



# **DISCUSSION:**

## **ISSUES THAT CONFOUND SITE CLEANUP**

Audience participation encouraged!

# Panelists:

**Alex Wardle, USEPA OUST**

**Cassandra Garcia, WA Pollution Liability Insurance Agency**

**Dayna Cordano, CA Water Resources Control Board**

**Debra Thoma, SC Department of Environmental Services**

**Nancy Mann, NE Department of Water, Energy, and Environment**

**Tom Fox, CO Division of Oil & Public Safety**

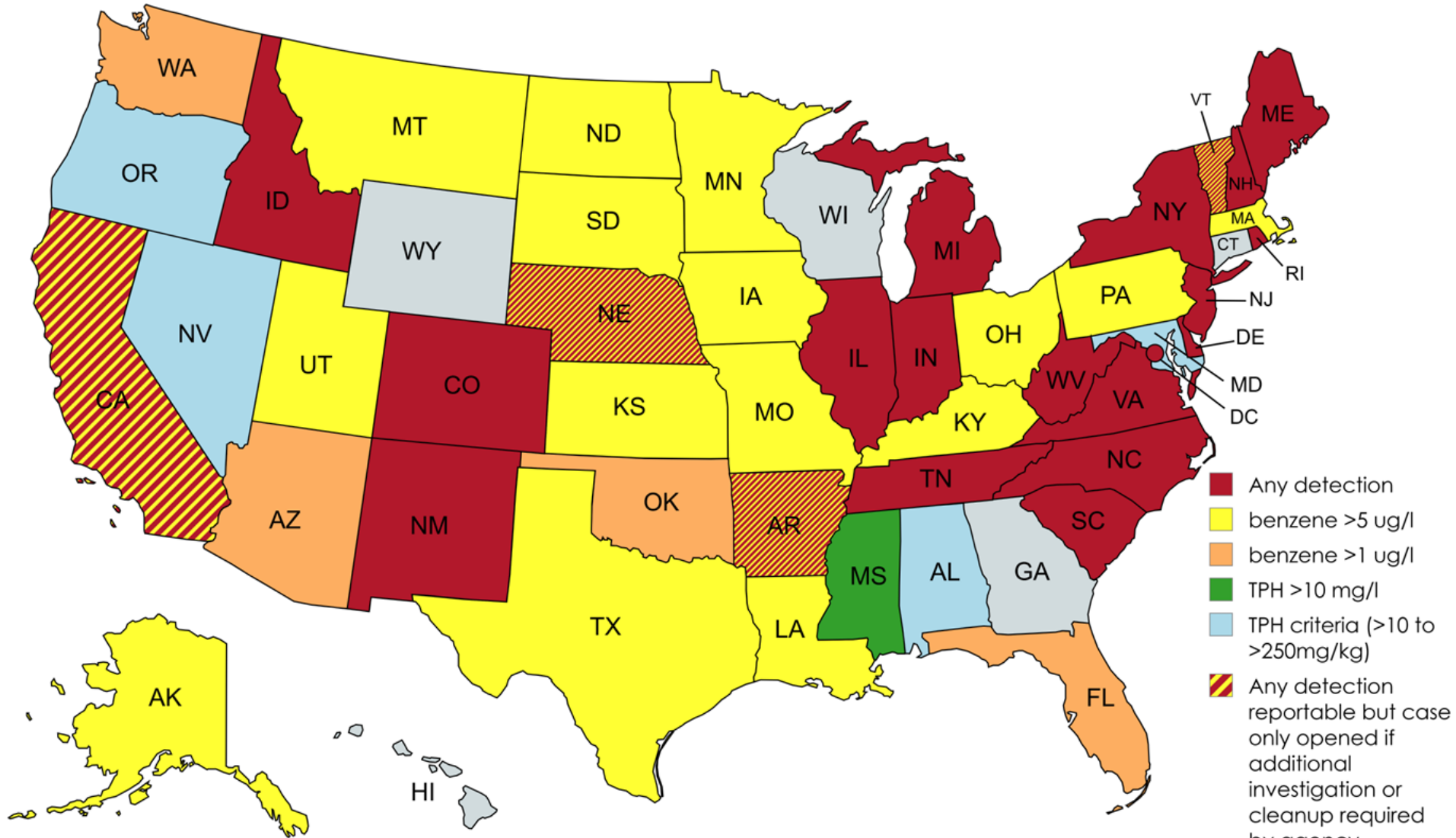




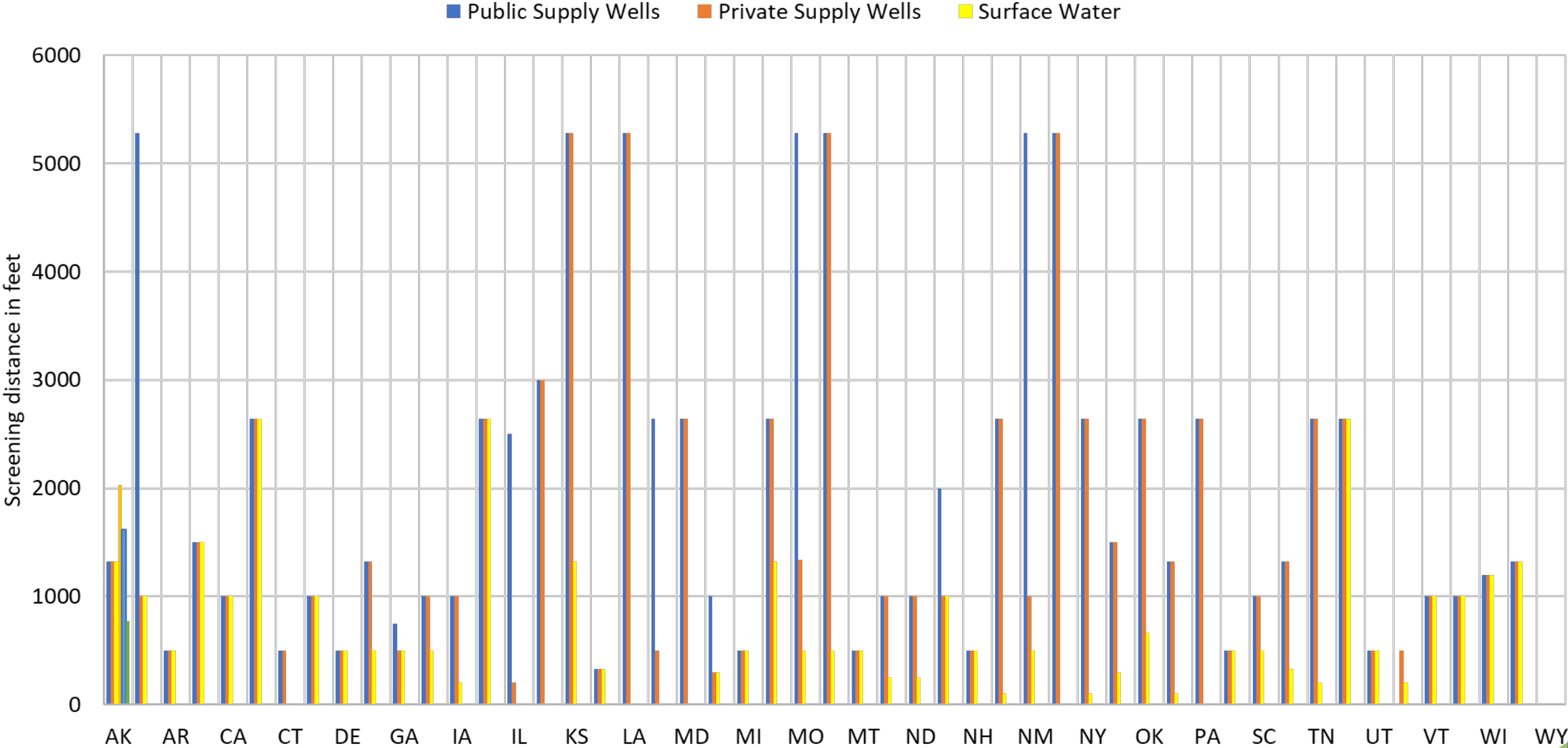
# HAVE A TOPIC?

