must receive specific approval by CP and CBFO for ANY change.

Update

- 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

New

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

Update

- Recertification Audit
 - Primary audit on Characterization Program

Program Enhancements

Issue	Then	Now
<p>Repackaging and Treatment</p>	<ul style="list-style-type: none"> • Review of site operations by CP and DOE • Site informed CP of changes 	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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
<p>Training and Qualification</p>	<ul style="list-style-type: none"> • Resumé based • No formal qualification program in place 	<ul style="list-style-type: none"> • New qualification program and cards – Ensures NTP oversight personnel are specifically certified to know ALL requirements and expectations

Program Enhancements

Issue	Then	Now
AK process	<ul style="list-style-type: none"> • Compiled documents • Incompatible components reported to site • High reliance on no liquids • WSPF only approved by CP 	<ul style="list-style-type: none"> • Enhanced AK – Significantly increased rigor/detail <ul style="list-style-type: none"> • Reverification of previously certified waste – Ensures this waste meets new requirements prior to shipment to WIPP • Includes commercial product names – Ensures personnel do not miss some incompatible compounds • Review of National Lab experts – Higher pedigree of review • CCE <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Extra review on chemical– Stops primary cause • Provides resolution for remediation • WSPF reviewed/approved by CBFO (DSA) – Higher pedigree

Program Enhancements

Issue	Then	Now
Management and Oversight	<ul style="list-style-type: none"> • Review of CP documents and procedures • Site visits with oversight personnel 	<ul style="list-style-type: none"> • NTP Oversight Office at HQ – Provides more program rigor • CBFO restructured – Separates program and oversight responsibilities • GSTR <ul style="list-style-type: none"> • DSA Key Element – higher pedigree to ensure this control remains in place and robust • Focus on Operations – Physically observes CONOPS to ensure Site is following procedures correctly • Separate from QA recertification – Independent review with independent group of assessors • No shipments until complete – Prevents shipment until each site program has been verified to meet new requirements

Roles and Responsibilities

DOE EM

CBFO/NTP

GENERATOR SITE

Prepares Waste

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

CERTIFIED PROGRAMS (CP)

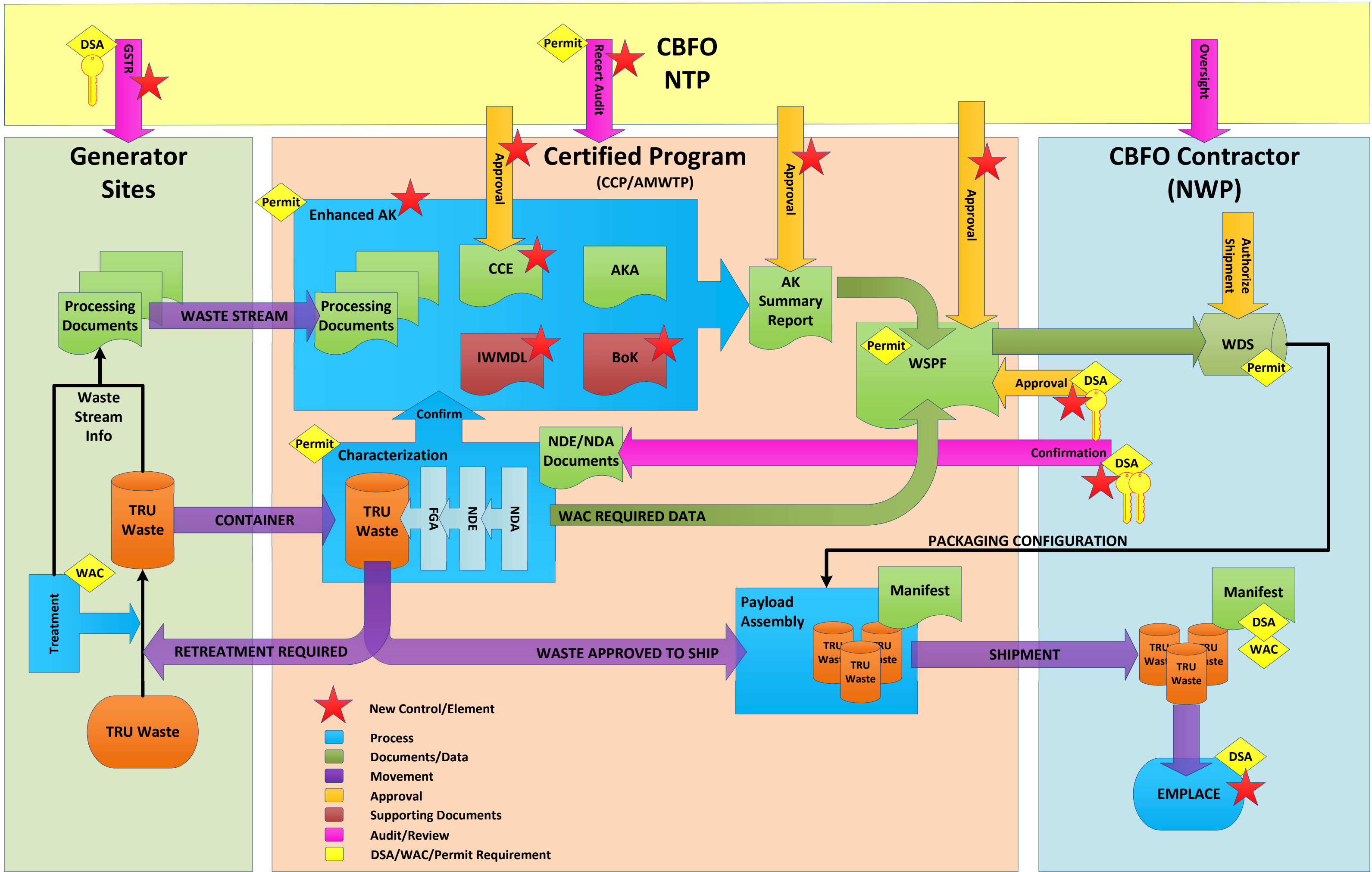
Verifies Waste

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



NWP

Receives Waste



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



Way Forward – Update Program

- Program Self Assessment 
- New CBFO Organization approved 
- Enhanced Implementation Plan
- BoK incorporated
- New NTP Qualification Program

Way Forward – Update Documents

- New WAC 
- New NTP Description Document
- In-Process review team in place 
- Update Procedures at CP and Sites
- Developing shipping plan

Way Forward - Certification

- 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