

# Bureau of Waste Site Cleanup Advisory Committee Meeting

February 20, 2025

*\* This meeting is being recorded.*



# WSC Advisory Committee Meeting Agenda

**Welcome / Agenda Review - Adoption - 5 minutes**

**Administrative Updates - 15 minutes**

**Program Updates - 10 minutes**

- **Brownfields Program Update (5)**
- **ER & MOSPRA Report Out (5)**

**LSP Board Report Out – 10 minutes**

**LSP Association Report Out - 10 minutes**

**TCE: Congenital Heart Defect Review - 20 minutes**

**Activity and Use Limitation (AUL) Guidance – 30 minutes**

**Soil Reuse Policy Update - 5 minutes**

**Q&A and Wrap-Up - 10 minutes**

**Next WSC Advisory Committee Meeting (May 22, 2025)**

*TOTAL MINUTES: 115 minutes*

**Millie Garcia-Serrano, BWSC**

**Millie Garcia-Serrano, BWSC**

**Diane Baxter, BWSC**

**David Foss, BWSC**

**Cathy Kiley, BWSC**

**Terry Wood, LSP Board**

**Katie Kudzma, LSP Association**

**Greg Braun, ORS**

**Millie Garcia-Serrano, BWSC**

**Ken Marra, BWSC**

**Peggy Shaw, BWSC**

**Ken Marra, BWSC**

**Millie Garcia-Serrano, BWSC**

**Millie Garcia-Serrano, BWSC**



# Administrative Updates



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**Millie Garcia-Serrano, MPH, Diane Baxter**  
MassDEP | Bureau of Waste Site Cleanup

# Administrative Updates

- **Monitoring of Federal Funds**

- **Personnel**

- Farewell to George Gardner, former TFS Director (Retired. Hiring process underway)

- **Now hiring!**

- 2 [Remedial Project Managers](#), Federal Programs Division (First consideration for applications received by **2/25/25!**)
- [Manager of Information & Data Management](#) (First consideration for applications received by **3/5/25!**)

- **“At the Podium”**

- *Meet the MassDEP Bureau of Waste Site Cleanup – EBC (3/4/25)*
- *2025 LSPA Environmental Symposium (4/15/25)*

- **“Staying the Course on Priorities”**

- Finalize AUL Guidance (February 2025)
- Issue Draft COMM-25 Soils Policy for Public Comment (Soon)
- PFAS Related Policies and Q&A's
- Risk Assessment Guidance



# Program Updates



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**David Foss, Cathy Kiley**

MassDEP | Bureau of Waste Site Cleanup

# Brownfields Roundtable Updates



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**David Foss, Statewide Brownfields Coordinator**  
MassDEP | Bureau of Waste Site Cleanup





# 2025 – Regional Brownfields Roundtables



## EPA Assessment Grantee

### WESTERN REGION

Berkshire Regional Planning Commission  
Franklin Regional Council of Governments  
Pioneer Valley Planning Commission

### CENTRAL REGION

Montachusett Regional Planning Commission  
Central Massachusetts Regional Planning Commission (CMRPC Applied FY24)

