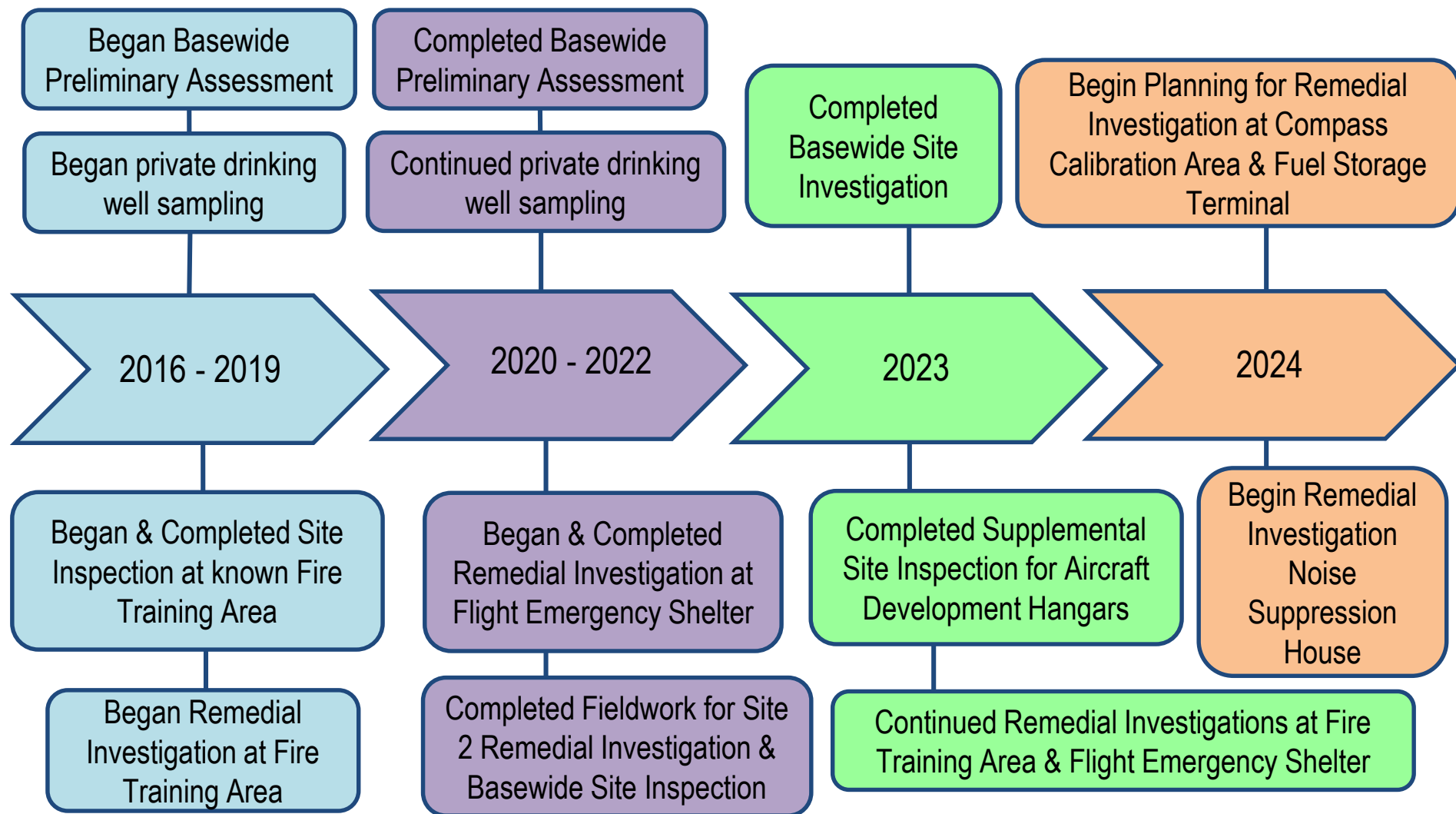


PFAS Criteria & Previous RAB Questions

**Presented by:
NAVFAC Mid-Atlantic
06 December 2023**

Timeline of PFAS Investigations



• Drinking Water Health Advisories

- Provide technical information to states and other public health officials on health effects, analytical methodologies, and treatment technologies
- Not legally enforceable
- **May 2016** - EPA established drinking water lifetime health advisories:
 - 70 parts per trillion (ppt) for PFOA & PFOS
 - Value currently used by DoD for private drinking water investigations
- **June 2022** - EPA issued new health advisories:
 - Interim for PFOA & PFOS
 - Non-regulatory
 - Levels are below detectable limits
 - The DoD is looking to EPA to finalize a regulatory drinking water standard

**2016 Health
Advisory is 70 ppt
for PFOA & PFOS**

PFAS Criteria – Maximum Contaminant Levels



• Drinking Water Maximum Contaminant Levels (MCLs)

- Highest level of a contaminant that is allowed in public water supplies are legally enforceable
- Public water supply standards and not groundwater standards.
- Not used for environmental investigations
- Federal MCLs have been proposed but not finalized

Agency	PFAS	Value
NYSDEC/NYSDOH (final)	PFOA & PFOS	10 ppt
EPA (proposed)	PFOA & PFOS	4 ppt
EPA (proposed)	PFNA, PFHxS, PFBS, & HFPO-DA (Gen X)	1 (unitless) Hazard Index*

*The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures.