Bring it up so we can discuss it

# What defines a release case?



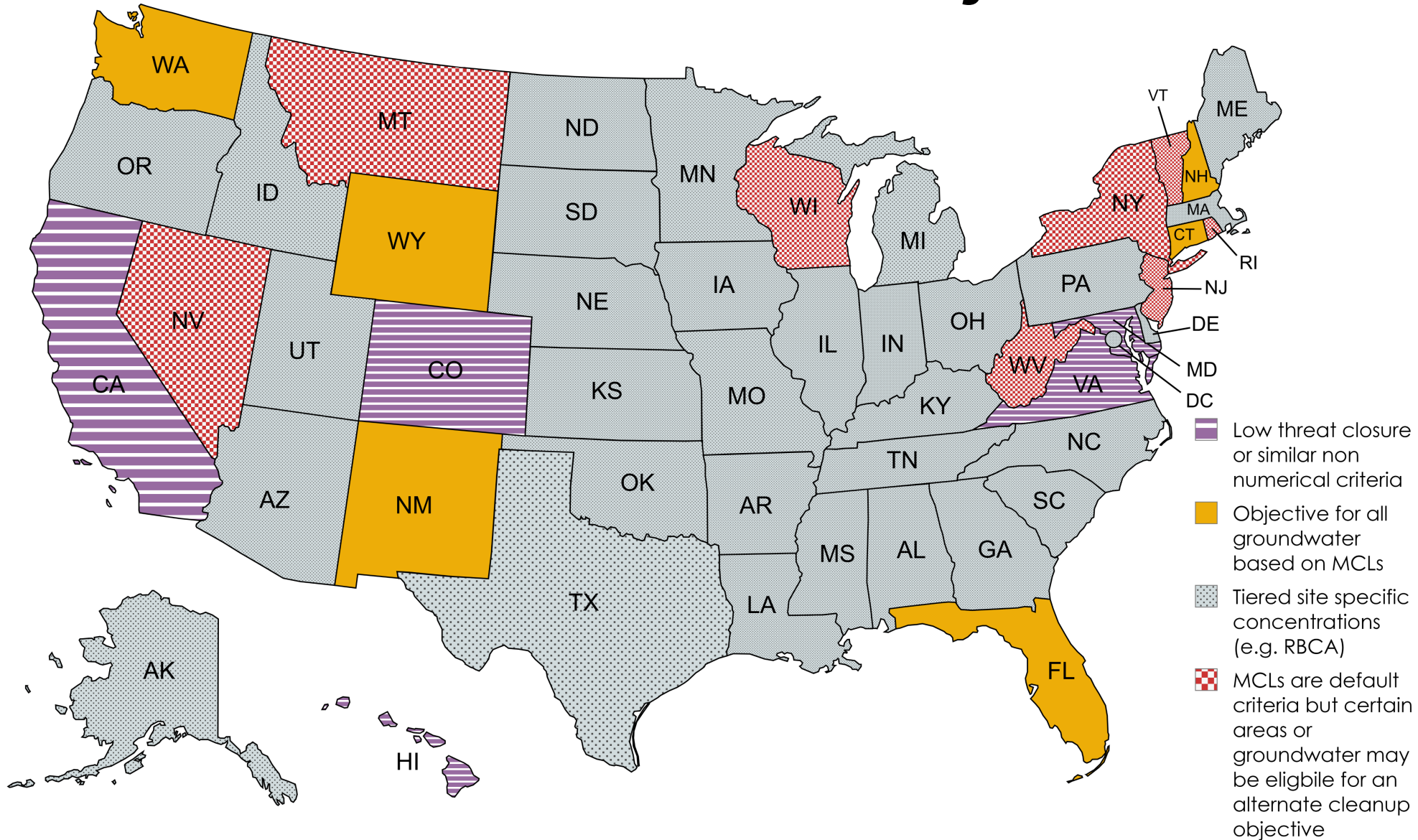
State Screening Distances for Groundwater Investigations