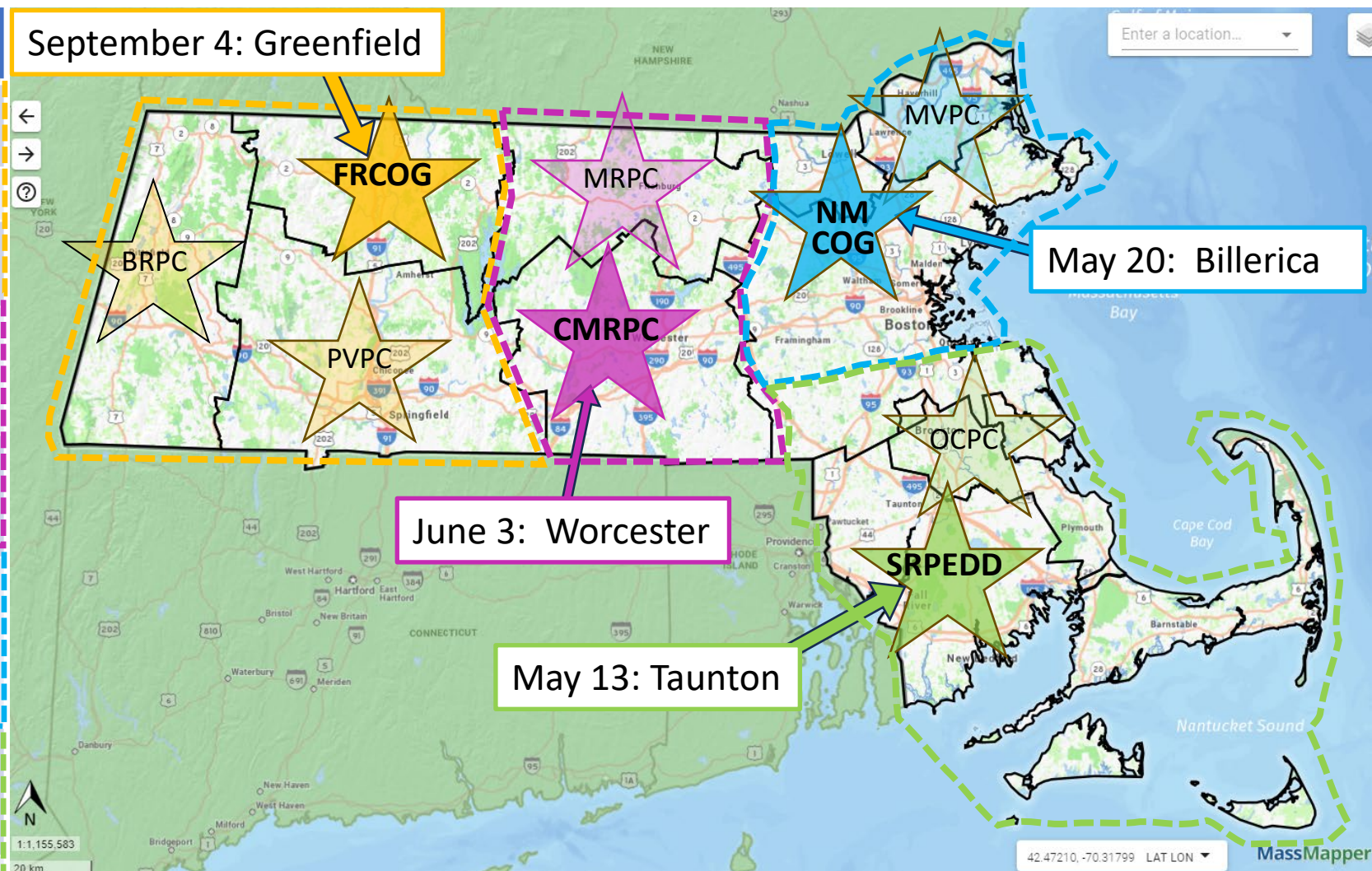
### NORTHEAST REGION

Merrimack Valley Planning Commission  
Northern Middlesex Council of Government (NMCOG Applied FY24)

### SOUTHEAST REGION

Southeastern Regional Economic Development District  
Old Colony Planning Commission