Maximum Contaminant Levels will be evaluated as Applicable and Relevant and Appropriate Requirements (ARARs) at the Feasibility Study (FS) phase of the CERCLA Process.

**NY MCL is
10 ppt for PFOA &
PFOS**

March 2023 Proposed EPA Regulations



- **Proposed regulation does not require any action until finalized**

EPA requested public comment on the proposed regulation which ended on May 30, 2023.

The public docket can be accessed at www.regulations.gov
Docket ID: EPA-HQ-OW-2022-0114.

- DoD respects and values the public comment process on this proposed nationwide drinking water rule and looks forward to the clarity that a final regulatory drinking water standard for PFAS will provide.
- In anticipation of the final standard that EPA expects to publish by the end of 2023, the Department is assessing what actions DoD can take to be prepared to incorporate EPA's final regulatory standard into our current cleanup process, such as reviewing our existing data and conducting additional sampling where necessary.
- In addition, DoD will incorporate nationwide PFAS cleanup guidance, issued by EPA and applicable to all owners and operators under the federal cleanup law, as to when to provide alternate water when PFAS are present.

PFAS Criteria – Regional Screening Levels



• Environmental Regional Screening Levels (RSLs)

- Screening levels are used to eliminate areas where risks are very low and no further action is needed
- DoD uses Regional Screening Levels:
 - SI phase: to determine if further investigation of PFAS in the Remedial Investigation (RI) phase is needed or if no further PFAS investigation is required
 - RI phase: to apply toxicity values from the RSL table for PFAS to conduct site-specific risk assessments to determine if clean up needed or not
- **May 2022, May & Nov. 2023** – EPA published Regional Screening Levels
 - Designed to be protective
 - Guide for investigation

**RSLs are 6 ppt
for PFOA &
4 ppt for PFOS**

PFAS Criteria – NY Guidance Values



• NY Guidance Values (GV)

- Protective of ambient waters
- Incorporated into requirements for industrial discharges and provide complementary protection of ambient waters used as drinking water sources
- Three types were issued: Health (water source), Aquatic (acute), & Aquatic (chronic)
- March 2023 – NY issued Guidance Values for Health & Aquatic

