



Annual Meeting
August 24, 2019



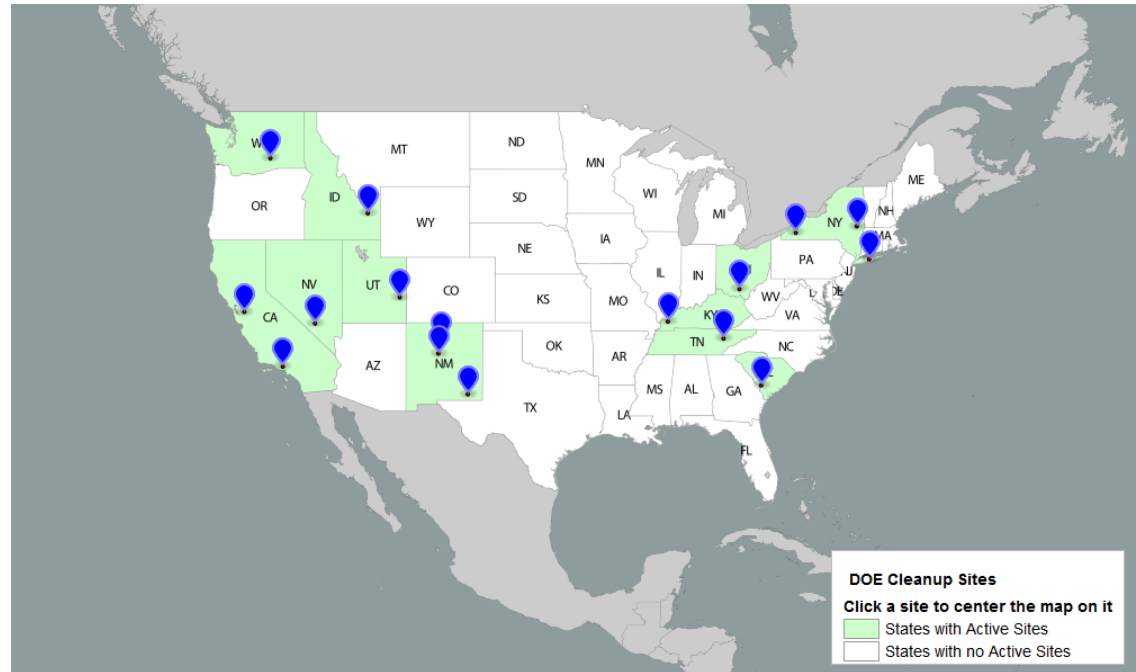
Oak Ridge Site Specific Advisory Board Annual Meeting

David Adler, Deputy Designated Federal Officer
Oak Ridge Office of Environmental Management

August 24, 2019

The Office of Environmental Management (EM) is removing legacies at sites across the country

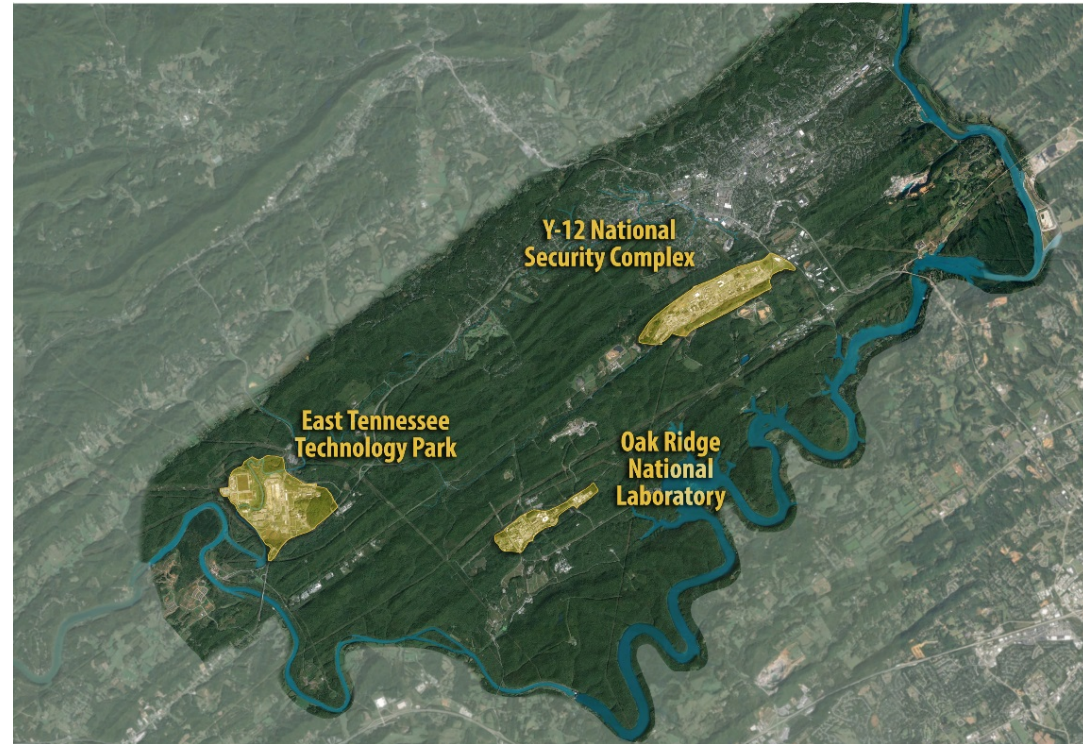
- As the largest cleanup program in the world, EM is responsible for addressing nuclear sites used to support the Manhattan Project and Cold War efforts
- The Oak Ridge Reservation is one of 16 sites in 11 states remaining to be remediated in the Department of Energy (DOE) complex



Our work is removing risks and enabling other critical missions in Oak Ridge

Our mission is to complete cleanup of the Oak Ridge Reservation to:

- Protect the region's health and environment
- Ensure DOE's ongoing vital missions
- Transfer land, buildings, and infrastructure



*Our vision is a remediated and modernized
Oak Ridge Reservation*

Our success is due in part to our partnering approach

- Maintain an environment of openness to build trust
- Communicate vision and goals to ensure clarity and facilitate consensus building
- Stress safe work practices to protect workers and the public
- Celebrate accomplishments with all parties



Oak Ridge Site Specific Advisory Board

Our cleanup approach has resulted in numerous accomplishments



2002: EMWMF Operations Begin



2003: Begin Operation of TWPC



2006: Building K-29 at ETPP Demolished



2006: All 7,000 UF6 Cylinders Removed From ETPP



2006: Melton Valley Cleanup Completed



2009: TSCA Incinerator Closed



2009: Initiated Recovery Act Work at Y-12 and ORNL



2010: Building K-25 West Wing Demolished



2011: Removal of Tank W1A at ORNL



2011: Building K-33 at ETPP Demolished



2012: Y-12 Mercury Tanks Prepared for Shipment



2014: Demolition of K-25 Completed



2015: Demolition of K-31 Completed



2016: Demolition of K-27 Completed



2017: TRU Shipments resume to WIPP



2017: Initiated Construction of Outfall 200



2018: Demolition of TSCA Incinerator Completed



2019: Demolition of K-1037 Completed



2019: Demolition of K-1414 Completed



2019: Completed Installation of GAC Columns at Building 3608

We have established near-term visions that provide a path forward





Vision 2020: Complete core cleanup at East Tennessee Technology Park (ETTP)


K-31/K-33 Cleanup Complete


We are making great strides toward achieving Vision 2020



 = Demolished

 = Deactivation under way

 = Demolition under way

 = To be demolished

Remaining focused on our near-term priorities is crucial to maintain momentum

- Complete planning and designs for the Environmental Management Disposal Facility—essential infrastructure to complete cleanup at Oak Ridge National Laboratory (ORNL) and Y-12 National Security Complex (Y-12)
- Reduce risks, stabilize buildings, maintain critical infrastructure, and demolish high-risk facilities as part of the Excess Contaminated Facilities Initiative
- Evaluate ongoing groundwater studies
- Complete cleanup at ETTP
- Complete construction of the Mercury Treatment Facility (MTF) by December 2022
- Begin U-233 processing campaign to eliminate the remaining inventory from ORNL
- Complete contact- and remote-handled transuranic debris processing



Current Onsite Disposal Facility



Excess Facility at Y-12

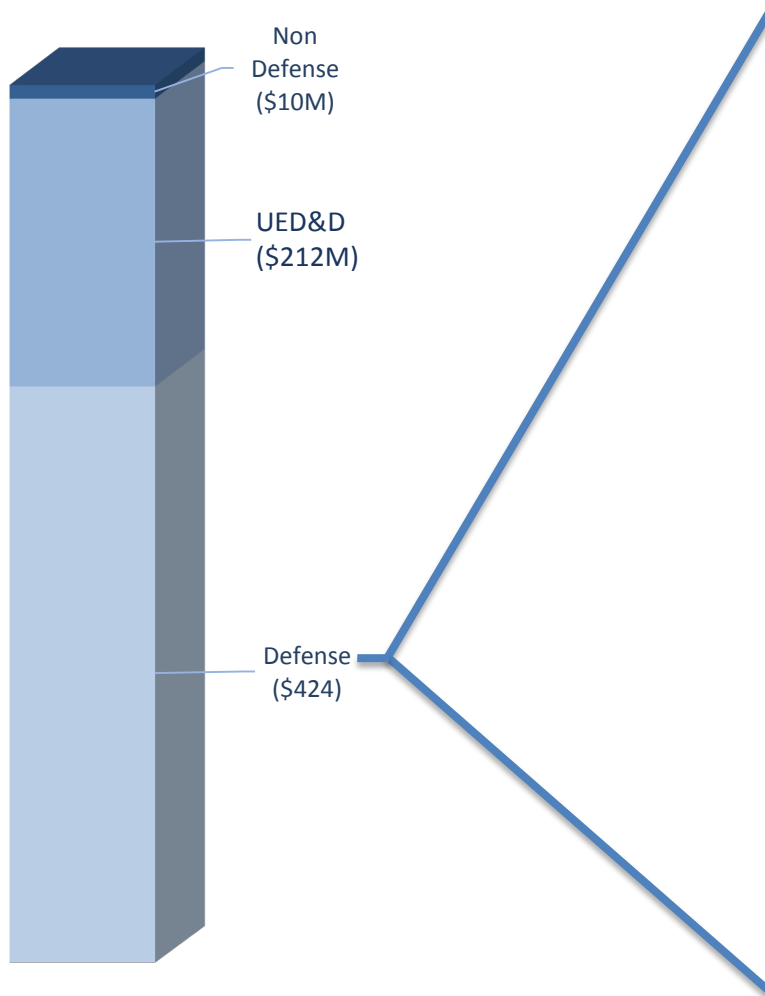


Site prep at MTF

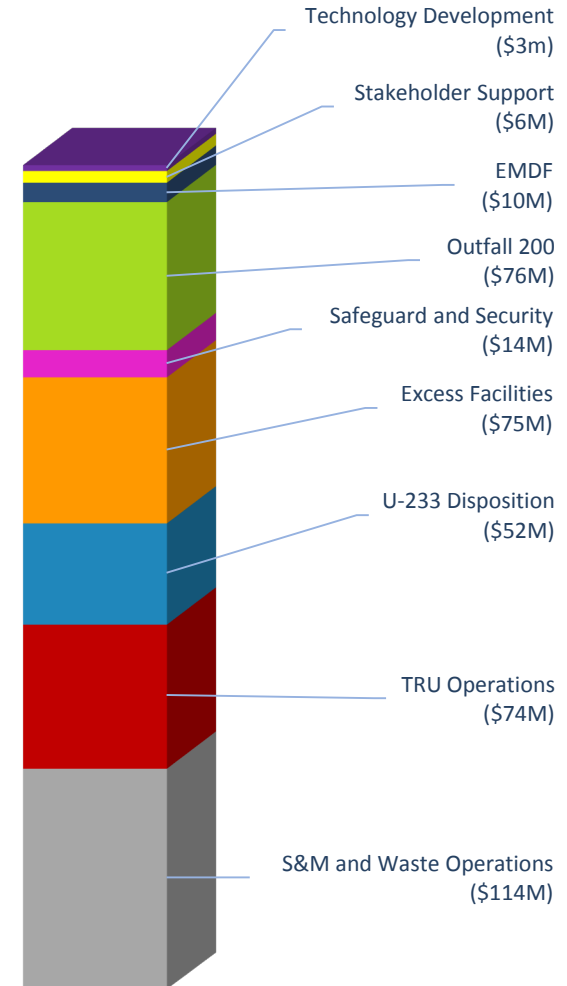
Oak Ridge's FY 2019 EM Budget



OREM Total FY 2019 Budget \$646 Million



FY 2019 Defense Funding Breakout \$424 Million



Our mission is benefitting and transforming Oak Ridge



- Complete cleanup of **East Tennessee Technology Park**
- Cleanup at **Y-12 National Security Complex** and the **Oak Ridge National Laboratory** is eliminating risks, supporting modernization, and enabling these sites to remain at the forefront of their respective fields



