Planning and preparation for emergency response in the PNW

Public and private industry working together for effective emergency response

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MONTROSE ENVIRONMENTAL

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Meet the Speakers

Angie Perez

- PhD, Toxicology, Oregon State University
- Certified Industrial Hygienist
- Qualified Safety Officer (NIMS E/L 0954)
- Active Region 10 Regional Response Team
- Spill Management Team Certified, WA Dept. of Ecology, Cal OSPR

Kyrion Gray

- MS, Environmental Science, Loyola Marymount University
- High Hazard Rail Planner, ODEQ
- Marine Science Technician, USCG (3 years Deep Water Horizon)
- 11 years as an EMT

Outline of Today's Presentation

- Planning
  - Development of plans
  - Drills and exercises
  - Maintenance and upkeep of plans
- Response
  - Creating a COP (Common Operating Picture)
  - CAM (Community Air Monitoring)
- Conclusions and recommendations

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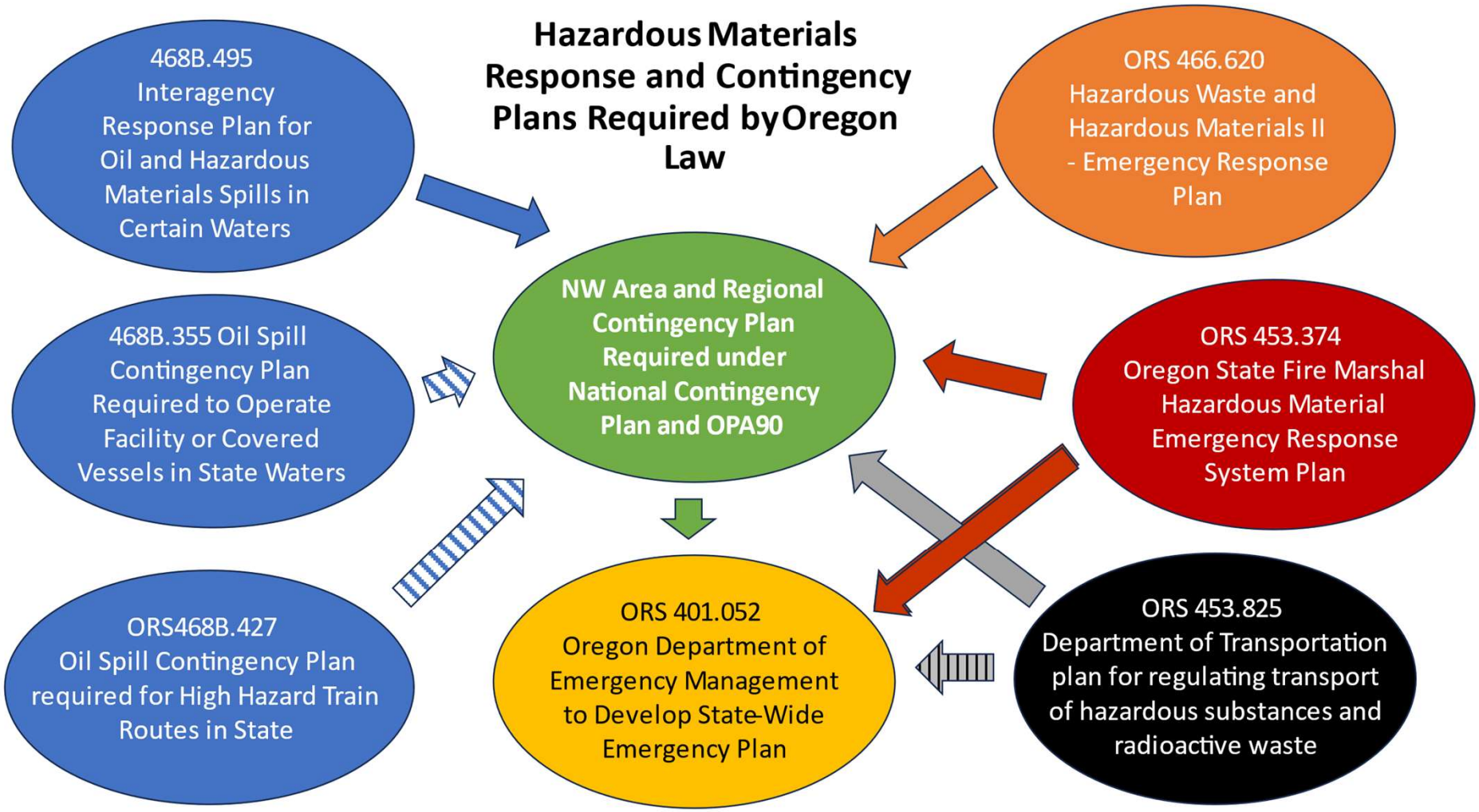
Planning



