

# **Headquarters U.S. Air Force**

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*Integrity - Service - Excellence*

## **Performance-Based Management** *of the Air Force Environmental Restoration Program*



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**U.S. AIR FORCE**

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# Overview

- PBM Definitions
- PBM Strategies & Components
- What is PBM
- Implementation
- Benefits
- Completion Strategy
- Summary



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# ***PBM Definition***

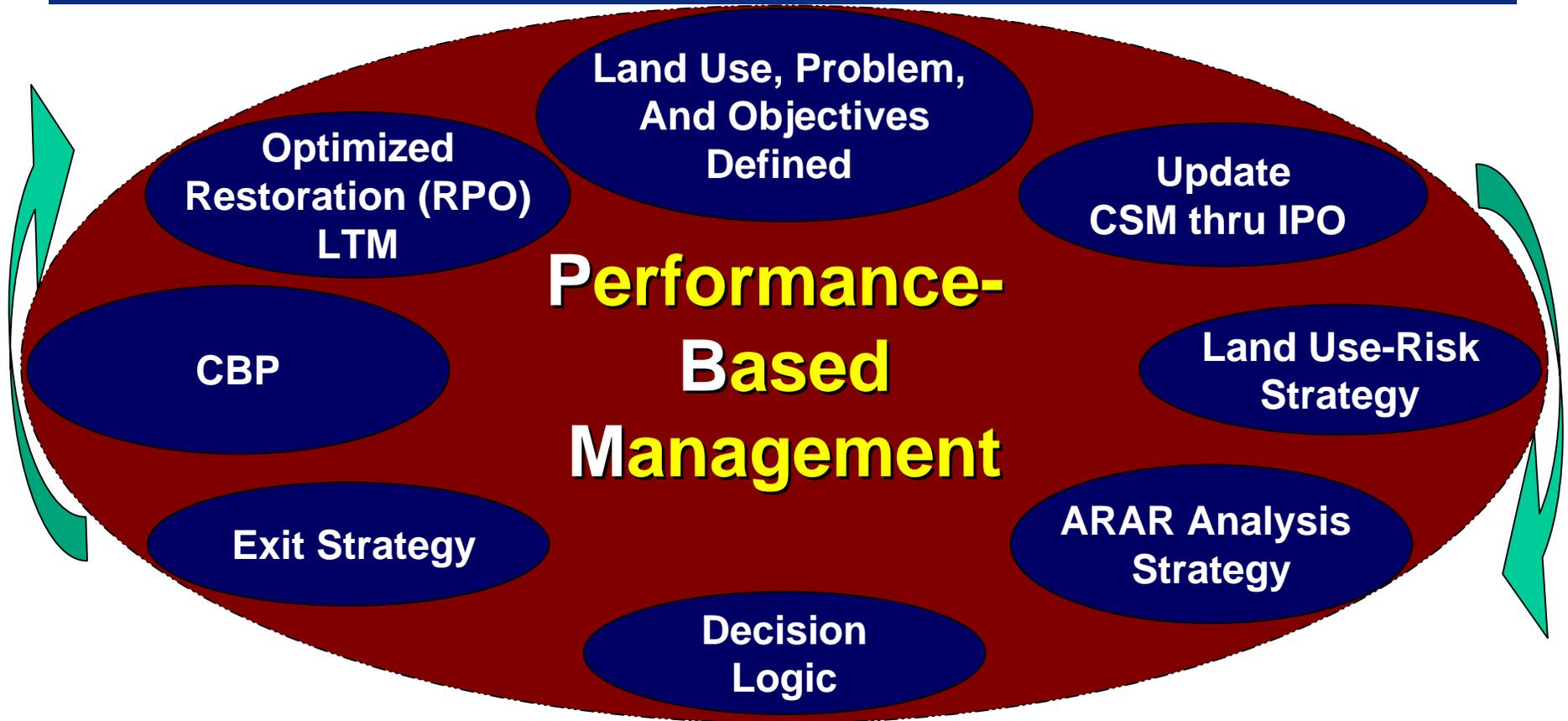
## **Performance-Based Management Of the USAF Environmental Restoration Program**