New Hope Center at Y-12



Oak Ridge National Laboratory



Heritage Center Industrial Park at ETTP

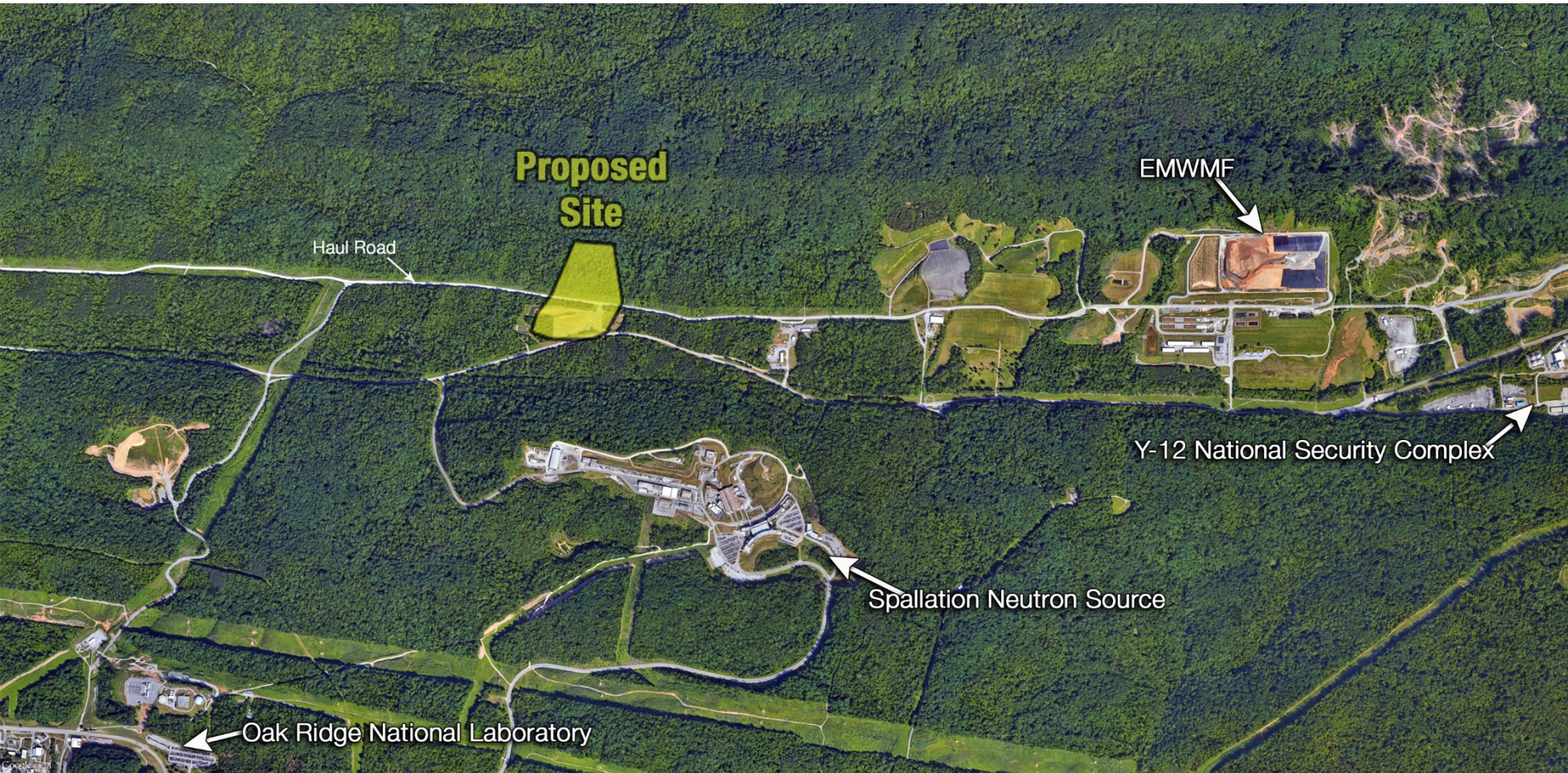


Fiscal Year 2020 Topics for the Oak Ridge Site Specific Advisory Board

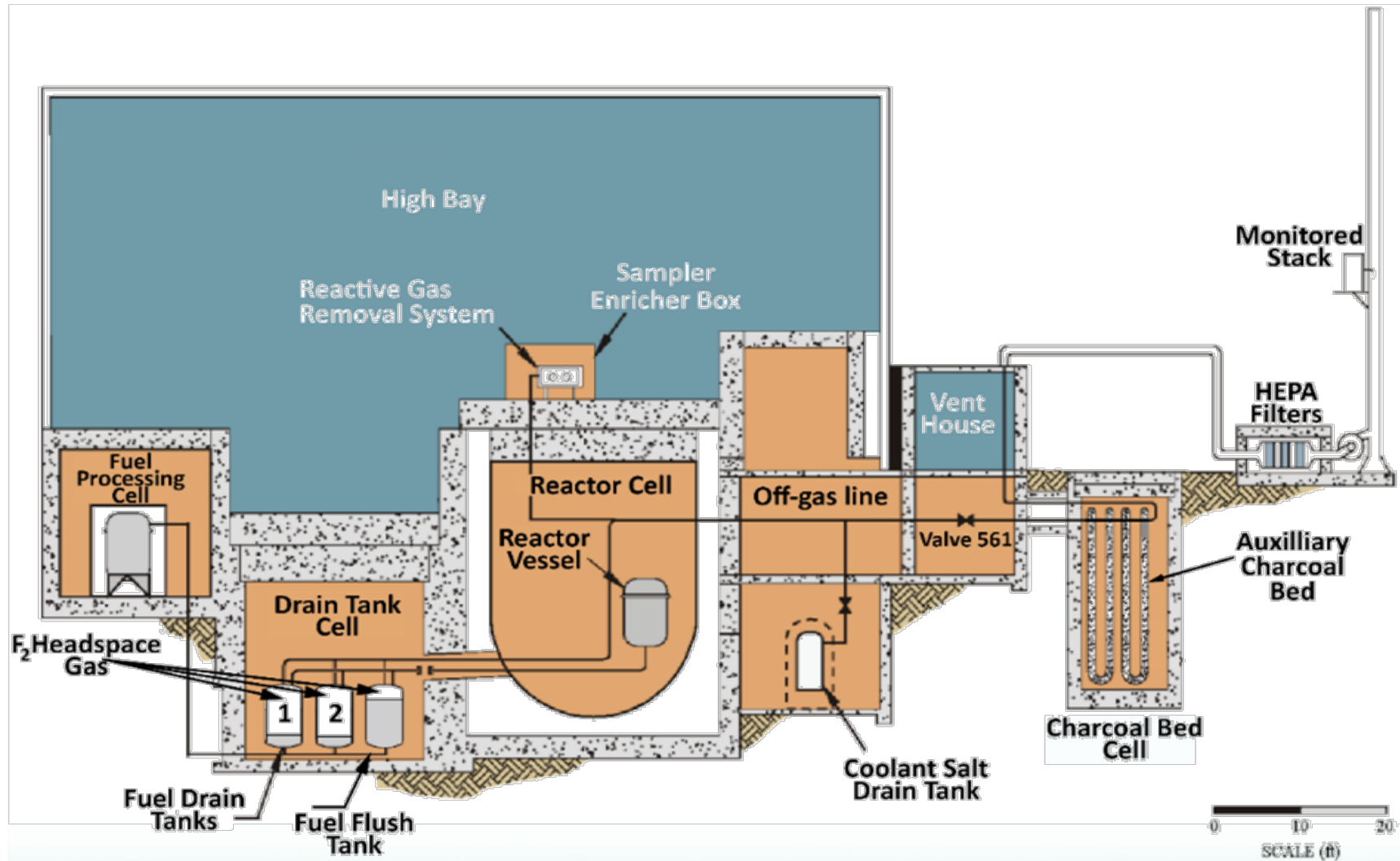
David Adler, Deputy Designated Federal Official
Oak Ridge Office of Environmental Management

August 24, 2019

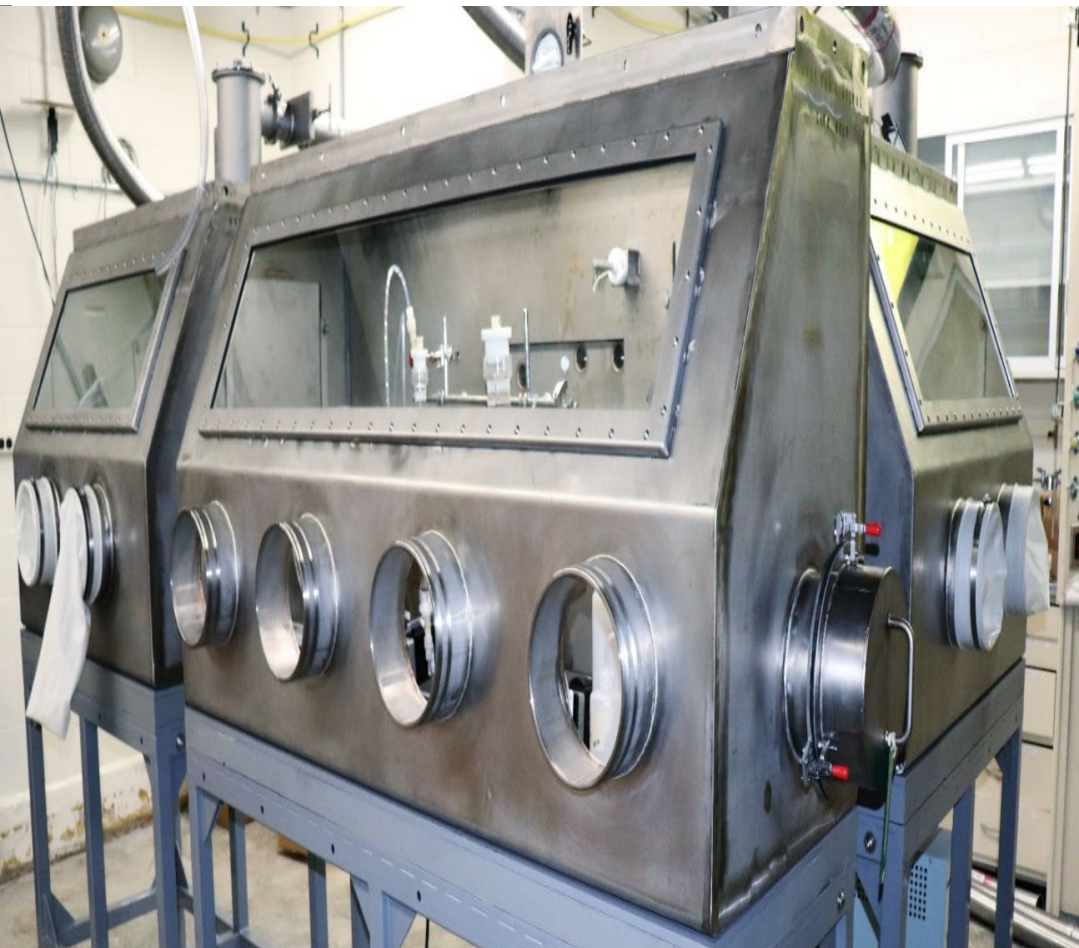
Participation in Ongoing Efforts to Assure Sufficient Waste Disposal Capacity



Molten Salt Reactor Experiment Feasibility Study Update



Processing of Uranium-233 Material

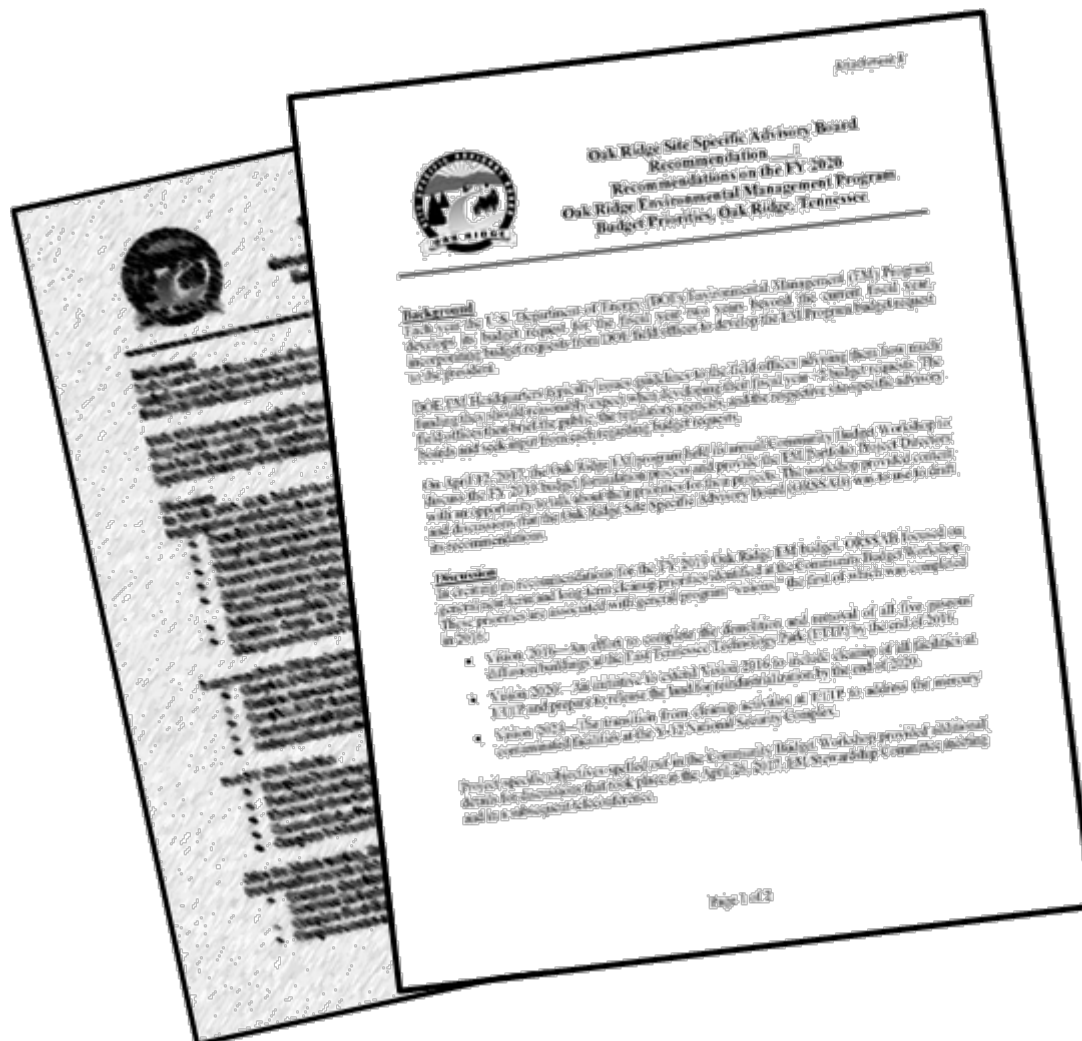


East Tennessee Technology Park Main Plant Groundwater Remedy Selections



Input on Reuse and Historic Preservation Activities at the East Tennessee Technology Park







