



# Cobalt Magnet Radiation Exercise, Kennedy Space Center 2/25-28/19

Jon Richards, Radiation Advisor,  
RERT, EPA R4

# Objectives

*Cobalt Magnet is a Department of Energy (DOE)/National Nuclear Security Administration (NNSA)-led exercise series that focuses on managing the off-site consequences of a radiological or nuclear incident. The purpose of this exercise series is to validate the concept of operations for inter-agency technical and operational support to State, tribal, territorial and local response to a nuclear or radiological incident. It also allows us to collectively and collaboratively identify any capability gaps and opportunities for improvement response capabilities and finally, it provides an opportunity to establish relationships between response partners prior to an event to help ensure that a common understanding of capabilities exists.*



*As with any DOE/NNSA-led full-scale exercise, Homeland Security Exercise and Evaluation Program (HSEEP) processes and practices are employed for planning, execution and after action reporting. Additionally, DOE/NNSA uses the planning cycle to provide training opportunities for the host locale, including medical management of radiation injuries, dose assessment, field monitoring and sampling, and data management during a radiological emergency.*



# Overarching Exercise Objective

Validate the concept of operations for interagency technical and operational support to State, local, tribal, territorial and response to a nuclear or radiological incident, allowing interagency partners to collectively and collaboratively identify capability gaps and opportunities for improvement to response capabilities. Providing an opportunity to establish relationships between response partners ensuring that a common understanding of capabilities exists.



# CM Objectives

1. Title: ***FRMAC/ EPA RERT Coordination***
2. Objective Description (what you expect the players to do): ***Effective communication and coordination between Consequence Management Home Team and EPA RERT Commander to deploy EPA field assets in support of the FRMAC field activities.***



# CM Objectives

3. What Standards will the players be evaluated by (SOPs, manuals, job aids, task execution, etc.)? ***EPA Radiological Emergency Response Plan (2017) and FRMAC manuals***

4. What staff agency/group will execute this objective (As examples: FRMAC Assessment, Brevard County ESF 14, Advisory Team, etc.) ***Consequence Management Home Team and EPA RERT Commander***



# Florida & County Exercise Objectives

- Ingestion pathway practice for upcoming graded NPP exercises
- Web EOC information sharing across counties
- Strike teams demonstration of cross pollination between state capabilities
- Unified command communications
- RadResponder use for laboratory data and ensuring unified data is available
- Optimize available training and interface opportunities



# NASA Priorities & Benefits

- Onsite reponse team to a unified command structure
- Medical decontamination discussions with REACTS
- Training practice for moving people from onsite to offsite
- Exploring how the DOE RAP team that is already onsite mobilizes to support offsite response
- Investigating how RAP can support the onsite response
- Exploring the data incorporation and uses that would be collected from the 30 ECAMS





# EPA Objectives

## **EPA Exercise Priorities and Benefits:**

- Observing the best method to ensure that the already existing pre-launch JIC would have DOE and EPA support for its continued operations.
- Incorporation of field teams into the response
- Developing a sampling plan to support the response and recovery efforts
- Explore the most effective methods to share data.

## **Advisory Team Exercise Priorities and Benefits:**

- Test updated guidance documents for the activation process
- Ensure appropriate Integration into the response activities
- Provide uniform, and consistent answers and recommendations
- Explore the most effective use of team members, including placement on site and offsite staff.



# Environmental Protection Agency

## Assets

- Radiological Emergency Response Team
- National Analytical Radiation Environmental Laboratory
- RadNet
- Mobile Environmental Radiological Laboratory
- ASPECT aircraft
- On-scene coordinators
- Public Information Officers