September 4: Greenfield



# Emergency Response & MOSPRA Report Out



**MassDEP**

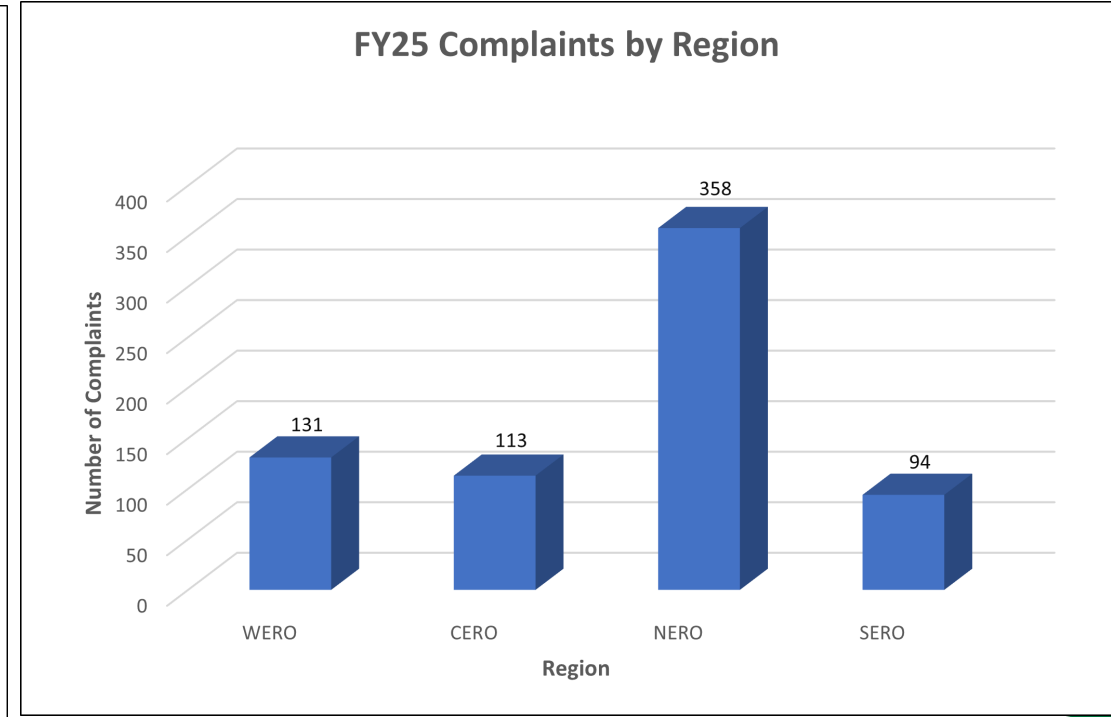
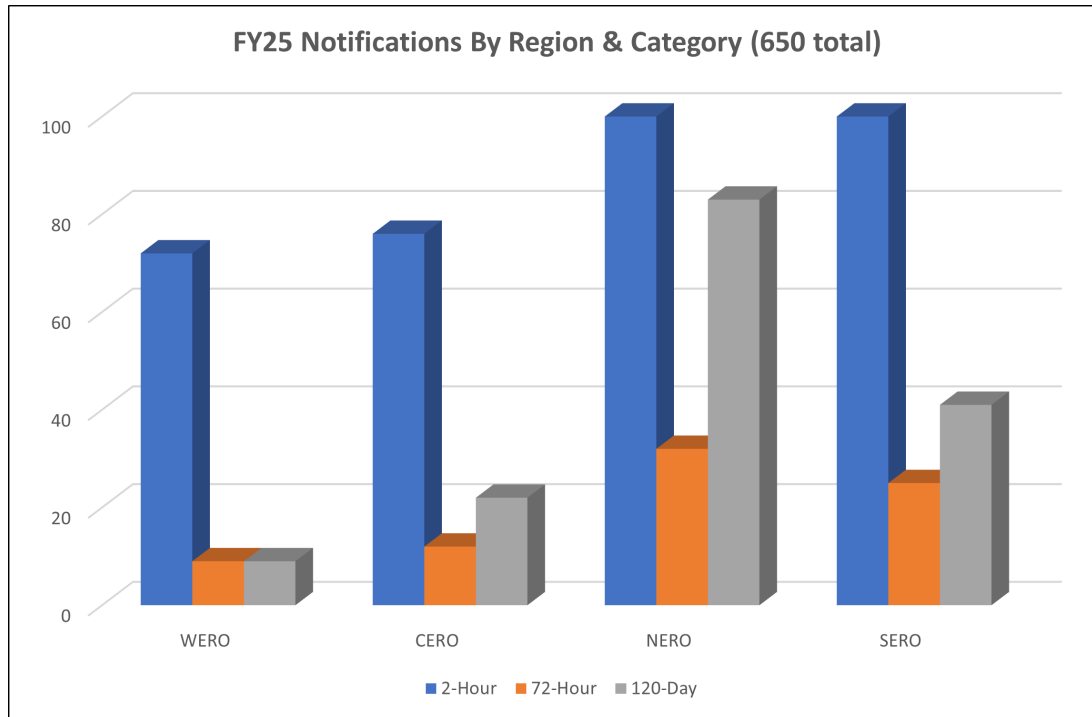
Commonwealth of Massachusetts  
Department of Environmental Protection