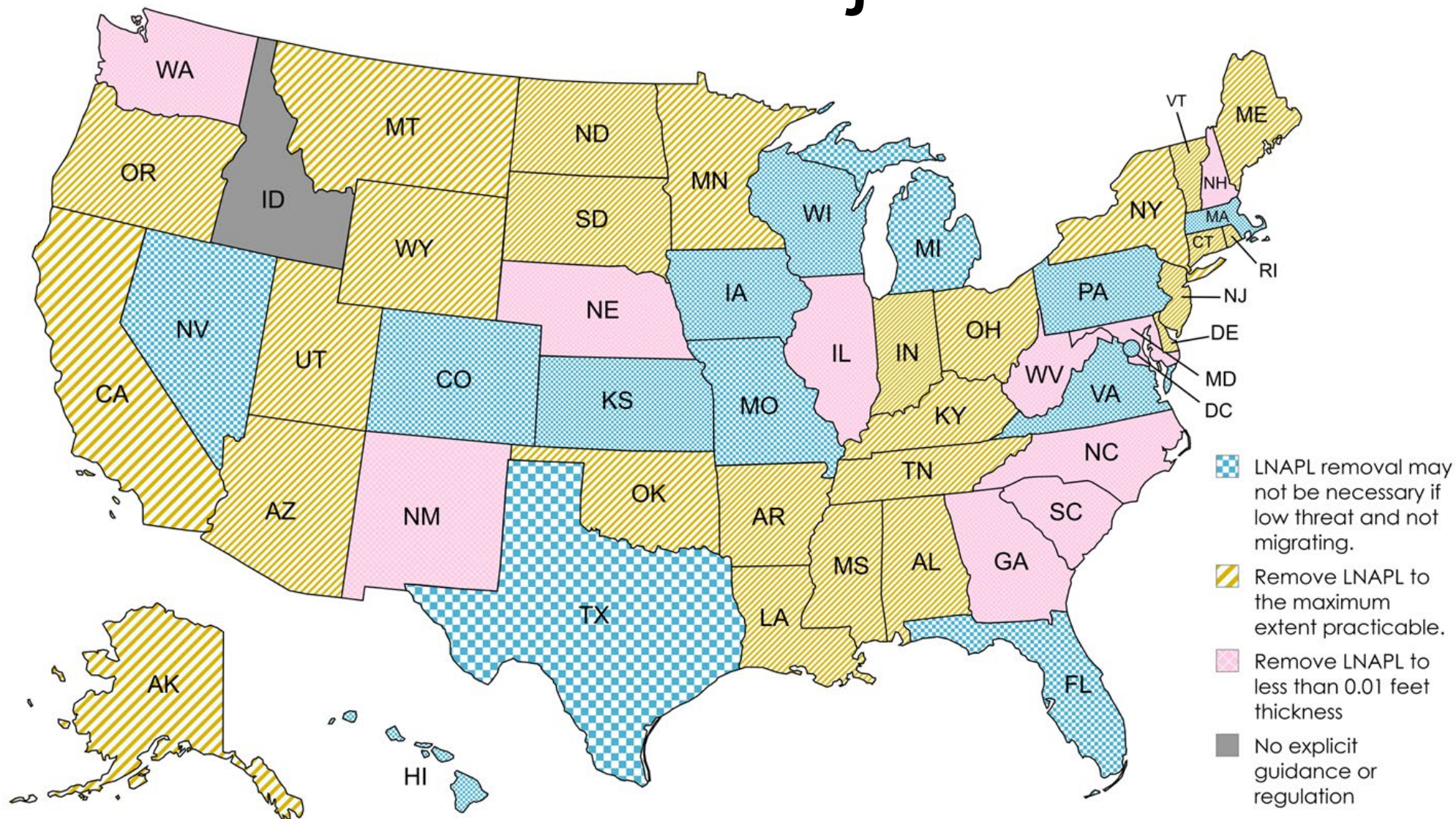
# 1. STATES REQUIRE VARIOUS RECEPTOR SEARCH DISTANCES...

- How and why does this essential risk factor vary?
- Is the area tailored to reflect regional flows or simply a circle around a site?
- Do differing aquifers, well construction methods and materials, urban versus rural areas, and surface water uses play a role in receptor identification?
- Is future use a consideration (how far into the future)?