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Development of Response Plans

- Northwest Area Contingency Plan
- NWACP

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Development of Response Plans

- Community Input
- Industry collaboration
- Tribal interests
- SHPO – Inadvertent Discovery
- Community air monitoring and sampling

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Community Air Monitoring Plan (CAMP)

- Major updates to the plan guidance in 2020
- Developed based on the potential hazard
- Adapted and updated for initial response, sustained response, and demobilization periods

9418

Emergency Response Community Air Monitoring

9418.1 Introduction

Airborne contaminants, at an incident, can present a potential threat to both site workers and surrounding communities. In particular, high consequence areas (HCAs; e.g., densely populated) or sensitive groups (i.e., people with heart and lung diseases/conditions, older adults and children, hospital patients, etc.) who are at greater risk from the presence of vapors or particles in the air can be adversely impacted by such threats. As such, identification and quantification of these contaminants through air monitoring and sampling is an essential component of protecting human health. Reliable measurements of airborne contaminants are useful for:

- Characterizing airborne threats,
- Delineating areas where protection or evacuation is needed,
- Assessing the potential health effects of exposure, and
- Determining the need for additional monitoring.

Air monitoring in the communities surrounding an incident should be considered when:

- Chemicals, airborne contaminants, and/or smoke are anticipated to impact communities;
- Volatile chemicals have been or may be released; and
- Sensitive populations are in close proximity to a release site or airborne contaminants are at a level that impacts healthy populations.

The purpose of community air monitoring (CAM) during emergencies is to both identify and quantify the airborne contaminant and use these results as a baseline to determine the optimum level of protection needed for the surrounding community.

9418.2 Scope

This document is intended to be used as a tool to assist emergency responders in establishing a CAM program during an emergency response.

Change 21
January 1, 2020

Drills and Exercises

Test the Plans

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Drills and Exercises

Test the Plans

This is a drill

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Practice like you will play

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Drills and Exercises

Build Relationships

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Maintenance and Upkeep of Plans

- Points of contact need to be maintained and continually updated
- Renewal cycle of 5 years for most C-plans
- Learn from drills and exercises
  - Continually evolve and learn to ensure an efficient and rapid response

Maintenance and Upkeep of Plans

- Example: Health-based screening or guidance values for chemicals may change.
  - Benzene
  - In 2022, ACGIH proposed to change their TLV from 0.5 ppm to 0.02 ppm and STEL to 0.1 based on revised sensitive health effect endpoint.
  - Change has not been enacted as of today.