**Cathy Kiley, Emergency Planning & Response Coordinator**  
MassDEP | Bureau of Waste Site Cleanup



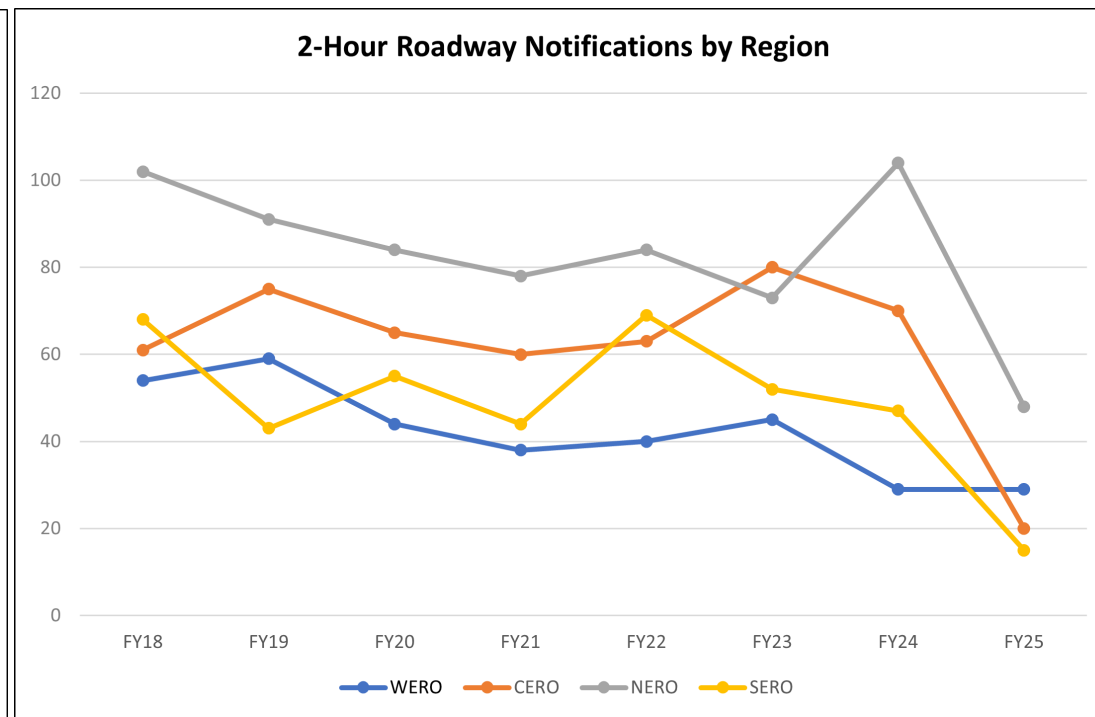
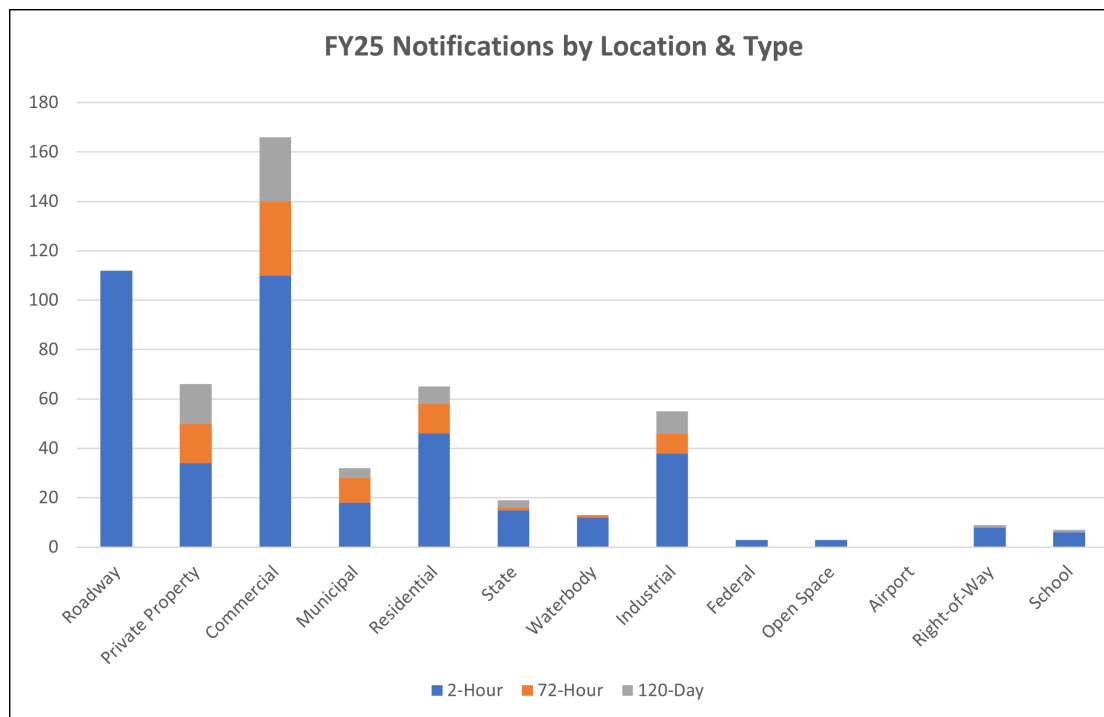
# Emergency Response

- FY25 – to date: 650 Releases/696 Complaints
- For Reference, FY24: 1,083 Releases/1,072 Complaints



# Emergency Response

- Trends



# MOSPRA Program

- **Website:** <https://www.mass.gov/oil-spill-prevention-response>
- Oil Spill Advisory Committee Meeting 12/5/24 – Presentations and video will be posted on website by end of February 2025
- GRS First Responder Training and GRS Testing Exercises
  - dates are being finalized for 5 Spring 2025 sessions



# Licensed Site Professional Board Report Out



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**Terry Wood, Executive Director**  
MA Licensed Site Professional Board (LSPB)

# Licensed Site Professional Association Report Out



**Katie Kudzma, President Elect**  
MA Licensed Site Professional Association (LSPA)

# TCE: Congenital Heart Defect Review



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**Greg Braun, Chief, Risk Analysis Division**  
MassDEP | Office of Research and Standards



# TCE Congenital Heart Defects: Overview

- 2011 IRIS reference concentration (RfC), used by MassDEP, is based on immunotoxicity and congenital heart defect endpoints.
- Because congenital heart defects are a serious effect, the IH for TCE is based on a hazard index of one.