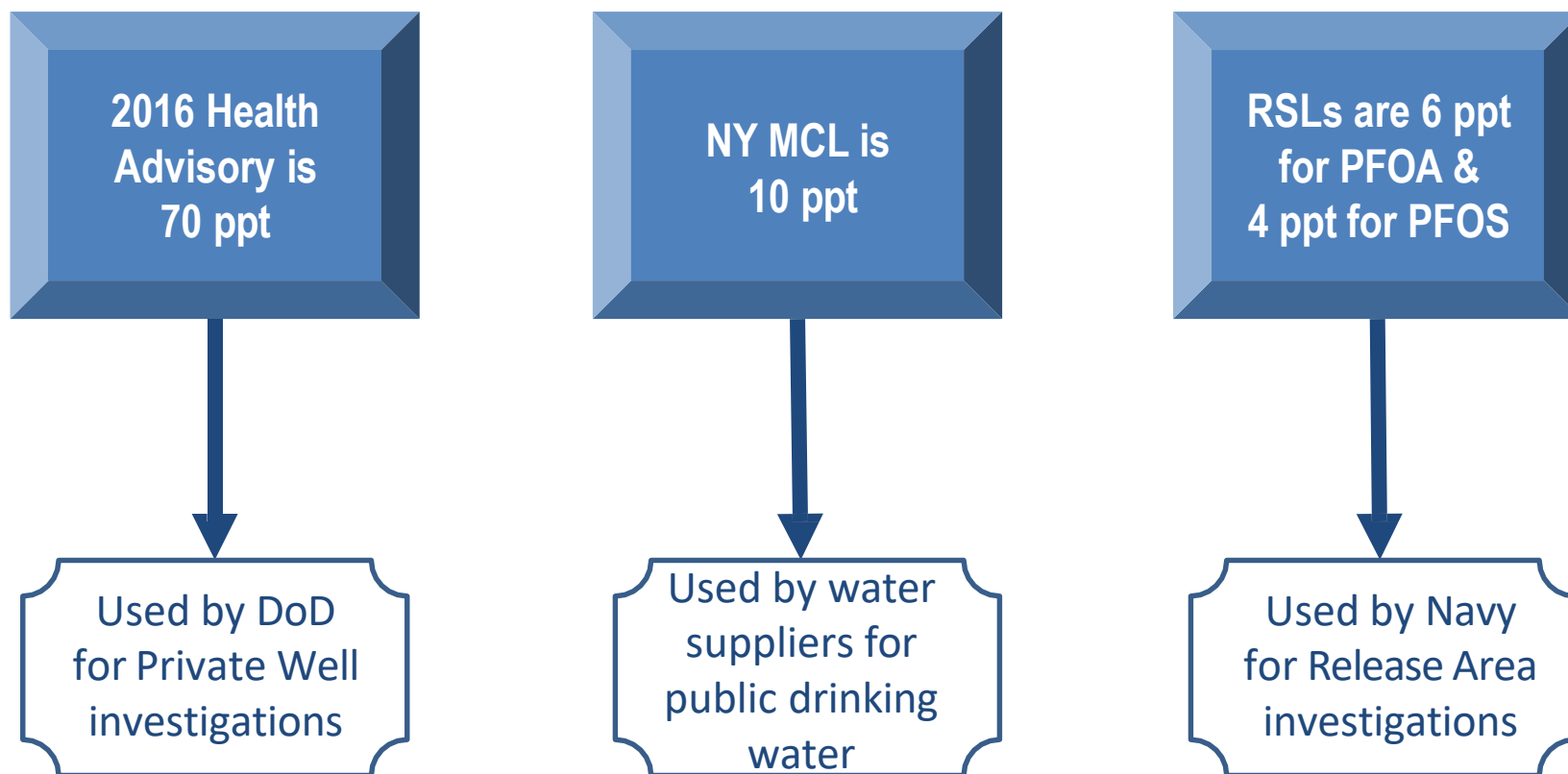
NYSDEC Ambient Water Quality Guidance Values will be evaluated as Applicable and Relevant and Appropriate Requirements (ARARs) at the Feasibility Study (FS) phase of the CERCLA Process.

**GVs are 6.7 ppt
for PFOA & 2.7
ppt for PFOS**

PFAS Criteria – Summary



PFAS are considered “emerging” and not yet federally regulated



Health Advisories & MCL values are for PFOA & PFOS

Previous RAB Questions



- **Why isn't the Navy using the NY MCL for Release Area Investigations?**

- MCLs are applicable to water suppliers and not used for delineation
- MCLs are not clean up values
- Navy is using the EPA RSLs for Release Area investigations
 - RSLs are 6 ppt for PFOA & 4 ppt for PFOS
 - NY MCL is 10 ppt for PFOA & PFOS

- **Why are the Project Screening Levels lower than the 2016 Health Advisories?**

- Screening levels are used to eliminate areas where risks are very low and no further action is needed
- Health advisories look at contaminant exposure over a period of time (lifetime)

- **When do the most recent proposed EPA MCLs come into effect?**

- These will not be in effect until finalized (expected early next year)



RAB Questions: PFAS Sampling Methods



- Sampling for PFAS in private wells has been conducted by the Navy from 2018 to present
 - Because PFAS are emerging chemicals, EPA methods & detection limits have improved throughout this duration

Selected Detection Limits (ppt):

PFAS	2018 EPA Method 537	2019 EPA Method 537	2020 EPA Method 537.1
PFOA	2.86 to 3.04	0.18 to 0.2	0.17
PFOS		0.13 to 0.15	0.13
PFNA		0.11 to 0.12	0.1



RAB Questions: PFAS Surface Water PSLs



- Do the Surface Water Project Screening Level (PSL) include the toxicity to fish? Does it protect human health consumption for eating fish?
 - The Site Inspection evaluated human health exposures to various media – not including fish or fish consumption
 - Swimming and incidental ingestion scenarios were evaluated
 - Separate surface water values will be calculated/used based on site specific conditions and exposure routes in the upcoming Remedial Investigations

The DOH conducts its own fish assessments and the DoD shares data and conclusions with the state.



RAB Questions: Development at Former Property



- Will the development at the former Grumman facility release more PFAS to the environment and what is the Navy's Role?
 - Contamination:
 - Soils – there are no PFAS detections in soils of the transferred Town of Riverhead property (along the Eastern & Western runways)
 - Groundwater - Approximately 32-37 feet under the surface.
 - Navy's Role:
 - Once property is transferred from the Navy, the Navy plays no role in determining future uses of that property
 - Regardless of future use or development, the Navy remains committed to conducting clean up at Calverton



Questions