Annual Meeting
August 24, 2019



Department of
**Environment &
Conservation**

Oak Ridge Site Specific Advisory Board

Fiscal Year 2020 Topics

Kristof Czartoryski, Environmental Consultant

Division of Remediation, Oak Ridge office

August 24, 2019

Fiscal Year 2020 Topics

TDEC Division of Remediation, Oak Ridge office recommends the following program areas:

- A. Future disposal for the Environmental Management generated waste**
- B. Remediation of Contaminant Sources within Bear Creek Valley (BCV)**
- C. Mercury Remediation**
- D. Assessment of Groundwater and Remedy Selection**
- E. Processing and disposition of Transuranic (TRU) waste**



A. Future disposal for the Environmental
Management generated waste

A. Future disposal for the Environmental Management generated waste

- **TDEC supports onsite disposal that is protective of human health and the environment. TDEC seeks to ensure that the Environmental Management Disposal Facility landfill (EMDF landfill), if approved, is constructed in a manner that prevents waste disposed from being released into the surrounding environment, particularly groundwater**
- **As required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), DOE must demonstrate that the proposed EMDF landfill will meet the threshold criteria of protecting human health and the environment and complying with Applicable or Relevant and Appropriate Requirements (ARARs) or justifying site-specific federal or state waivers**

A. Future disposal for the Environmental Management generated waste

EMDF Path Forward: Record of Decision (ROD)

- 02/06/2019 DOE tells EPA & TDEC forthcoming D1 ROD will not resolve public comments or State concerns
- 08/30/19 Draft D1 ROD submittal to TDEC & EPA
- 10/2019 TDEC & EPA comments due
 - Will follow ROD delivery by 60 days
- Winter 2019 Final D2 ROD submittal to TDEC & EPA – TBD
 - DOE says some concerns may be resolved before D2; most/all concerns will be resolved in this final ROD or after—not before
 - Due to information received after the Proposed Plan was issued, TDEC believes that additional public comment may be necessary.
 - DOE says there will be no additional opportunity for public input before the ROD codifies a decision

A. Future disposal for the Environmental Management generated waste

State of Tennessee's Key Concerns

Preferred Alternative: Onsite Disposal at CBCV Site

1. Site Characterization
2. ARAR Identification (and Waivers/Exemptions)
3. Waste Acceptance Criteria
4. DOE Assessments: PA/CA → LFRG → PDAS
5. Mercury Disposal
6. Use of Underdrains
7. Discharge Limits for Landfill Wastewater

A. State Position & Key Concerns

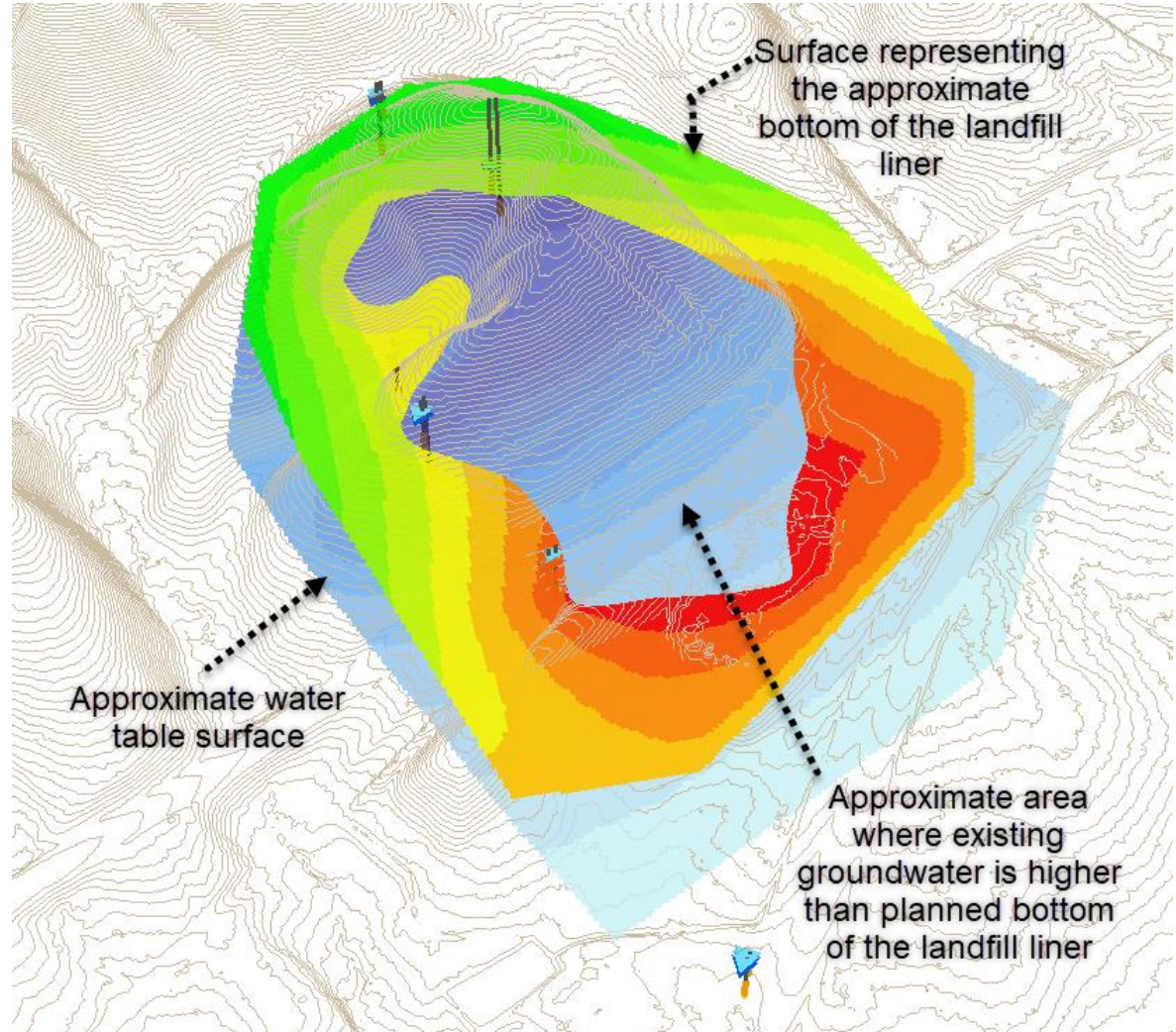
A.1. Site Characterization

- **March-April 2018:**
DOE collected wet-season data at CBCV Site 7c
 - Preliminary data: indicated need to revise conceptual design
- **Additional data included in Tech Memo 2 (TM-2)**
 - Indicated the need to elevate the base of the landfill to allow for separation from the historical high water table
- **OREM will place TM-2 in the CERCLA Administrative Record**
 - <https://doeic.science.energy.gov/uploads/F.0615.029.0158.pdf>
- **If site information changes TDEC's understanding of the site's suitability:**
 - The new information would be documented in the ROD
 - Additional public comment may be necessary
 - TDEC has concerns about groundwater levels that are not mitigated by modeling

A. State Position & Key Concerns

A.1. Site Characterization

This graphic based on TM-1 data. TM-2 data reveals higher water levels.

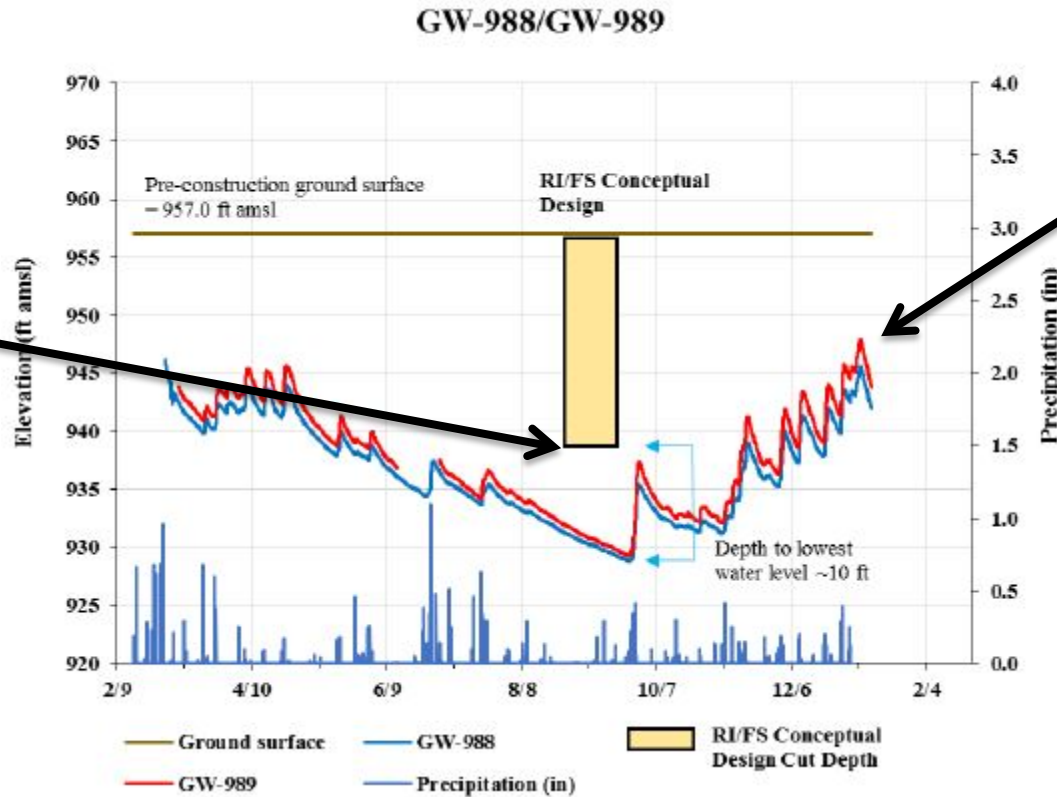


Source: Prepared by TDEC-DoR (Beth Rowan) based on data from Technical Memorandum #1, Environmental Management Disposal Facility Phase 1 Field Sampling Results, Oak Ridge, Tennessee (DOE/OR/01-2785) and conceptual cross-sections in Figure 6-29 from *Remedial Investigation/Feasibility Study for Comprehensive Environmental Response, Compensation, and Liability Act Oak Ridge Reservation Waste Disposal, Oak Ridge, Tennessee* (DOE/OR/01-2535&DS)

A. State Position & Key Concerns

A.1. Site Characterization: Groundwater Levels

Bottom of waste cell after cutting into the hill (elevation ~939 ft amsl)



High water level measured in limited data set 2018-2019 (elevation ~948 ft amsl)

Well 988: 3/2/18 - 1/10/19

Well 989: 3/8/18 - 1/10/19

A. State Position & Key Concerns

A.2. Anticipated Waiver/Exemption Requests

- The hydrogeologic unit used for disposal **shall not discharge ground water** to the surface within the disposal site. [TDEC 0400-20-11-.17(1)(h)]
- The bottom of the landfill shall be above the historical high groundwater.... There shall be **no hydraulic connection** between the site and standing or flowing surface water.... The bottom of the landfill liner system or natural in-place soil barrier shall be **at least fifty feet from the historical high water table**. [TSCA 40 CFR 761.75(b)(3)]
- The landfill site shall be located in an area of **low to moderate relief** to minimize erosion and to help prevent landslides or slumping. [TSCA 40 CFR 761.75(b)(5)]

A. State Position & Key Concerns

A.3. Waste Acceptance Criteria

- Protect human health by limiting waste disposed on site
 - Analytic WAC for long-half-life radionuclides
 - *Toxic* effects of uranium
 - Mercury limits to meet water quality requirements
- The State will consider site data, assumptions, and exposure scenarios in evaluating whether WAC meet CERCLA requirements, remedial action objectives, and performance objectives in TN radiological health rule 0400-20-11-.16
 - Independent verification of modeling for DOE Order 435.1
- The FFA parties agreed¹ not to sign a ROD before DOE approves a PDAS² through its internal LFRG³ review process

¹ Dispute Resolution Agreement (December 7, 2017)