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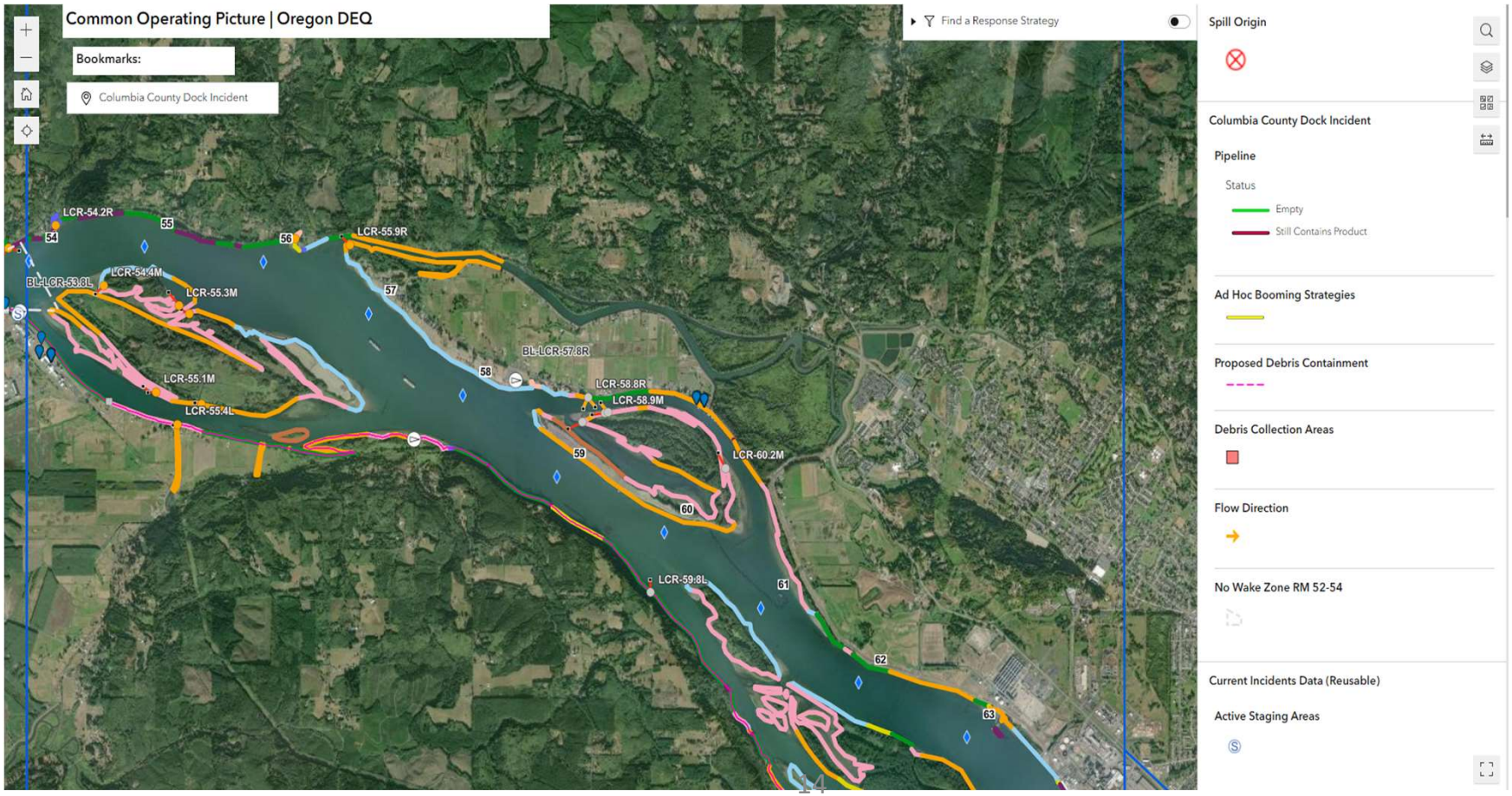
Response

Common Operating Picture (COP)

- Incredibly helpful for participants within the Incident Command.
- Snapshot of the incident