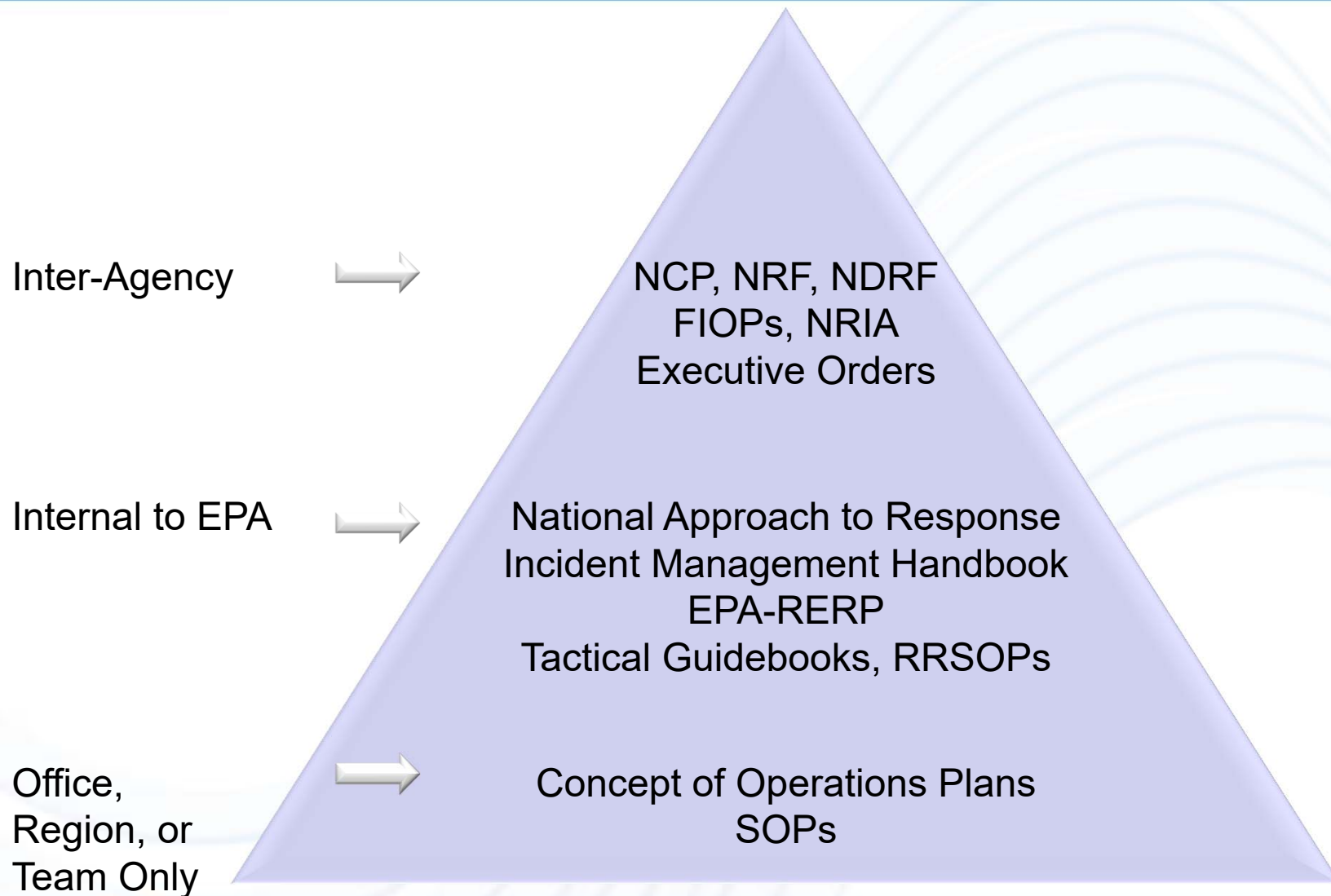
## Capabilities

- Monitoring and sampling
  - Field
  - Aerial
- Fixed and field laboratory analysis
- Wide-area monitoring
- Dose assessment
- Advise and support remediation
- Provide PAG advice -- A-Team
- Mixed hazard expertise
- Public messaging

## How to Activate:

- National Response Center
- EPA regional offices
- EPA HQ EOC
- **NCRFO Field Assets**

# Layered Approach



# CERCLA at NPPs

2000 EPA-RERP states that CERCLA cannot be used at NRC-licensed Nuclear Power Plants

- Based on definition of “release” in CERCLA
- Excludes certain substances covered by financial assurance provisions in NRC regulations (Price-Anderson Act)

OSCs were instructed not to respond to incidents at NRC-licensed Nuclear Power Plants

RERT expected to respond under existing radiation protection authorities



# 2016 EPA-RERP Guidance on Nuclear Power Plant Incident Authorities

Stafford Act

CERCLA

- Use CERCLA's investigative authority
- Determine extent of excluded substances
- Consult with OEM HQ
- Address commingled contamination

Public Health Service Act/Atomic Energy Act



# OAR/OLEM Description of Responsibilities

2000 EPA-RERP

Pre-“Ruby Slippers” Memo

Fukushima

2016 EPA-RERP



# 2015 EPA-RERP Scenario 1

## Scenario 1

- Impacts one or more sites within U.S.
- OLEM/OEM is EPA's response lead
- OSC leads the EPA response
- Special Teams support response
- ORIA provides the Senior EPA Representative in the FRMAC

Example: Las Conchas Fires (2011)



# 2015 EPA-RERP Scenario 2

## Scenario 2

- Does not create a specific site within U.S.
- OAR/ORIA and OLEM/OEM are EPA's response co-leads
- Limited field activities expected (no "Incident Commander")
- ORIA conducts sampling, deployment of RadNet Deployables

Example: Fukushima (2011)