# LSPA Technical Practices Committee TCE White Paper

- In 2023 LSPA Technical Practices Committee argue congenital heart defect endpoint should no longer be considered due to:
- A 2019 study (DeSesso et al.) funded by the Halogenated Solvents Industry Alliance; and
- A 2020 TSCA Risk Review that did not select congenital heart defects for the Point of Departure.
- This would result in HI of ten for imminent hazards for TCE.



# Current 2011 IRIS Values

- Current RfC of 2 ug/m<sup>3</sup> was derived on the basis of two candidate RfCs:
- 1.9 ug/m<sup>3</sup> for decreased thymus weight in mice (Keil et al 2009)
- 2.1 ug/m<sup>3</sup> for congenital heart defects in rats (Johnson et al., 2003)



# EPA Final 2020 Risk Evaluation Selection of Point of Departure

- EPA's Office of Chemical Safety and Pollution Prevention conducted an updated Weight of Evidence Evaluation, which considered animal and human studies published since the 2011 IRIS assessment (EPA, 2020).
- Chose immunological endpoint of reduced thymus weight from Keil et al., 2009.
  - Immunological endpoint was also used by IRIS
- However, EPA also concluded that:
- "Overall, an association between increased congenital heart defects and TCE exposure is supported by the weight of evidence, in agreement with previous EPA analyses." and that ".....other EPA program reliance on the fetal cardiac endpoint is scientifically valid."



# ORS' Position on TCE and Cardiac Malformations

While there is some uncertainty with the Johnson et al., 2003 study, ORS has concluded there is sufficient evidence to continue to use congenital heart defect data in our toxicity assessment of TCE and that the hazard index for assessing Imminent Hazards for TCE should remain at 1, especially in light of the serious nature of the endpoint.



# Office of Research & Standards Toxicology Division

Sandy Baird, Chief, Toxicology Division: [Sandra.Baird@mass.gov](mailto:Sandra.Baird@mass.gov)

Tom Angus, Senior Toxicologist: [Thomas.Angus@mass.gov](mailto:Thomas.Angus@mass.gov)





# Activity & Use Limitation (AUL) Guidance



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**Millie Garcia-Serrano, Ken Marra & Peggy Shaw**  
MassDEP | Bureau of Waste Site Cleanup

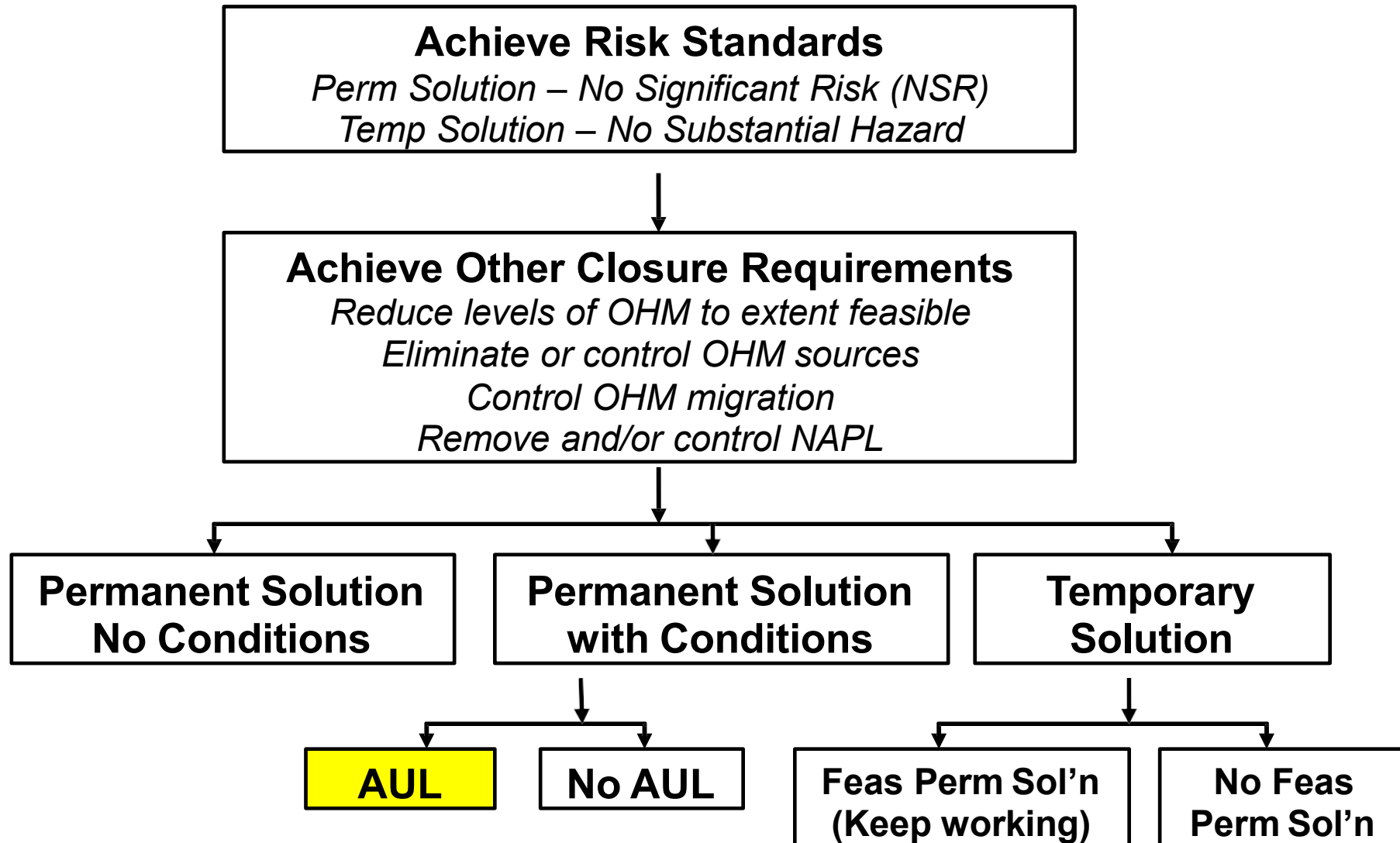
# Activity and Use Limitations (AULs)