² PDAS is a preliminary Disposal Authorization Statement

³ LFRG is DOE's Low-Level Waste Disposal Facility Federal Review Group

A. State Position & Key Concerns

A.4. DOE Assessments: PA/CA → LFRG → PDAS

- DOE documents should be in the Administrative Record because the State will rely on them when evaluating the protectiveness of the preferred alternative during remedy selection under CERCLA.
 - Performance Assessment (PA)
 - Composite Analysis (CA)
 - Preliminary Disposal Authorization Statement (PDAS)
 - Update: LFRG identified 17 primary issues with the submitted PA and CA. These must be resolved before a PDAS can be issued.
- Independent verification of modeling for DOE Order 435.1

A. State Position & Key Concerns

A.5. Mercury Disposal

- The State is concerned that disposal of Y-12 demolition waste could:
 - Increase risks for people who eat fish caught downstream.
 - Further degrade Bear Creek, East Fork Poplar Creek, Poplar Creek, Clinch River
- The State expects mercury disposal to be limited or managed to comply with the Tennessee Water Quality Control Act (TWQCA)

A. State Position & Key Concerns

A.6. Use of Underdrains

- Tennessee operational practice does not allow drainage features to permanently suppress the water table to mitigate springs or streams at proposed landfill sites.
 - This is consistent with Tennessee rules.
- Selecting a disposal alternative that requires an underdrain would require:
 - Exemptions or waivers from requirements
 - Convincing demonstration that use of underdrain(s) would protect human health and the environment.
- **Update: DOE plans no longer include the use of underdrains or drainage features to suppress the water table.**
 - **If the State agrees to move forward with a Record of Decision, language preventing groundwater suppression as a corrective action will need to be added to ensure no manufactured direct and preferential pathways for contaminant release are built into the landfill site through the use of drains.**

A. State Position & Key Concerns

A. 7. Discharge Limits for Landfill Wastewater

- Discharge limits should be:
 - Consistent with CERCLA
 - Established in the ROD
 - Based on best available technology
- A future onsite landfill should:
 - Protect downstream surface water users who eat fish
 - Comply with TWQCA & associated regulations
- FFS for landfill wastewater management:
 - Three parties currently in formal dispute over CWA as an ARAR for radioactive contaminants and the use of Technology Based Effluent Limits (TBELS)
 - **Update: Currently with the EPA Administrator for final decision**



**B Remediation of Contaminant Sources within
Bear Creek Valley (BCV)**

B. Remediation of Contaminant Sources within Bear Creek Valley (BCV)

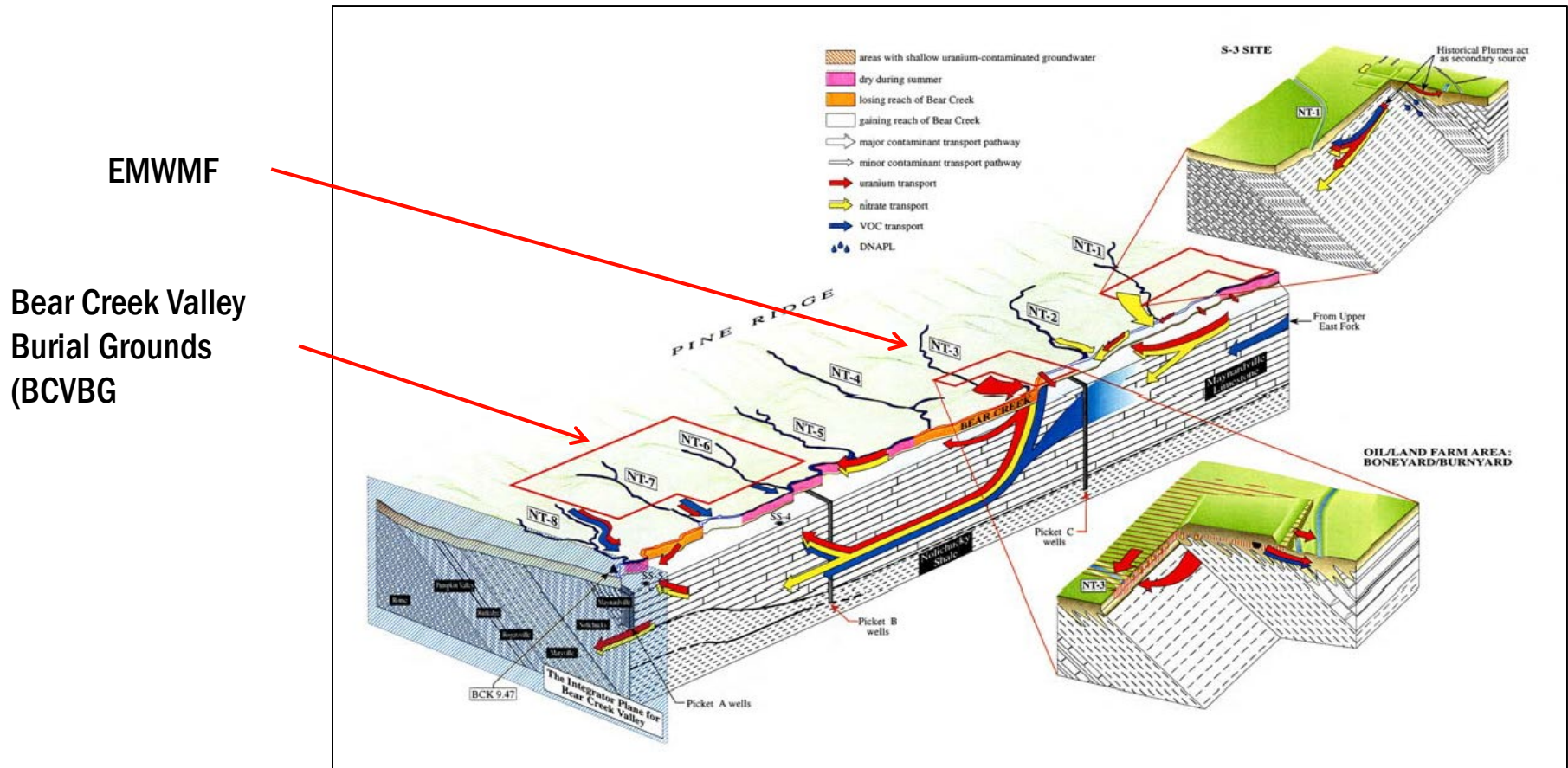
State Position & Key Concerns:

- The current cumulative discharges to creek and groundwater in BCV are above risk goals.
- The FFA parties (EPA, DOE and TDEC) are relying (among others) on DOE's **radiological** assessment process within DOE Order 435.1 to demonstrate protectiveness of additional waste disposal in BCV
 - Performance Assessment (PA)
 - **Composite Analysis (CA)**
 - Preliminary Disposal Authorization Statement (PDAS)
- DOE assumes in the CA that the Bear Creek Valley Burial Grounds (BCVBG), one of the main sources of contamination entering Bear Creek Valley, will be remediated
- DOE planning documents do not have remediation of BCVBG for at least 12 years
- A better alignment is needed between the cleanup assumptions and actual funding for cleanup commitments before a new contaminant source is introduced on the Oak Ridge Reservation

B. Remediation of Contaminant Sources within Bear Creek Valley

(BCV)

Conceptual rendering of contaminant transport away from the primary waste areas in Bear Creek Valley.



Source: Figure 12 from The Oak Ridge Field Research Center Conceptual Model - Natural and Accelerated Bioremediation Research (NABIR)/Oak Ridge Field Research Center (FRC) Oak Ridge, Tennessee, August 2004



C. Mercury Remediation

C. Mercury Remediation

East Fork Poplar Creek:

- Releases of mercury from the Y-12 National Security Complex continue to exceed State of Tennessee and EPA water quality criteria.
- The Outfall 200 water treatment plant needs to be operating prior to the commencement of the Decontamination and Decommissioning (D&D) of Beta 4, Alpha 5, and Alpha 4

Bear Creek:

- The stream is impaired and does not meet the parameters for its water quality classifications
- Bear Creek currently receives contaminated inputs from various legacy sites (e.g. Bear Creek Valley Burial Grounds and S-3 Ponds) and from CERCLA waste disposal operations at EMWMF
- The wastewater discharge from EMWMF to Bear Creek has at times exceeded the recreational use water quality standard, according to DOE records

Placement of mercury-bearing waste in the existing EMWMF or the proposed EMDF landfill would generate landfill wastewater containing mercury



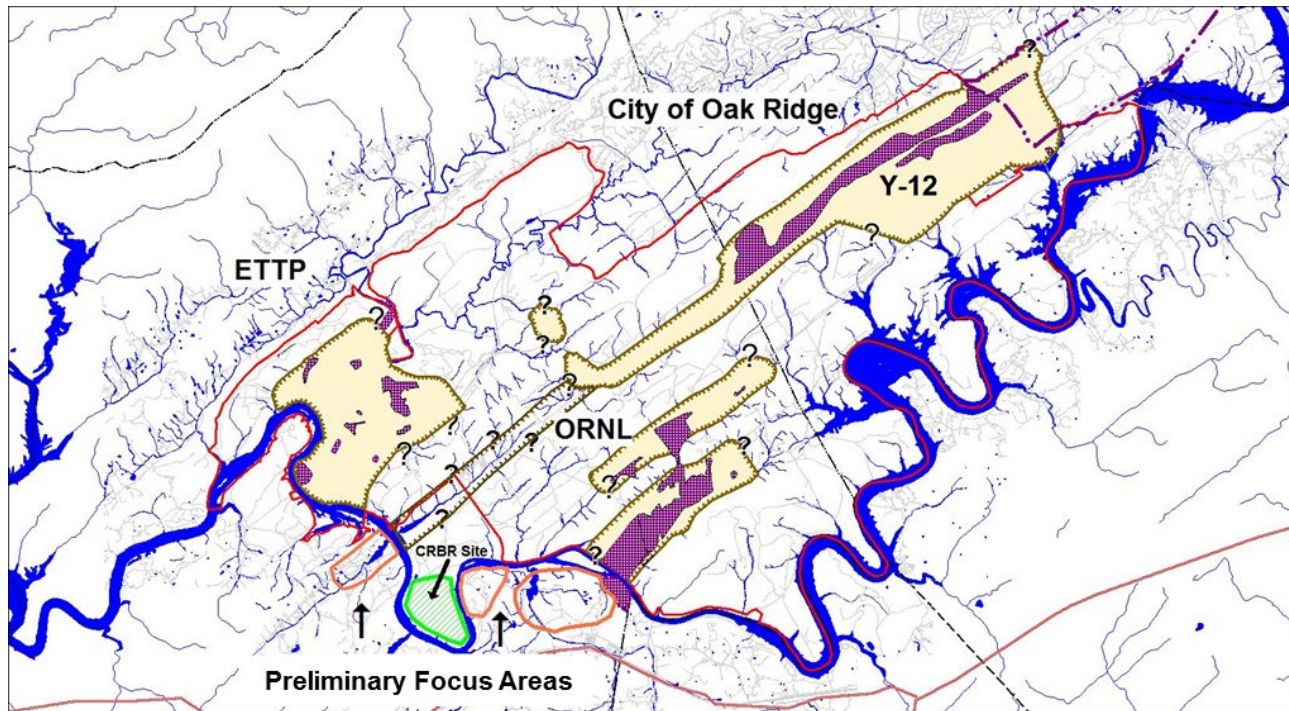
D. Assessment of Groundwater and Remedy Selection

D. Assessment of Groundwater and Remedy Selection

- **DOE funding requests do not identify adequate resources to complete the necessary, detailed on-site groundwater investigations**
- **These investigations have been generally deferred since the signing of the ORR FFA in 1992**
- **Several known groundwater plumes have yet to be delineated or controlled**
- **TDEC also sees a need for more aggressive implementation of groundwater remedies following successful treatability studies**
- **DOE budget requests should identify the need for significant, dedicated funds to implement CERCLA groundwater investigations and remedies on the ORR**

D. Assessment of Groundwater and Remedy Selection

TDEC continues to work with DOE and EPA to achieve a balanced approach to the remediation of the Oak Ridge Reservation



Millions of curies of radioactive contaminants and chemicals buried or injected into the ground on the ORR

More than fifty inches of annual rainfall

Relatively shallow distance to groundwater

The known potential of contaminant migration via karstic or fractured flow in the ORR geology



E. Processing and disposition of Transuranic (TRU) waste

E. Processing and disposition of Transuranic (TRU) waste

- **Historical operations at ORNL resulted in generation of liquid radioactive waste. Though currently stable and safely stored, TRU Sludge stored in Melton Valley Storage Tanks represents one of the highest levels of risk to the public and the environment**
- **Currently, the anticipated quantity of sludge/supernate to be processed for disposal is approximately 2000 cubic meters (~528,000 gal)**
- **The current target date to complete the pilot study for the sludge processing is May 31, 2022, with the actual processing of the sludge beyond 2022**
- **The successful design and construction of the sludge treatment facility requires a steady fiscal environment**
- **The trench 13 milestone for submittal of a revised Engineering Evaluation for removal and disposal of the waste is September 30, 2035, with the actual work to commence by September 30, 2037**

Questions?