# Groundwater Objectives



# LNAPL Objectives



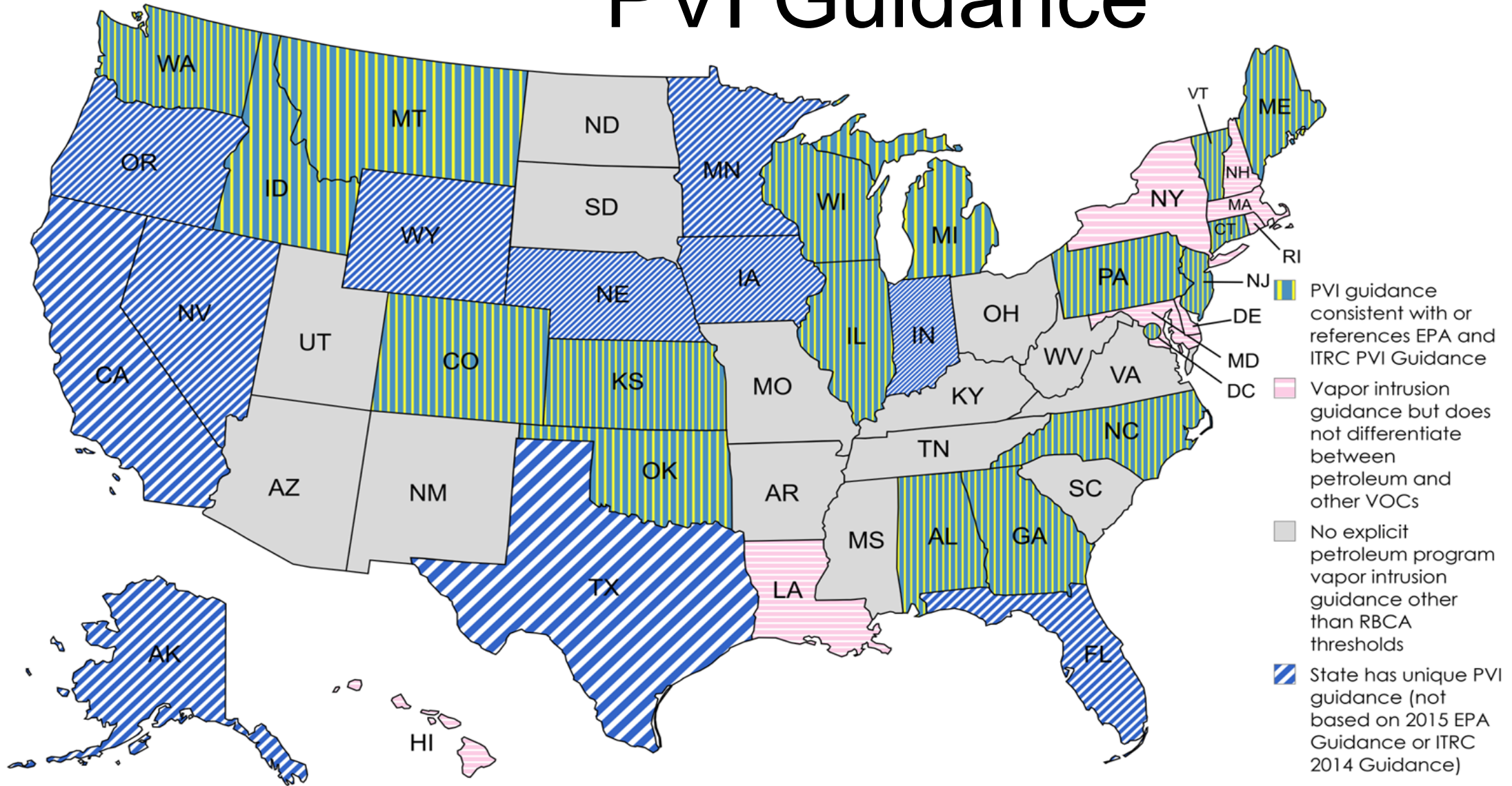
## **2. HOW DO STATES INTERPRET MAXIMUM EXTENT PRACTICABLE (MEP) FOR SITE CLOSURE?**

- What factors do states consider when determining MEP, and what "weighting" is assigned?
- When is enough enough?
- If closure criteria are not met, what additional steps are taken to advance the site toward closure?

# 3. OVERLAPPING PLUMES

- What methods do states use or accept to differentiate overlapping releases? Or sources / ages on one site?
- When multiple Responsible Parties (RPs) are identified, how do states apportion responsibility? What if no RP can be identified?
- What criteria are applied (analyses, hydrogeology), and what success has been achieved?
- Has HRSC been used successfully at such sites to answer this question?

# PVI Guidance



## **4. HOW DOES YOUR STATE ASSESS PETROLEUM VAPOR INTRUSION (PVI)?**

- Is EPA's VISL table used?
- Do you account for biodegradation? Vary the attenuation factor?
- Are RBSLs set, or is modeling allowed (PVI Screen, Biovapor)?
- How are you assessing conduits / backfill for contamination to avoid utility damage?
- Do you have examples of cases where utility backfill was documented as a PVI pathway?
- Do you have community engagement materials available for use?

## **5. WHEN A WATER SUPPLY BECOMES CONTAMINATED OR PVI MITIGATION IS STARTED...**

- How does the state respond if / when the RP is not able to financially address the situation?
- Or if the RP dies or becomes defunct?
- What is a typical 'exit plan'?

## **6. IS CLOSURE WITH CONTAMINATION OFFSITE AN ALTERNATIVE?**

- Does any state NOT allow it, and why?
- What restrictions (no LNAPL, minimum depth, F&T modeling, etc.)?
- How are property owners notified (notification, public meeting)?
- Can they object based on non-RBCA issues?
- If deed notifications / restrictions... the process in your state?
- If closed, how / when is a site re-opened?

# 7. WHAT IS THE IMPACT OF PFAS ON YOUR PETROLEUM PROGRAM?

- Do you anticipate it will have an impact?
- Are you required to sample for it?
- What about other contaminants (metals, CVOCs, etc.)?
- Is it affecting waste disposal? (maybe become hazardous?)
- Is analysis/disposal reimbursable under your state fund?