## Primary Purposes

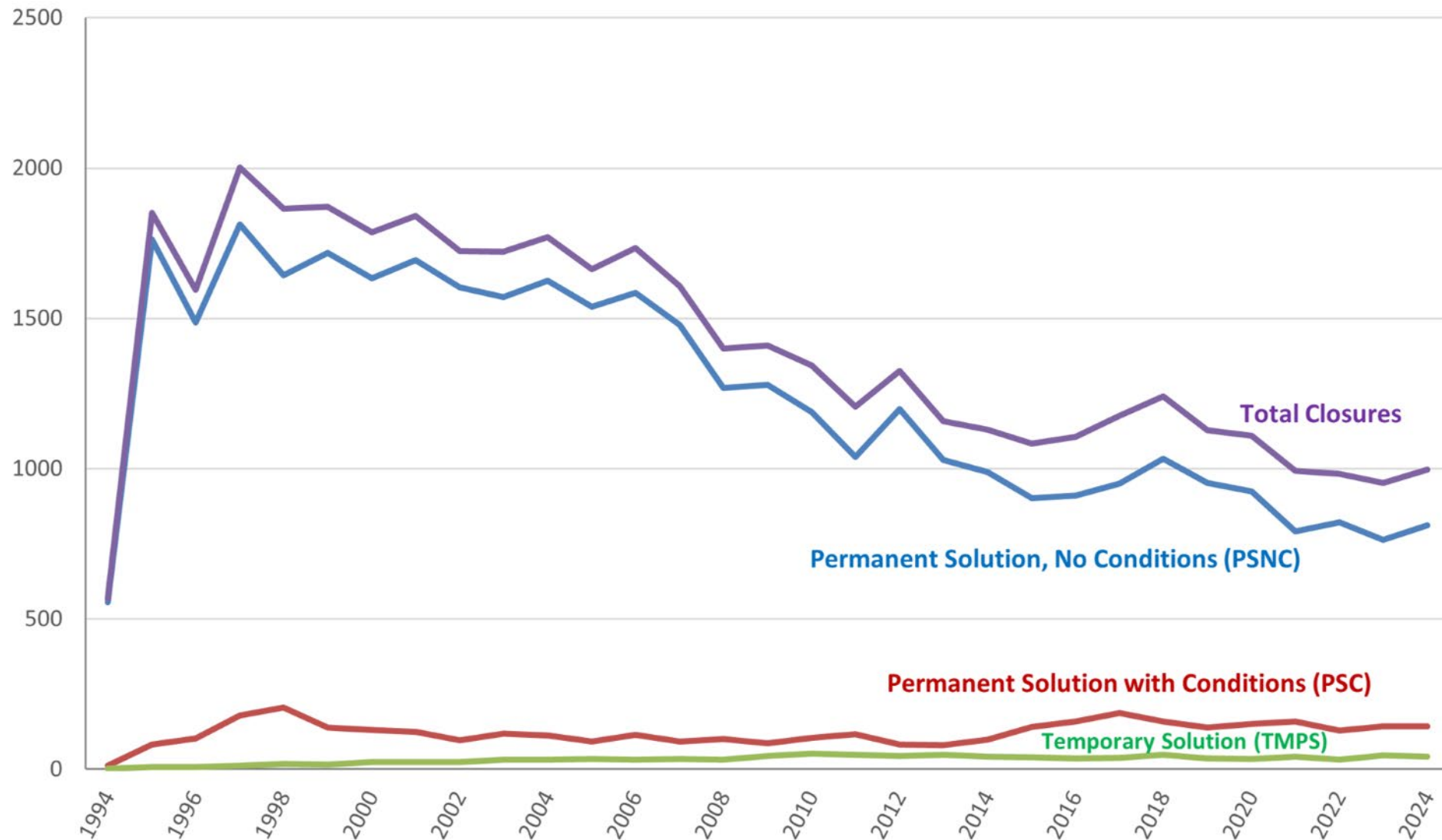
- Provide notice to future property owners for future uses/activities consistent/inconsistent with No Significant Risk (NSR)
- Specify owner obligations to meet AUL objectives
- Indicate location of residual contamination at property