Contact:

Kristof Czartoryski

TN Department of Environment & Conservation

Division of Remediation, Oak Ridge office

Kristof.Czartoryski@tn.gov

(865) 220-6580



Annual Meeting
August 24, 2019



***Department of Energy
Oak Ridge Site Specific
Advisory Board
FY 2020 Planning Meeting***

August 24, 2019

Townsend, TN

Constance Jones

EPA ORSSAB Liaison & FFA Project Manager



EPA Suggested FY 2020 Topics

- East Tennessee Technology Park
 - Main Plant Area
 - K-31/K-33 Area
- Bear Creek Sentinel Wells
- Environmental Management Waste Management Facility
- Environmental Management Disposal Facility



East Tennessee Technology Park

- Sitewide RI/FS D3: Groundwater, Surface Water, Sediment and Ecological Assessment (2007)
 - D3 RI/FS not approved; groundwater contamination not fully investigated
 - Sitewide approach needs to be redefined with clear ETTP cleanup strategy and closure
- 2019 Main Plant Groundwater Feasibility Study (FS)
 - K-1401 Characterization Study; only plume of 13 fully characterized
 - DOE will assess technologies and alternatives based on “generic” source areas and plumes
 - Each plume must be fully characterized, defined and contained



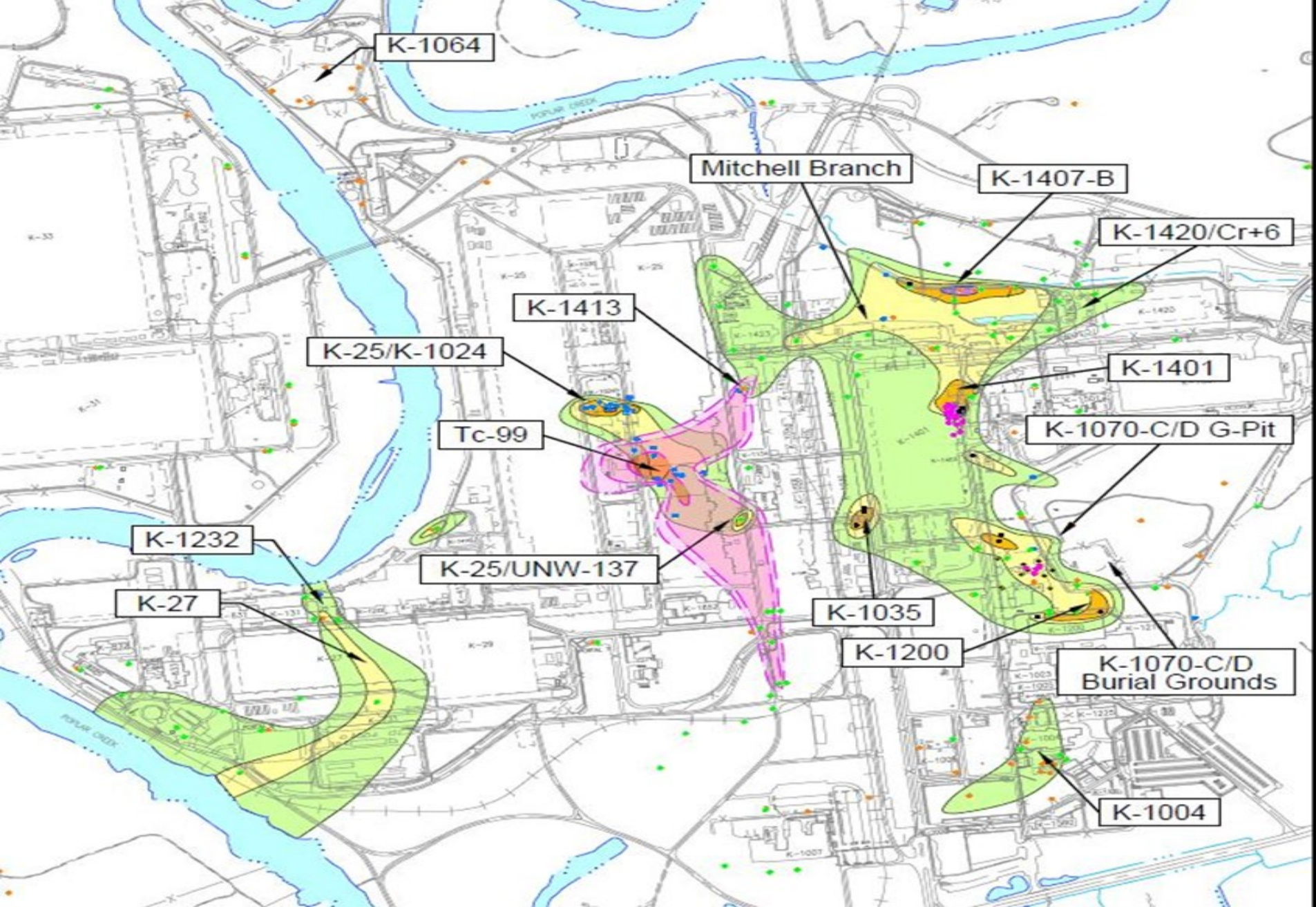
East Tennessee Technology Park (cont)

- Primary contaminants of concern (VOCs) across Main Plant Area: PCE, TCE, vinyl chloride, carbon tetrachloride, cis-1, 2-DCE, 1,1-DCE
- Developed in the 2007 Sitewide Human Health Risk Assessment
- FS due to regulators 11/29/2019

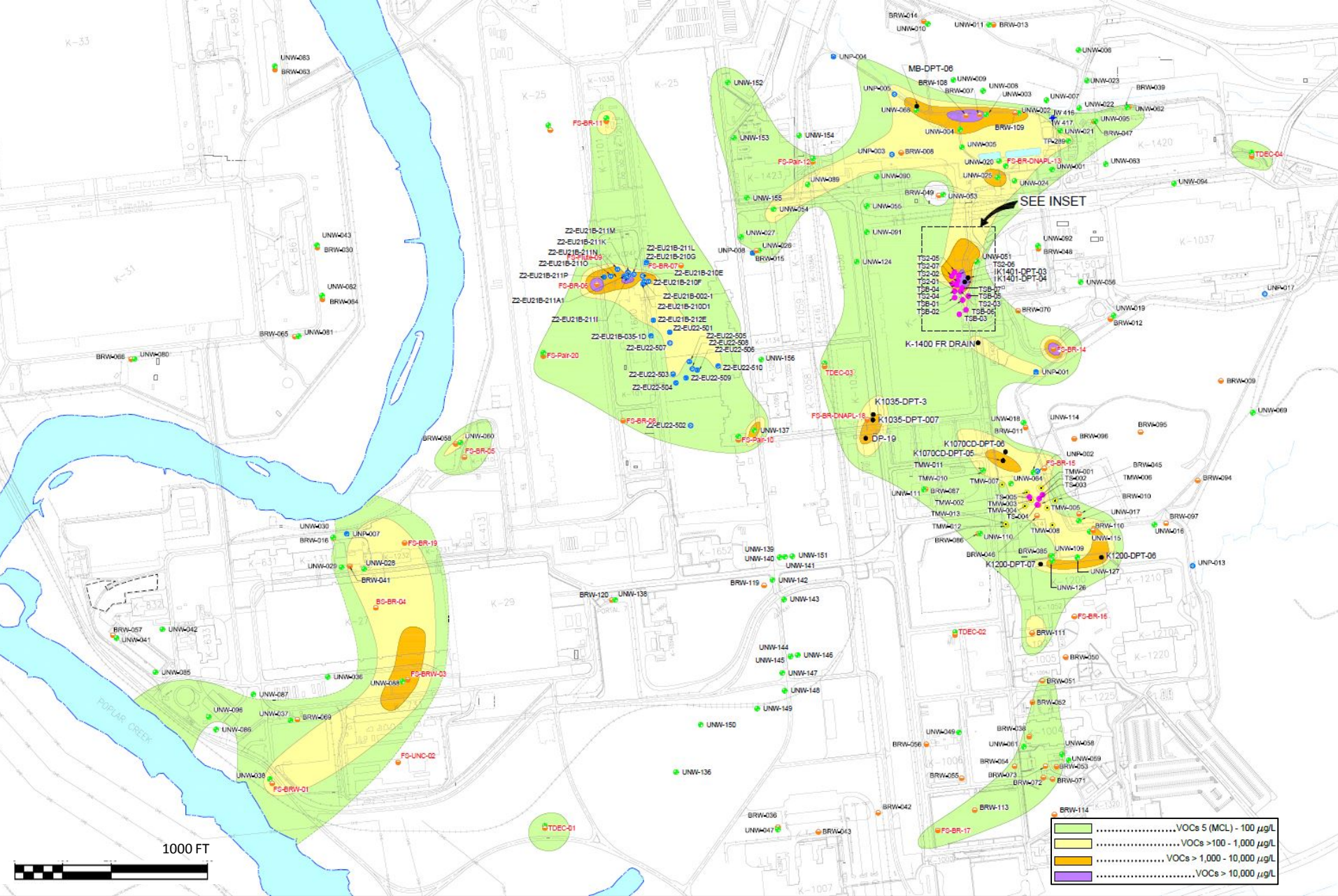


East Tennessee Technology Park (cont)

- Main Plant approach:
 - Assumes the source areas and plumes have similar characteristics; have not characterized 13 remaining plumes
 - K-1401 is used as an example, since it has more data than others
 - Evaluates technology separately for unconsolidated and bedrock zones
 - DOE also needs to focus on metals, Semi-VOCs and polycyclic aromatic hydrocarbons (not in planned Main Plant FS)
 - Tc-99 plume evaluated separately
- Develop a focused evaluation of VOC technologies based on industry experience



Main Plant Groundwater Source Areas



Current Total Volatile Organic Compound Plumes



East Tennessee Technology Park (cont)

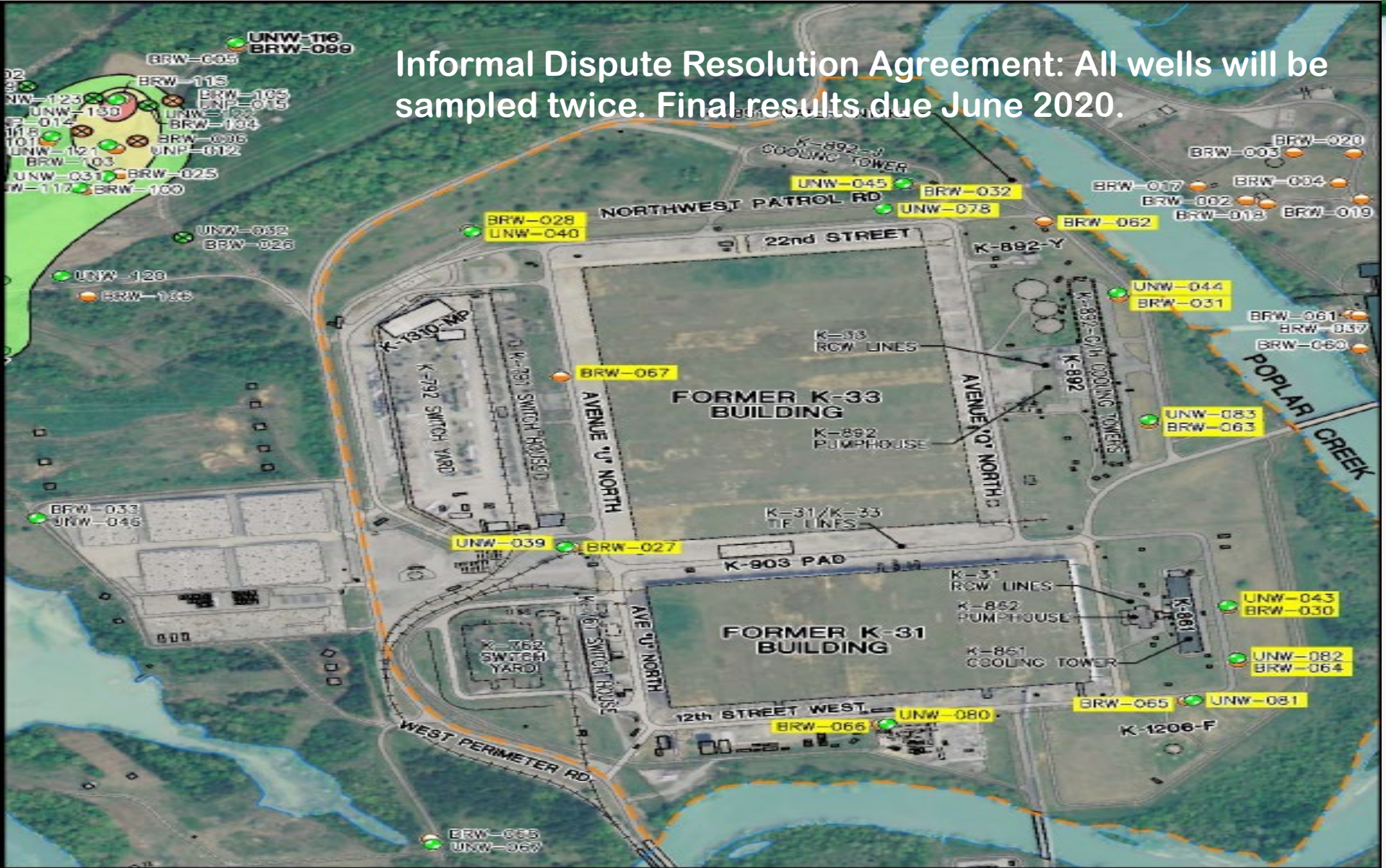
K-31/K-33 Area Groundwater

- Buildings demolished
- Soil remediated under Zone 2 Record of Decision (ROD)
- No Soil contamination exceedances observed in areas following remediation in upper 10 ft. zone
- Groundwater wells located outside of building footprint evaluated under the Zone 2 ROD



Fig. 1.4. K-31/K-33 Area circa 2017.