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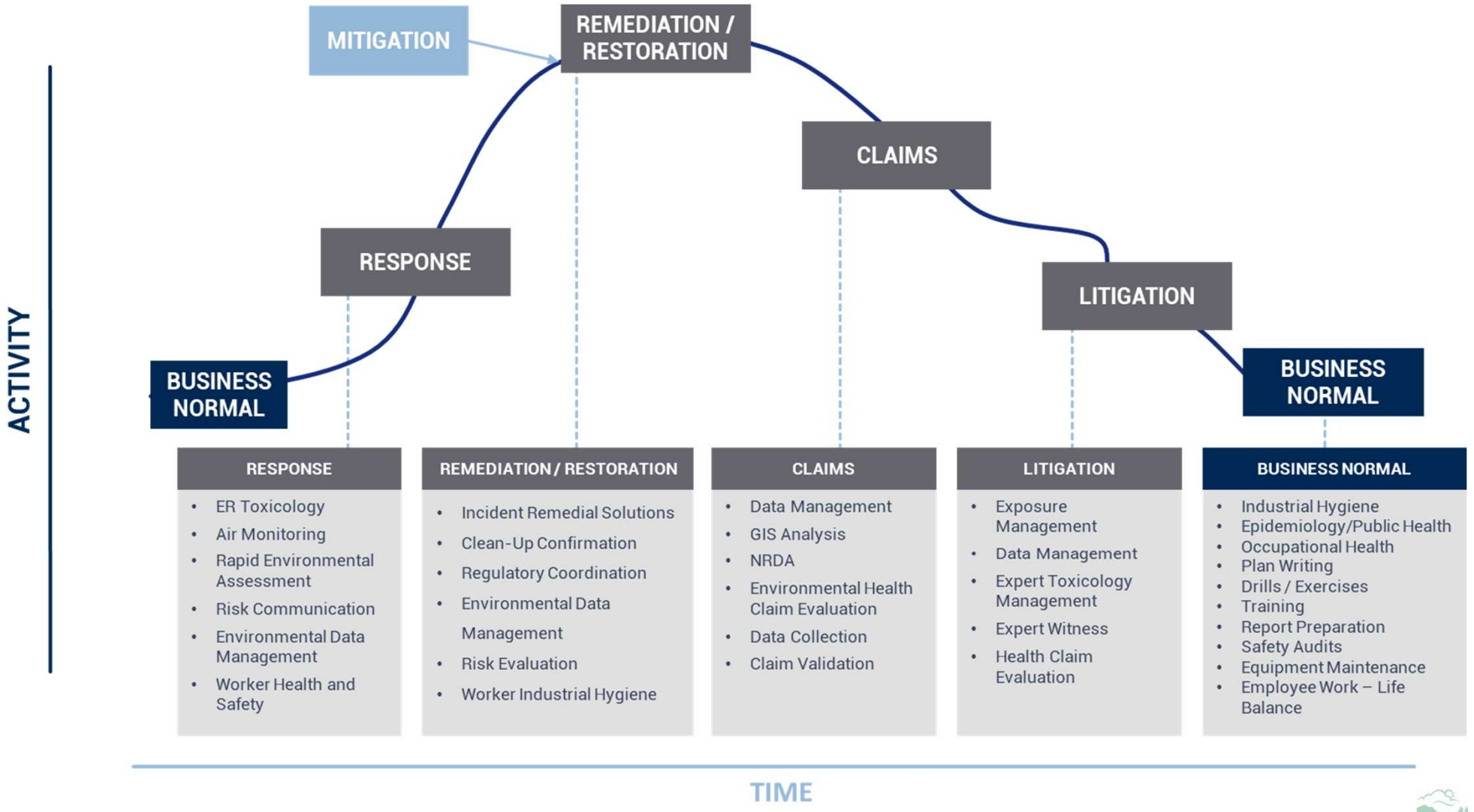
Response – ER Project Lifecycle



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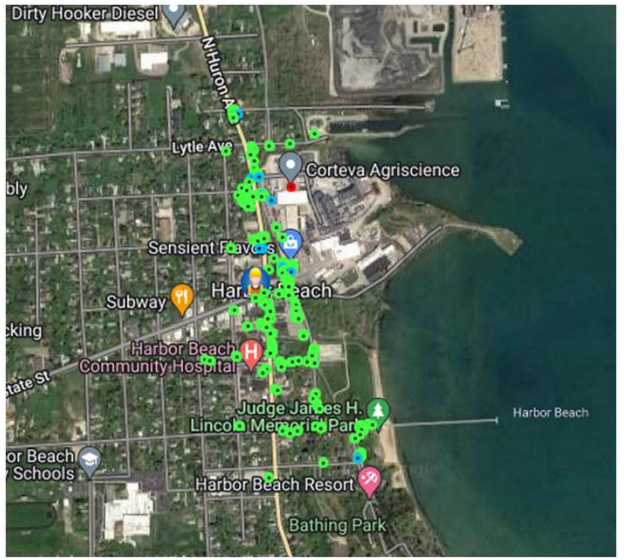
Response – Data Management & Sharing

- Intelligent data is actionable, reproducible, and defensible

- Cast a wide net, then narrow scope
- Data sharing is critical in an ER
  - CTEH works with EPA Regions 9 and 10 to integrate data into SitStat
  - Laboratory relationships permit TAT of hours versus days
  - Data are transparent and have a traceable record



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Response

Risk communication and messaging

– Internal and external messaging

– Social media

- Unified voice is critical
- Educate the public
- Official messaging vs. the "REO Speedwagon" messaging … *"Heard it from a friend who, Heard it from a friend who Heard it from another…"*