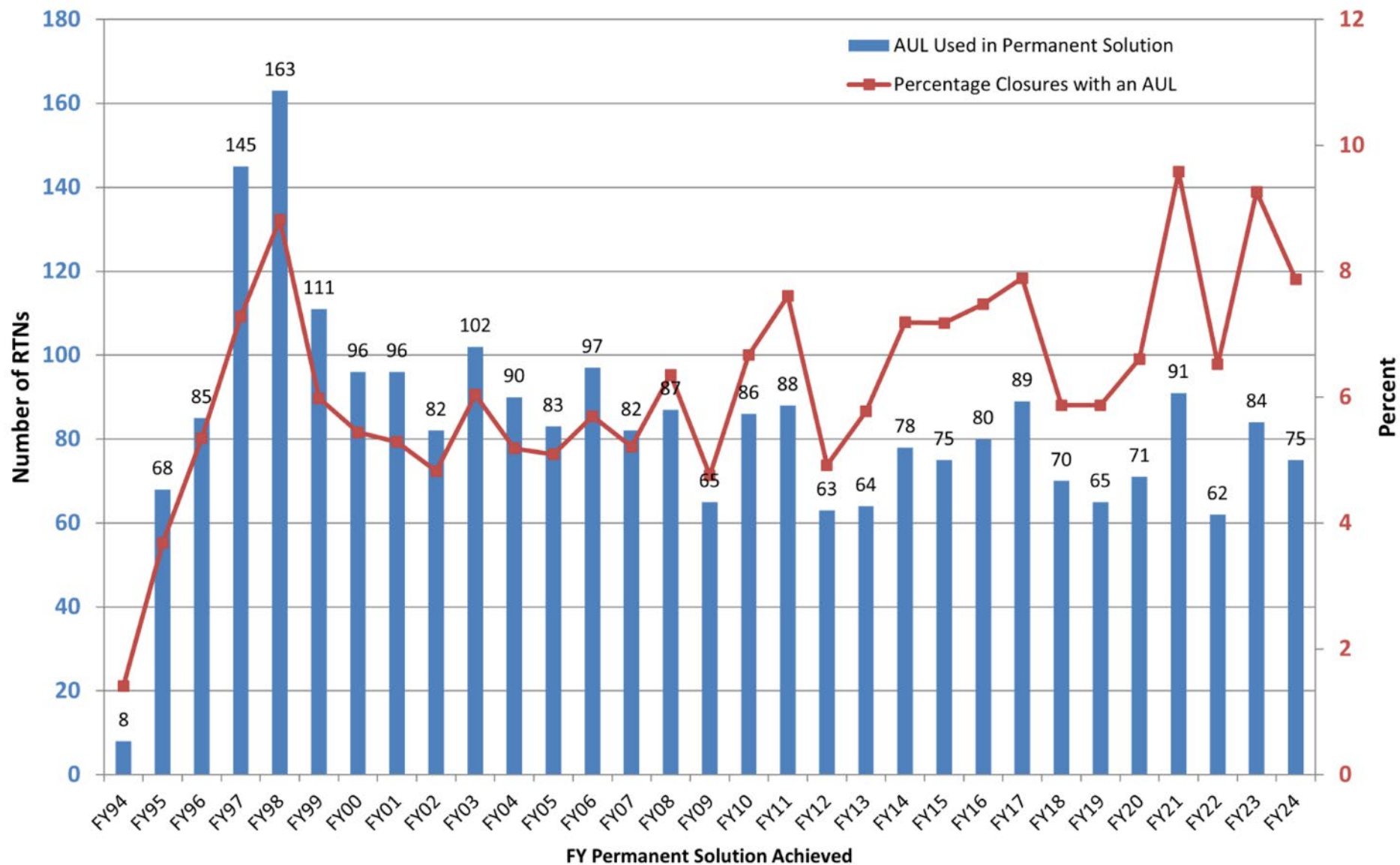
# Site Closure



## Site Cleanup & Closures by Category (Fiscal Year)



## Trend in the Use of AULs



# Activity and Use Limitations (AULs)

- Key consideration/element in a Permanent Solution
- Most commonly used to control future exposures to high soil contamination levels
- Child's frequency or intensity of use is considered to be high