Informal Dispute Resolution Agreement: All wells will be sampled twice. Final results due June 2020.



LEGEND:

[Solid black rectangle]	BUILDING
[Dotted line]	ASPHALT ROAD
[Dashed line]	GRAVEL ROAD
[Line with cross-ticks]	RAILROAD TRACKS
[Line with 'x' marks]	FENCE LINE
[Dotted line]	K-31/K-33 AREA
[Circle with 'x']	ABANDONED WELL
[Green circle]	BEDROCK MONITORING WELL
[Orange circle]	UNCONSOLIDATED MONITORING WELL
[Green circle]	UNCONSOLIDATED PIEZOMETER WELL
[Green circle]	VOCs 5 (MCL) - 100 µg/L
[Orange circle]	VOCs 100 - 1,000 µg/L



leidos

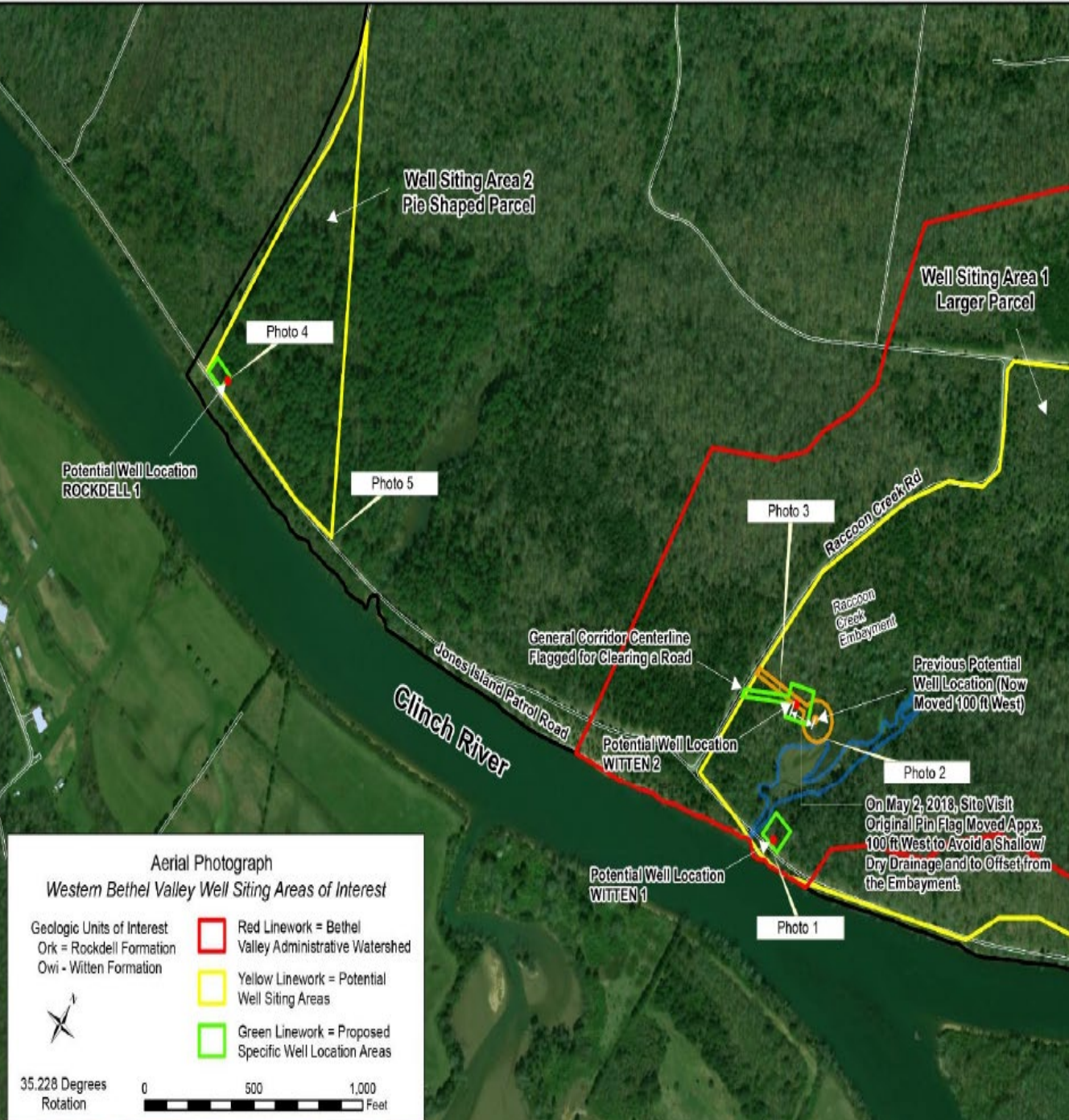
EAST TENNESSEE
TECHNOLOGY PARK
SITEWIDE REMEDIAL INVESTIGATION



Bear Creek Sentinel Wells

- Sentinel wells cannot be located in active firing range.
- Possible future lead issue?
- Wells will intercept limestone units that are most transmissive
- Deliberately skewing locations to identify if contaminants have moved
- Determine whether contamination extends to the Clinch

- Three new sentinel wells (within green boxes)
- Wells are pushed up against the Clinch
- DOE site preparation is Fall 2019





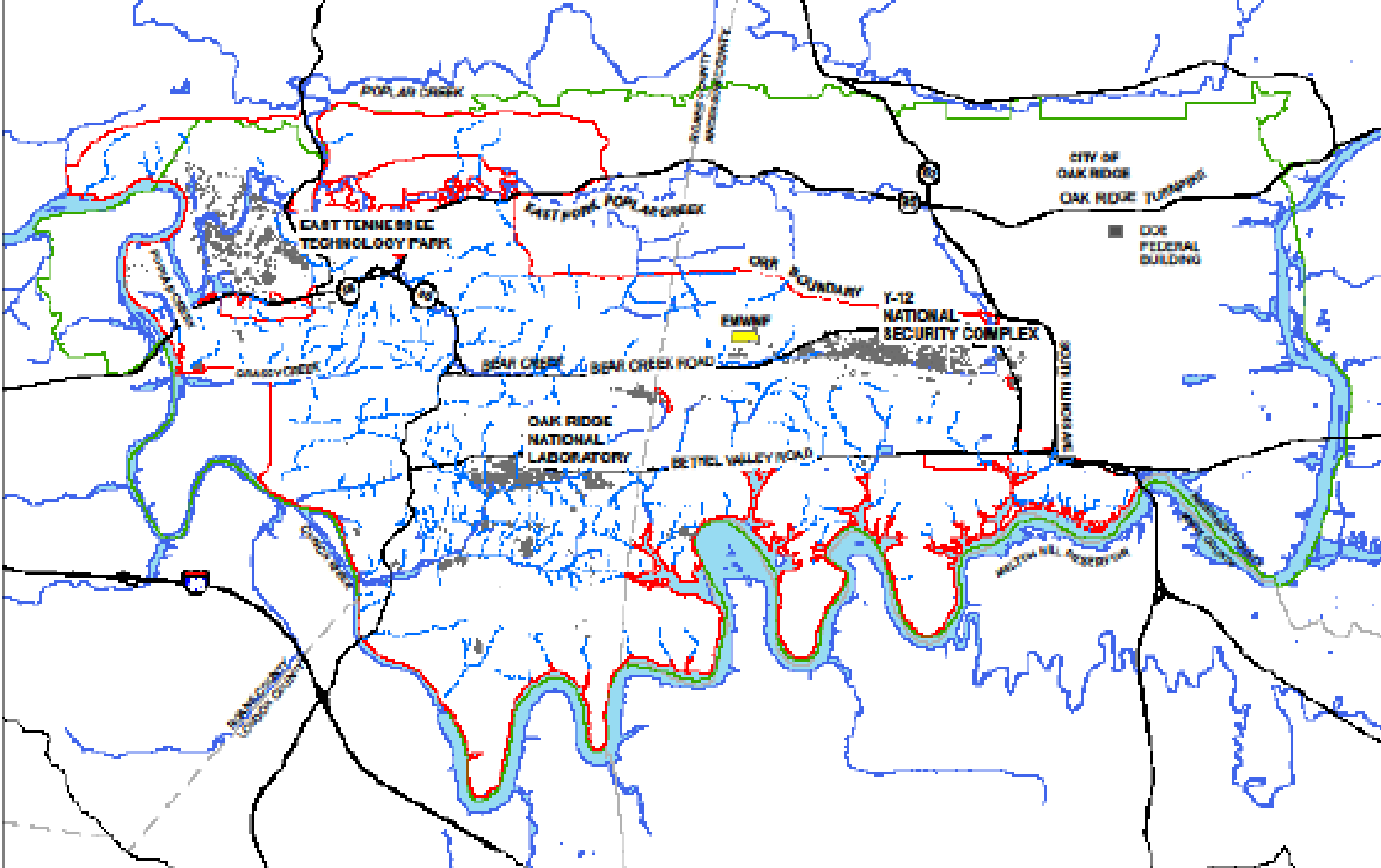
Superfund Groundwater Cleanup Expectations

- Restore to beneficial use wherever practicable (in GW Charter to GW Strategy Document & NCP)
- Define and contain the plume
- Early actions as soon as possible
- Institutional controls should not be the only response
- If restoration not technically practicable – Technical Impracticability Waiver
- Characterization required; evaluate active alternatives










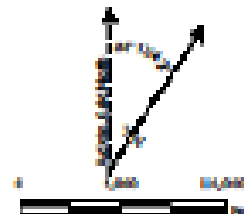
Environmental Management Waste Management Facility (EMWMF)

- 4 of 6 cells filled
- Cell 5 mostly filled
- Cell 6 just opened (2019)
- Soil remediation from Building K-25 (Tc-99) is generating more volume than estimated
- EMWMF likely will close in 2025
- DOE working to overlap disposal operations with EMDF



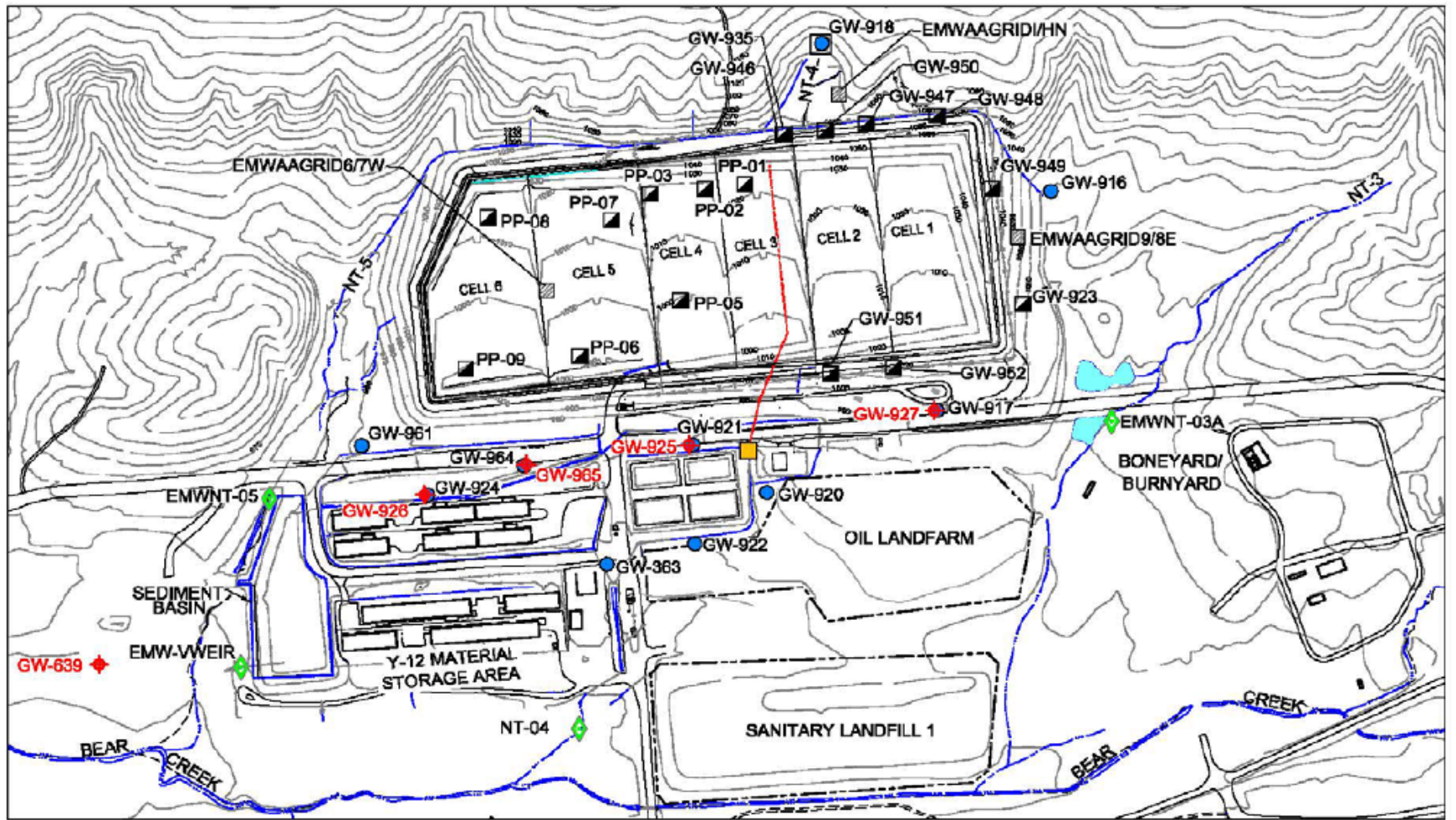
LEGEND

-  BUILDINGS
-  OAK RIDGE CITY BOUNDARY
-  COUNTY BOUNDARY
-  DOE OAK RIDGE BOUNDARY
-  ROAD
-  WATER
- 



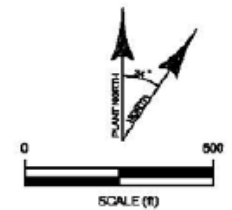
**OAK RIDGE RESERVATION (ORR)
OAK RIDGE, TENNESSEE**

COORDINATE SYSTEM: Oak Ridge Administrative Grid
 DATUM: NAD83 Feet
 DATE: 01/18/2011
 MFP DOCUMENT NAME: ORR_10.mxd
 MFP AUTHOR: Mary Lou Brogdon
 ORGANIZATION: DOE
 SUBJECT: Oak Ridge Environmental Information System