- **A holistic and systematic results-based planning to manage uncertainty of the restoration program to expedite closure through the incorporation of:**
  - **Clear and accurate definition of the *environmental problem***
  - **Identification of *stakeholders objectives***
  - **Investigations and studies per *Triad guidance***
  - **Updated and accurate *conceptual site model (CSM)***
  - **Established *exit strategy***
  - **Development/Implementation of *decision logic & analyses***
  - **Identification & Tracking of *performance-based Metrics***
  - **Services procured through *results-based contracts***



# PBM Strategies

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Long-Term Monitoring (LTM)	-	Conceptual Site Model (CSM)
Contracts based on Performance (CBP)	-	Restoration Program Optimization (RPO)
Investigation Process Optimization (IPO) [Triad equivalent]		
Applicable or relevant and appropriate requirements (ARAR)		



# ***PBM + RPO***

## ***Assessment Components***

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- ① Evaluate **understanding** of problem and objectives
- ② Evaluate accuracy of **Conceptual Site Model (CSM)**
- ③ Verify application of **TRIAD approach** to studies and investigations
- ④ Determine appropriateness and consistency of current **Data Quality Objectives (DQOs)** and **Remedial Action Objectives (RAOs)**
- ⑤ Establish/review **decision logic**, and **performance metrics** for continuous assessment of Remedial Action Operations (RA-O) & Long Term monitoring (LTM)



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# ***PBM + RPO Assessment Components***

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- ⑥ Develop and update the exit strategy to assess the potential for the remedial design and/or remedial action to meet RAOs**
- ⑦ User-friendly-access to streamlined and standardized database(s) to archive & track systems performance**
- ⑧ Use Results-Based Contracting to promote accelerated completion without compromising risk**
- ⑨ Create incentives that promote accelerated completion of tasks**
- ⑩ Assess impact of the remedial action on human health and the environment**



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# *What does PBM do*

- Shifts the focus onto **results-attained** rather than **steps completed**
- Promotes establishing a realistic **exit strategy**
- Emphasis on **smarter, faster ways to achieve site characterization and Response Complete**
- Promotes implementation of innovative **alternate contracting**
- **Implements RPO** to optimize the Installation's Restoration Program
- **Helps** stakeholders understand that:
  - It is in DoD's best interest to clean IRP sites
  - Cleanup resources are limited
  - Cleanup has an impact on the environment
  - Remedial actions carry their own risks to human health



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# ***PBM Institutionalizes Existing Processes***