*“Can a child eat the soil anywhere at the site from 0 to 15 feet deep and still be at a condition of NSR? If NO, you need an AUL.”*





# Permanent Solution with Conditions including AUL

(not all-inclusive, refer to Guidance for details)

- A condition of No Significant Risk (NSR) exists for current use, BUT
  - NSR does NOT exist for ANY site use (including excavation and relocation of soils 0 – 15 feet deep); and/or
  - Soil > 15 feet deep exceeds “Method 3 Ceiling Limits” per Table 6 at 40.0996; and/or
  - Passive or Active Exposure Pathway Mitigation Measures are required to maintain a condition of NSR; and/or
  - A private well is no longer providing drinking water but is not abandoned and is maintained for non-potable water uses (e.g., irrigation); and/or
  - NAPL with Micro-scale Mobility remains at a site at any depth.



# Process for Finalizing Guidance

- Interim Guidance released for public review March 1, 2024; comment period ended June 5, 2024
- Incorporates comments received on the 2014 public review draft and the 2024 MCP amendments; provides clarifications based on program experience
- **Final** AUL Guidance addresses comments received on 2024 Interim Guidance



# Comments Received

- **Clarifications & Edits:** Most comments led to language clarification or editorial revisions only
- **Substantive Changes:** A few comments resulted in more substantive revisions
- **Summary of Response to Comments:** All comments received, and the summary will be posted on BWSC webpage



# AULs at Mixed-Use Properties

- **Issue:** Sites with vapor intrusion issues where AUL differentiates between “zones” (e.g., commercial on ground floor, residential above) - *Section 2.6.3*
- **Comment:** Prohibiting or discouraging mixed-use AULs is overly restrictive
- **Response:** The new language aims to highlight this issue and related concerns; comments prompted rewording
- **Action:** Revised to clarify that mixed-use AUL must demonstrate that a condition of NSR is met for all distinct uses/receptors, in accordance with the MCP



# Table 2-1: Common Exposure Assumptions/AUL Conditions

- **Issue:** Table in Section 2 (Risk Characterization) provides examples of common scenarios in a quick reference tool to be used alongside the Guidance – *Section 2.10*
- **Comment:** Sub-slab gas example suggests that an AUL is required whenever VOCs are detected beneath a slab
- **Response:** We acknowledge that this example may be misleading due to its brevity
- **Action:** Revised to incorporate suggested language and to ensure alignment with the Vapor Intrusion Guidance



# “Voluntary” AULs

- **Issue:** AULs implemented for scenarios listed in 40.1012(3) & 40.1013 to provide notice of residual contamination when not required by the MCP – *Section 2.4.2*
- **Comment:** Discussion of optional AULs may suggest that they are expected rather than voluntary
- **Response:** The Guidance appropriately outlines the voluntary use of AULs, as permitted by the MCP, but we agreed to add further clarifications
- **Action:** Revised to emphasize that voluntary AULs are not expected and are just one of several options for providing notice, as described in Section 1.6





## Exhibit B – 40.1074(2)(a)5.

- **Issue:** Exhibit B sketch plan must depict the AUL area “in relation to the boundaries of the disposal site” – *Section 4.3.3*
- **Comment:** AUL should not be used to identify disposal site boundaries on neighboring, non-owned properties
- **Response:** While disposal site boundary information is important to the reader, it can be obtained from the site files; we agree that information depicted in the AUL sketch plan regarding disposal site boundaries may be limited to the subject parcel(s)
- **Action:** Revised to clarify that the sketch plan show the AUL area in relation to disposal site boundaries only as they exist within the property boundaries



# Next Steps

- **Document:** Finalize & release AUL guidance document
- **Q&As:** Review and update existing Q&As on AULs; Develop new Q&As as needed and post on BWSC webpage
- **Training:** Conduct AUL training session



# Soil Reuse Policy Update



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**Ken Marra, P.E.**

MassDEP | Bureau of Waste Site Cleanup

# Soils Reuse Update

- COMM-25 Soils Policy currently under review by Commissioner's Office
- Policy would allow reuse of contaminated soils at other 21E sites at levels greater than COMM-15 allows
- Public Review of Draft Policy before finalization
- Major acceptance requirements include (but not limited to):
  - Achievement of a Permanent Solution
  - Public Involvement
  - > 250,000 CY



# Q&A and Wrap Up



**MassDEP**

Commonwealth of Massachusetts  
Department of Environmental Protection

**Millie Garcia-Serrano, MPH**

Assistant Commissioner

MassDEP | Bureau of Waste Site Cleanup

# Next WSC Meetings & Wrap Up

- Office Hours Meeting: **3/20/25**
- WSC Advisory Committee Meeting: **5/22/25**
  - *Hybrid? At MassDEP Offices - 100 Cambridge Center, Boston, MA*



# Thank you from your BWSC Team!