EXPLANATION

- | | | |
|-------------------------|--------------------------------------|---|
| — BUILDING | — UPGRADIENT SHALLOW MONITORING WELL | — AMBIENT AIR STATION (EMWAAGRID6/7W is upwind) |
| — ROADS | — SHALLOW MONITORING WELL | — UNDERDRAIN |
| — FENCE LINE | — DEEP MONITORING WELL | — UNDERDRAIN OUTFALL |
| — STREAM | — PIEZOMETER | |
| — POND | — SURFACE WATER STATION | |
| — CONTOUR (10 FT. INT.) | | |

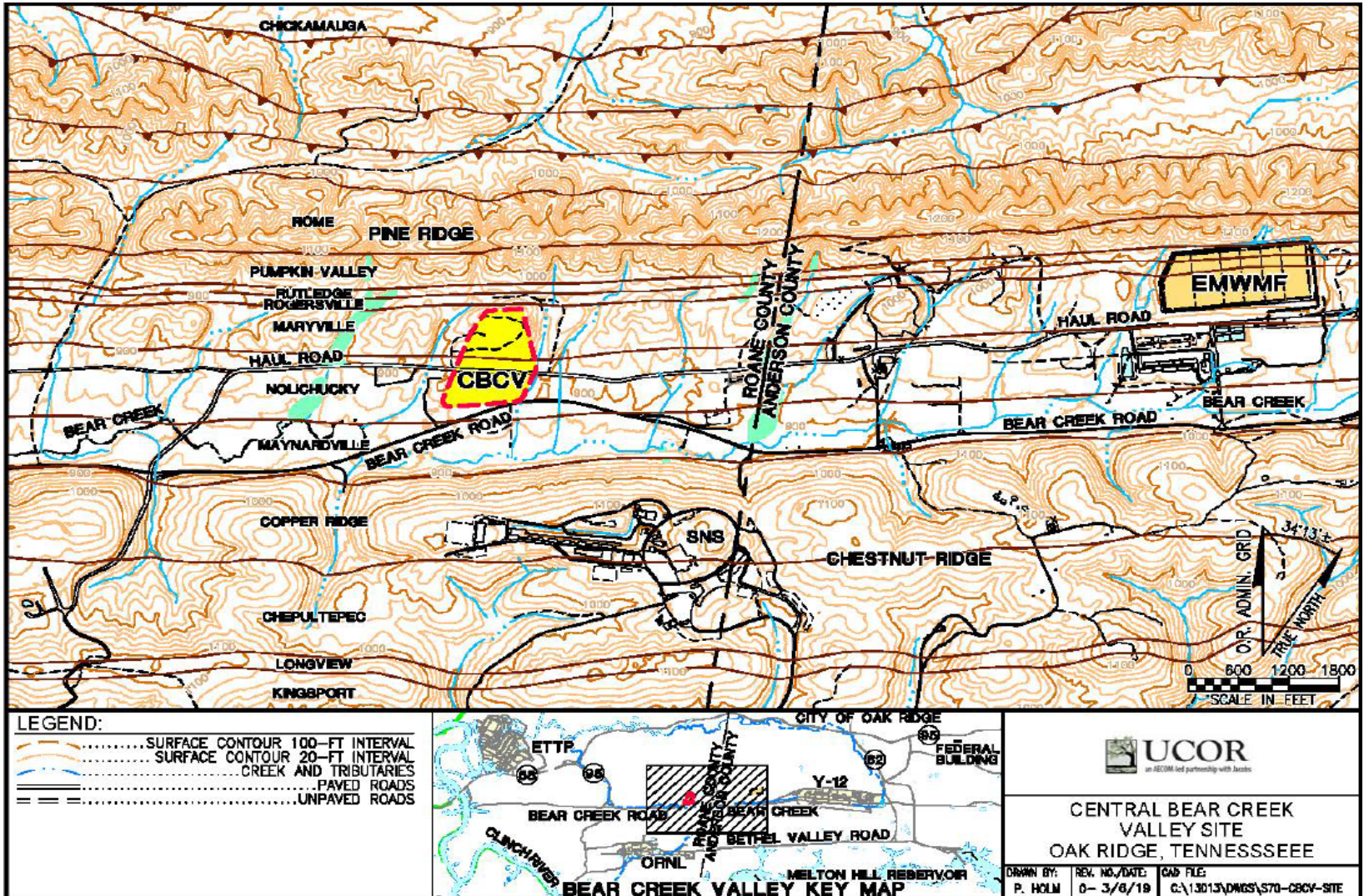




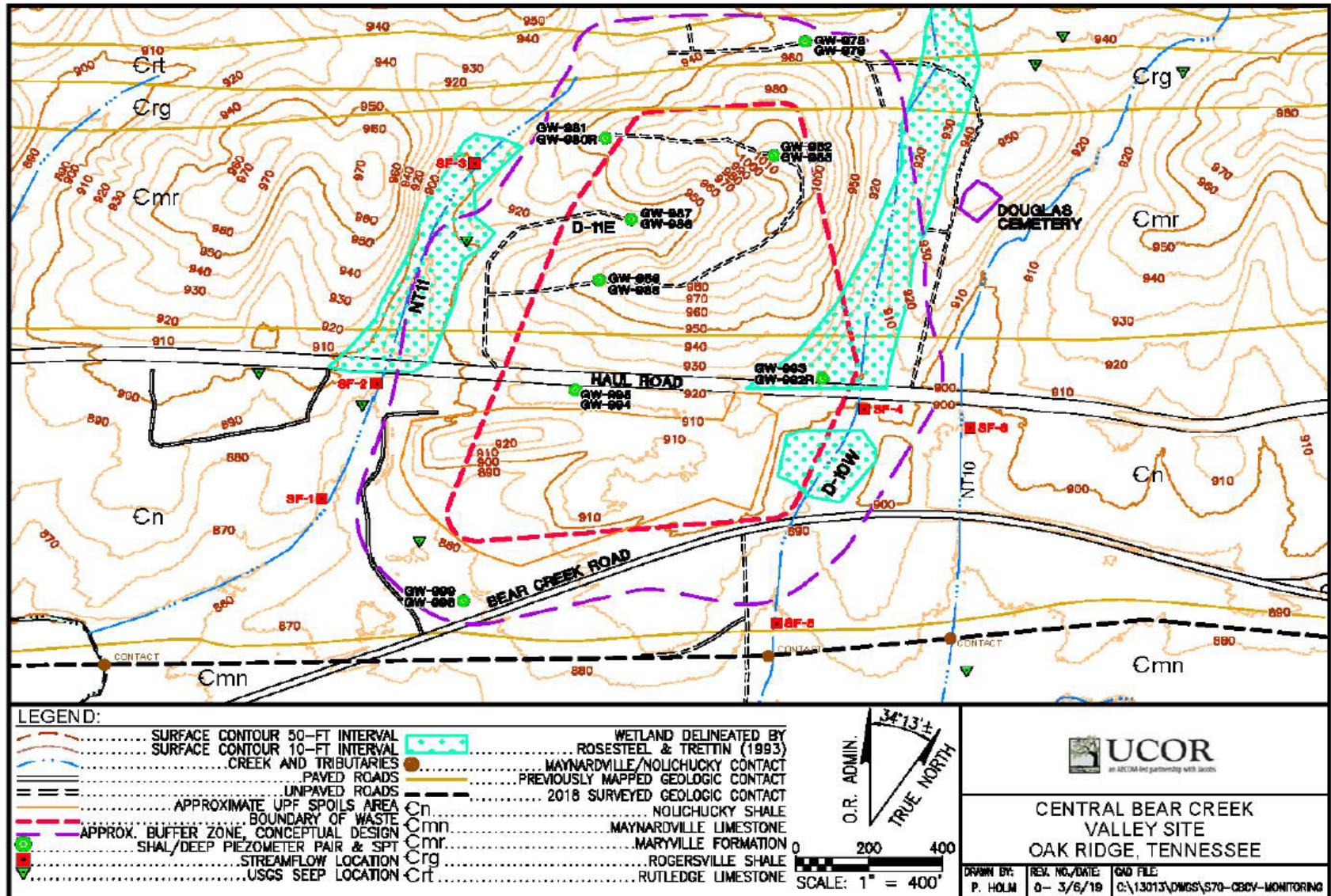
Environmental Management Disposal Facility (EMDF)

- DOE has proposed a 2nd CERCLA landfill in Bear Creek – Environmental Disposal Management Facility (EMDF)
- Located at Site 7c
- Remedial Investigation/Feasibility Study (D5) approved in 2017 via Dispute Resolution Agreement
- Site 7c Field Sampling Plan approved by TDEC and EPA
- DOE collected geologic/hydrogeologic and surface water data to aid in site characterization

Proposed EMDF Location



Geographic Features of Site 7c





Current Status

- Technical Memorandums (TM-1 and 2) received. They provide Site 7c geologic & surface water characterization data.
- TM-2 is currently under review; comments due 9/3/2019
- Focused Feasibility Study (FFS) for Water Management formal dispute has impact on the EMDF ROD requirements (e.g., water treatment, treatment standards for discharge to surface water)
- EPA Administrator has planned meeting with DOE and TDEC on September 6, 2019 to discuss FFS



ORSSAB Actions

- For all areas with groundwater concerns, evaluate data to assist in appropriate groundwater cleanup decisions
- Review and evaluate information collected from DOE field data activities related to the EMDF
 - Data will inform the landfill design, construction and operation.



Contact Information:

Constance A. Jones
U.S. EPA, Region 4
61 Forsyth Street
Atlanta, GA 30303
Phone: 404-562-8551
jones.constance@epa.gov



Suggestions from Members

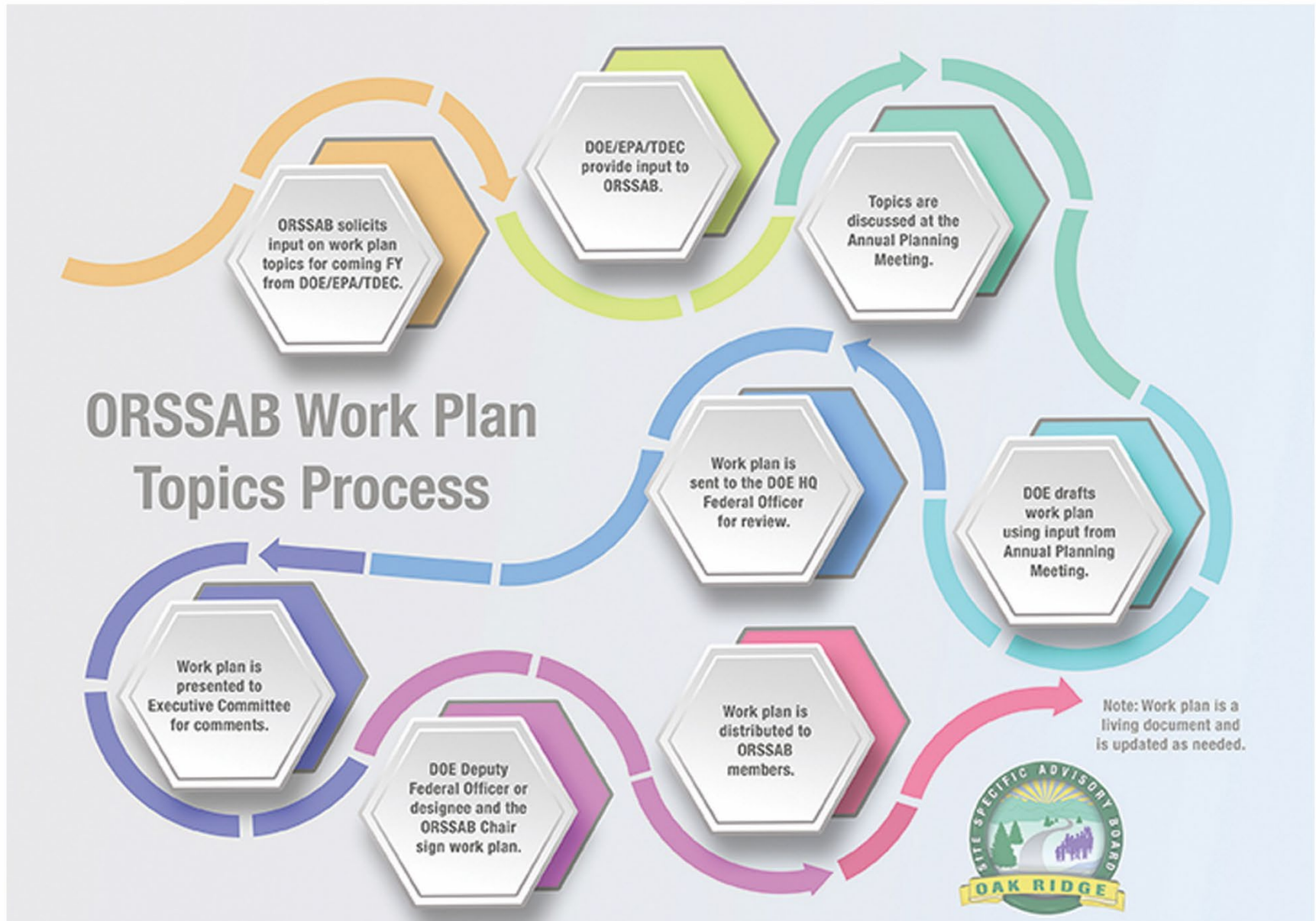


Process and Plan for Issue Groups

Melyssa Noe

Alternate Deputy Designated Federal Official
Oak Ridge Office of Environmental Management