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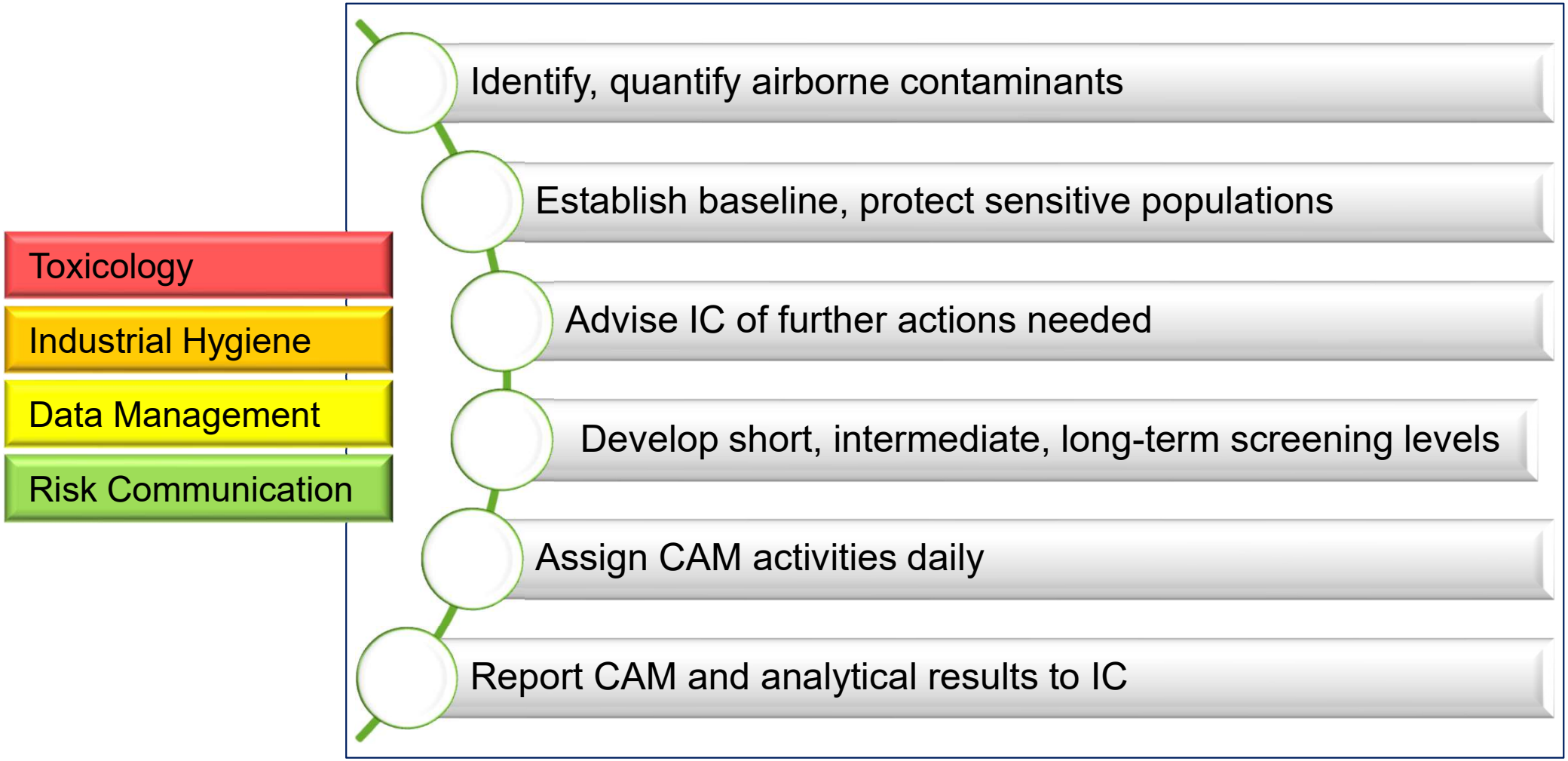
Response – Common Messaging

Makes or breaks a response!

1. Have a plan
2. Start small
3. Grab a partner
4. Become familiar
5. Be consistent

Community Air Monitoring Plan



Response – Community Air Monitoring Plan

- Recent incidents show the importance of CAM
- CAMP is now required under the NWACP
  - *Additional values*
  - *Roving vs. stationary*
  - *Use of technology*
  - *Use of modeling*
  - *Environmental Justice Concerns*

USEPA Environmental Justice Screening and Mapping Tool
https://www.epa.gov/ejscreen

Oregon Environmental Justice Council
HB 4077 – EJ Mapping Tool – IN DEVELOPMENT
https://www.oregon.gov/gov/policies/pages/environmental-justice-council.aspx

Washington State Environmental Health Disparities Map
https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/washington-environmental-health-disparities-map

CalEnviroScreen Mapping Tool
CalEnviroScreen | OEHHA

Conclusions and Recommendations

- Become familiar with NWACP
- Know the “players” and build relationships
- Understand the basics of ICS
- Reach out!

“Plan for what is difficult while it is easy, do what is great while it is small”

-Sun Tzu

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Questions

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