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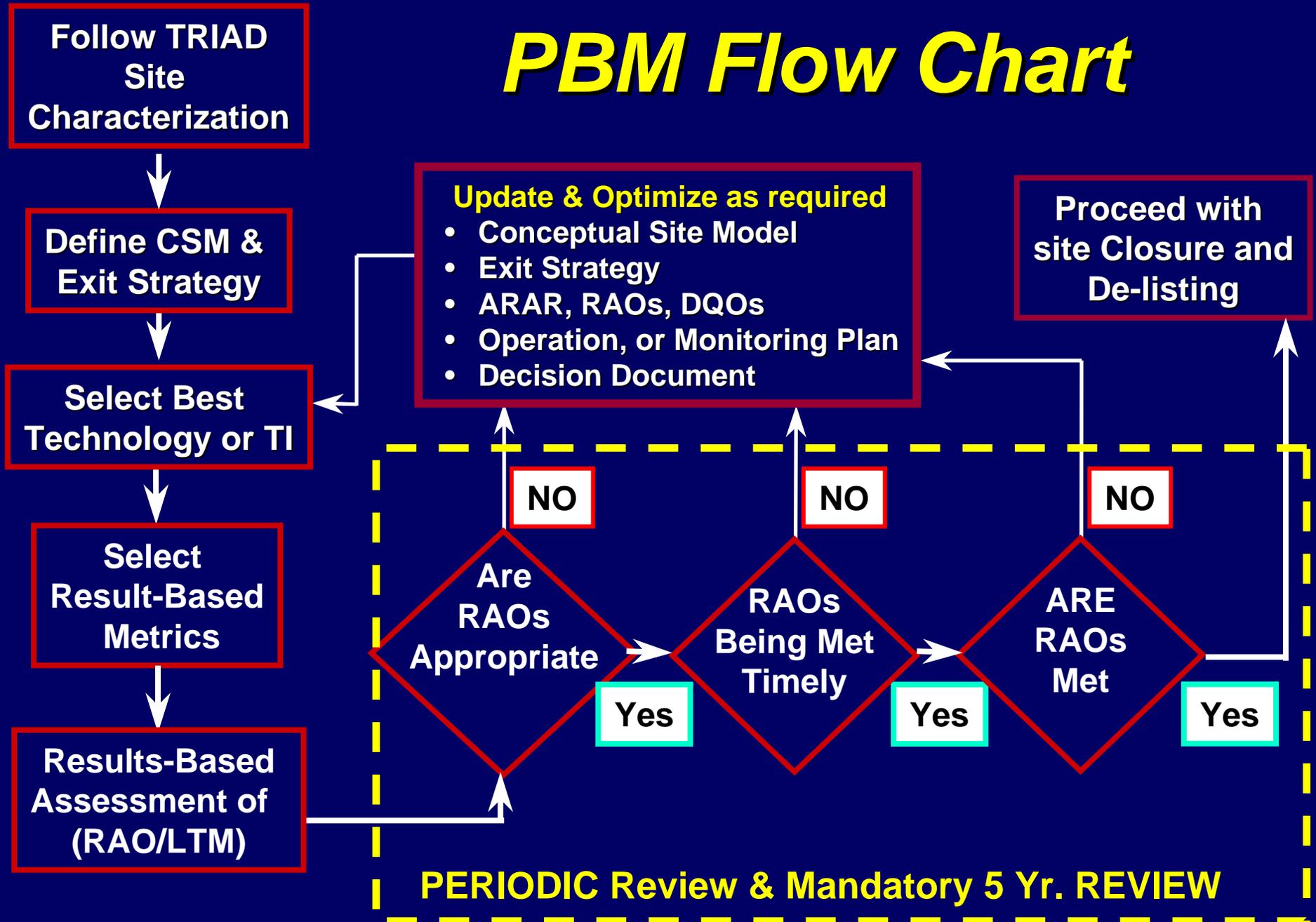
## ■ **Remedial System Optimization (RSO)**

- Focus on optimization opportunities of the remedial action with **short-term** benefits (i.e. Pump and treat – minimum number of wells and extraction flow-rates needed to capture a plume)

## ■ **Remedial Process Optimization (RPO)**

- Explores whether there are “smarter/faster” ways to meet **long-term** restoration obligations
  - Is there a better response option that should be considered to complement or replace current responses? Why?
  - Should we consider protective but alternative cleanup RAOs?

# PBM Flow Chart





# Policy ↔ Implementation ↔ Results!

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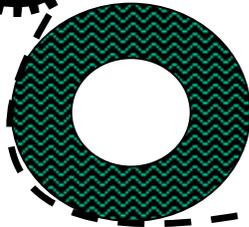
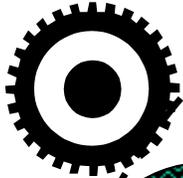
## “First-Generation Toolbox”

(technology focus)

Triad approach to characterization  
& Collection of Site-specific  
knowledge

System/Process Optimization

Installation



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### Validation Team

- Root-cause analysis
- Contingency decision consequence analysis
- Translation/transfer

## “Second-Generation Toolbox”

(timely performance-Based focus)