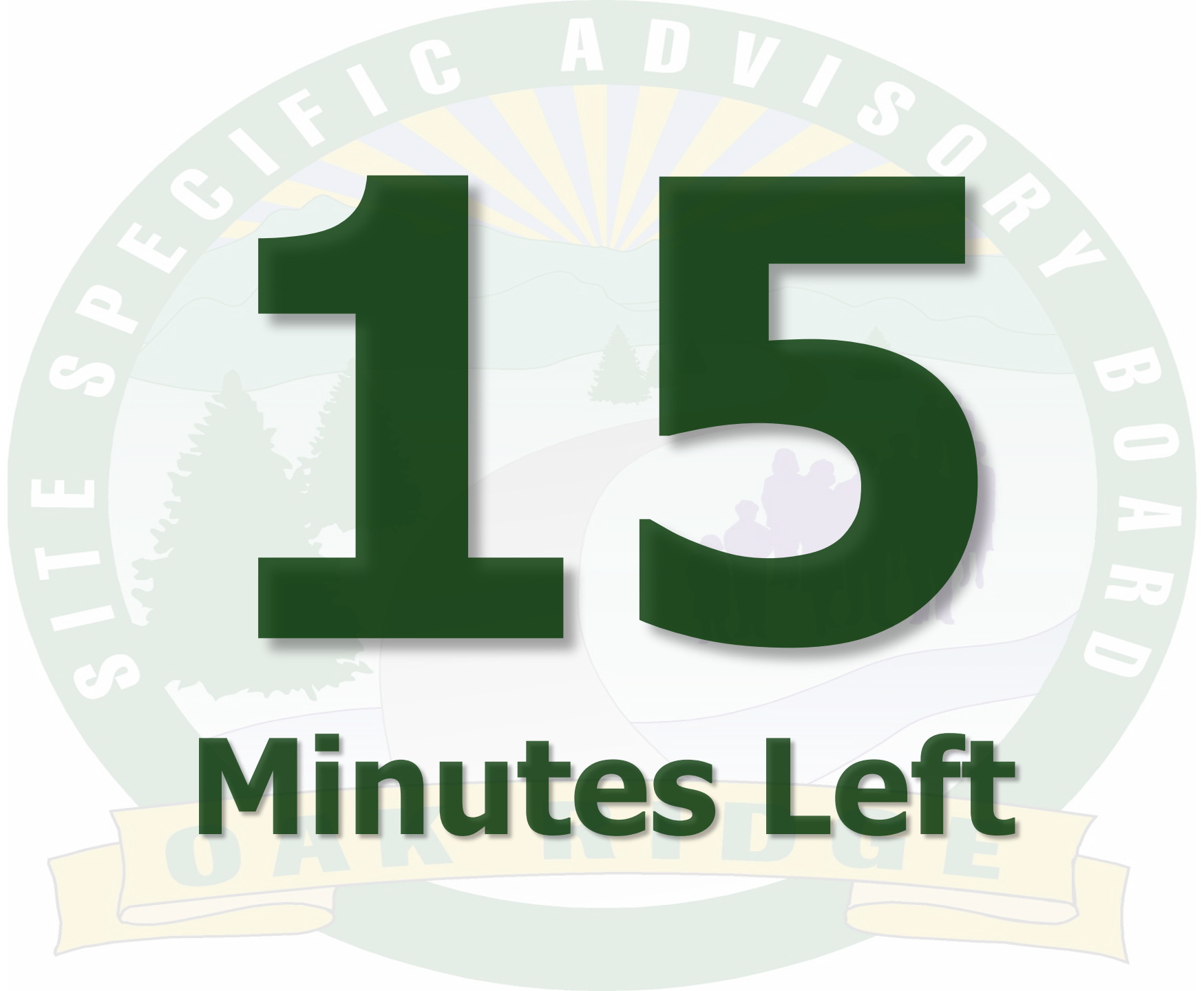
A Visual Guide to ORSSAB's Annual Planning





Break

OAK RIDGE



15

Minutes Left

OAK RIDGE



Public Comment Period

Questions and comments may be submitted by:

Phone - (865) 241-4583 or 241-4584.

Email - orssab@orem.doe.gov

Letter - Oak Ridge SSAB, P.O. Box 2001, EM-942
Oak Ridge, TN 37831

Board Mission & Accomplishments



FY 2019 Annual Planning Meeting

Mission

- The Board's mission is to provide informed advice and recommendations concerning site-specific issues related to the DOE EM program.
- To provide unbiased evaluation and recommendations on DOE's cleanup efforts related to the Oak Ridge site, the Board seeks opportunities for input through collaborative dialogue with the communities surrounding the Oak Ridge Reservation, governmental regulators, and other stakeholders.



The Recommendation Process

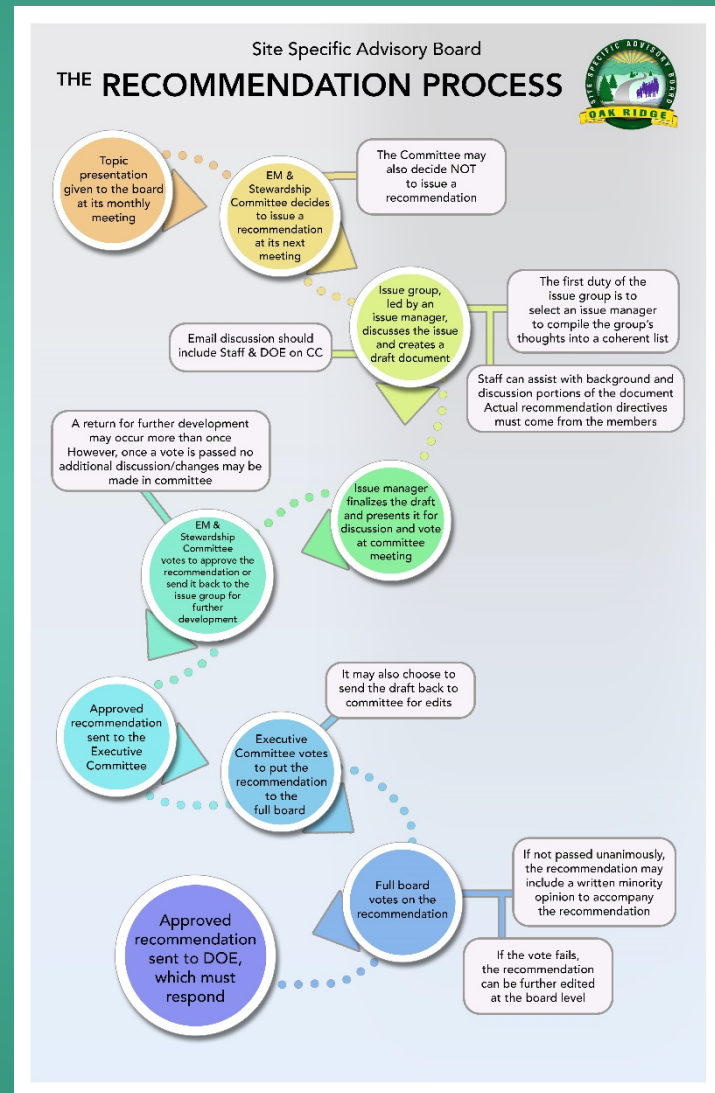
- Topic presentation given at the monthly board meeting.
- Additional discussion at EM/Stewardship Committee including a decision on making a recommendation.
- Issue Group elects an Issue Manager and compiles ideas for the recommendation.
- Manager finalizes the draft recommendation (with staff assistance) and presents to EM/Stewardship Committee for vote.
- If approved, recommendation sent for Executive Committee vote.
- If approved, recommendation sent for full board vote.
- If approved, recommendation sent to DOE, which must respond.



The Recommendation Process

Additional resources:

- Recommendation Process Flow Chart
- More detailed documents included in the folder
- Staff and DDFO can provide additional clarification or answers to any questions



FY 2019 Accomplishments

- Submitted three recommendations to DOE:
 - Recommendations on the Proposed Environmental Management Disposal Facility
 - Recommendations on the FY 2020 Oak Ridge EM Budget Priorities
 - Recommendations on the FY 2021 Oak Ridge EM Budget Priorities (Pending approval)



FY 2019 Accomplishments

- Co-drafted two EM SSAB Chairs recommendations:
 - Recommendation on EM's Review of Milestones
 - Recommendation on Improving EM's Science and Technology Program
- Approved an EM SSAB Chairs recommendation on Site-Specific Advisory Board Involvement in Enhancing Stakeholder/Public Engagement
- Attended public meetings regarding DOE's proposed Environmental Management Disposal Facility (EMDF)



FY 2019 Accomplishments

- Completed a number of public outreach goals:
 - Presented information about ORSSAB to the Kingston Rotary Club
 - Issued **8** news releases, **4** *Advocate* newsletters, and the FY 2018 annual report
 - Continued success in Facebook advertising, which resulted in record traffic to our website and contributed to recruitment; published numerous ads and online posts about ORSSAB meetings and new member recruitment
 - Expanded advertising to additional local outlets
 - Redesigned video production for the monthly meetings



FY 2019 Accomplishments

- Attended 6 national meetings and conferences:
 - **2018 RadWaste Summit**, September 4-6, Henderson, NV
 - **2018 Fall SSAB Chairs Meeting**, September 11, Alexandria, VA
 - **2018 National Cleanup Workshop**, September 12-13, Alexandria, VA



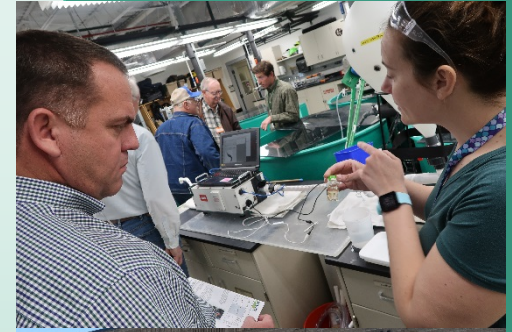
FY 2019 Accomplishments

- **2019 Waste Management Symposium**, March 3-7, Phoenix, AZ
 - Submitted paper on "Best Practices in Project Communications Involving Stakeholders"
- **National Environmental Justice Conference**, March 13-15, Washington, D.C.
- **2019 Spring Chairs Meeting**, May 8-9, Augusta, GA



FY 2019 Accomplishments

- ✧ Members participated in 5 site tours:
 - **November:** OREM's Environmental Waste Management Facility (EMWMF)
 - **February:** OREM sites with groundwater work underway
 - **March:** Oak Ridge National Laboratory's (ORNL) Aquatic Research Laboratory
 - **April :** Excess Contaminated Facilities at ORNL
 - **July:** New Member Orientation Tour of OREM Sites



Results of the 2019 Member Survey



FY 2019 Annual Planning Meeting

2019 Member Survey

Board Members Ready to Engage in Field Trips

- Member responses indicated a slight preference for afternoon, although most were flexible.

Board Members Ready to Engage on the Issues

- Most respondents interested or willing to serve as issue managers.
- Members suggested that additional information about the issue groups and those group's activities – both in general and specific past work products – would encourage issue group involvement.
- Others indicated that group members equally participating and sharing workloads, plus an organized group leader, would encourage involvement. Additionally, another member said personal interest in topics, presentations, and tours encourages involvement in issue groups.



2019 Member Survey

Board Members Ready to Be Social

- Majority would like to attend a board social event in December
- Aubrey's in Oak Ridge was an acceptable location for most members, but several members suggested Calhoun's in Oak Ridge as a possible alternative.

Board Members Ready for Additional Meeting Structure

- Several members suggested additional meeting structure or intervention by DOE/board leadership to prevent discussion from shifting off-topic.
- Another suggestion was an increased focus on potential recommendations



For more details about the survey, see the insert in your meeting binder.

FY 2019 Annual Planning Meeting



Board Business

- Approval of June 13 Minutes
- Vote on EM Chairs Recommendations
- Vote on FY 2021 Budget Priorities
- Vote for FY 2020 Board Officers
- Take FY 2020 Board Photo
- Complete Meeting Evaluation