- PBM (framework)
- Results-based contracting option



### Program Team

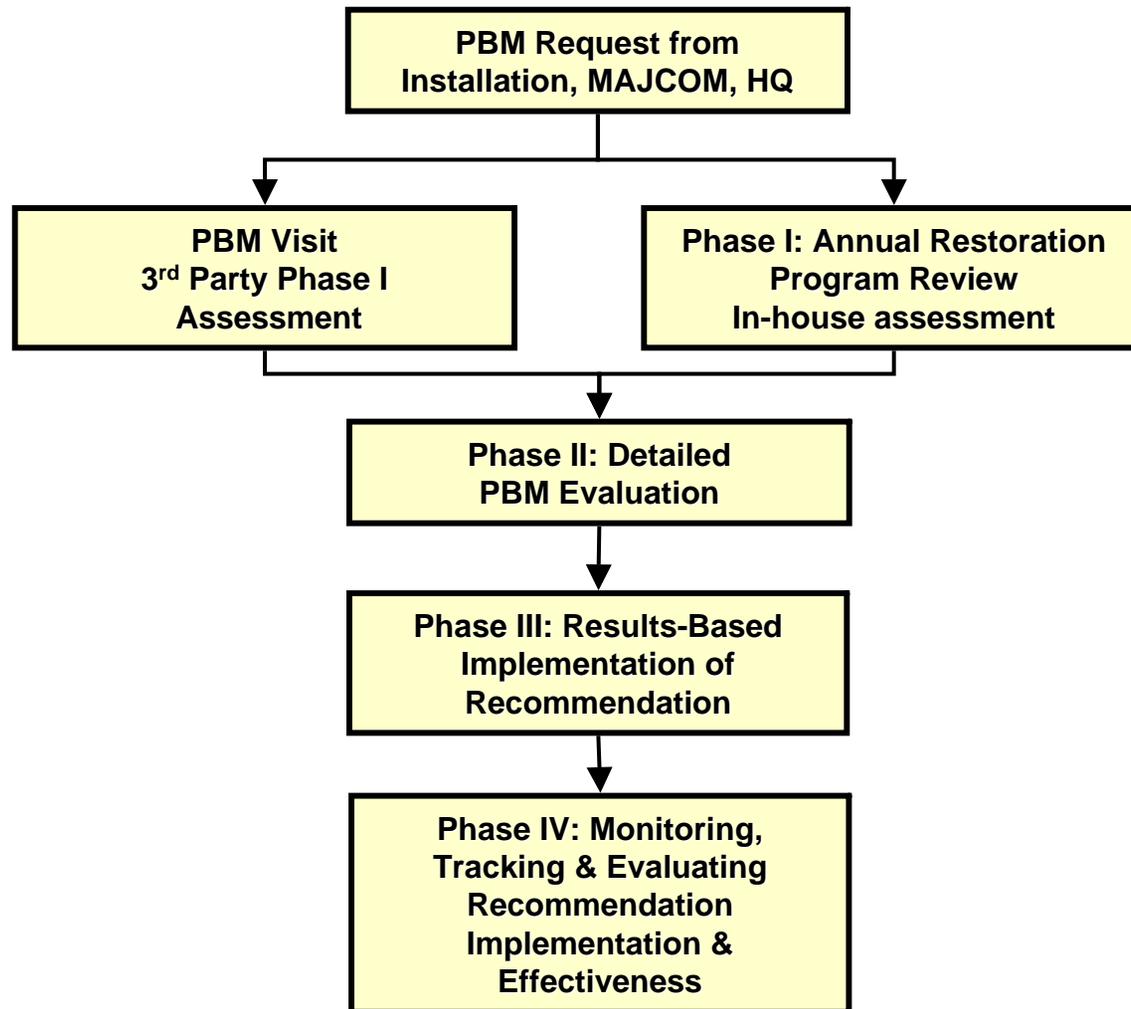
- Eagle Look
- Program Vision
- Policy & Guidance
- Budget ↔ Goals

HQ or MAJCOM



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# ***PBM Implementation Flowchart***





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# *Benefits of PBM*

- Institutionalize the DERP results-based-focus into the day-to-day implementation of response actions
- Clearly identifies the environmental problem and evaluates the adequacy of the proposed solutions
- Establish Completion Strategy - clarify response objective and intended outcome
- Define performance metrics & “triggers” for re-assessment
- Measure and Document progress (as percent complete or equivalent)
- Use decision logic to validate and/or update RAOs
- Promote innovative response strategies
- Accelerated closure



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# *PBM Completion Strategy*

- ***Realistic & achievable RAOs must be the foundation of the restoration program.***

## **Addressing:**

- **How clean can we get the site in a reasonable timeframe**
- **Consider/implement**
  - ◆ **Up-to-date restoration knowledge/technology**
  - ◆ **Exposure control and land use control options**
  - ◆ **Exposure point treatment**
  - ◆ **Adverse impact of the remedial action on the environment**
- **Primary focus on performance-based restoration exit strategy**



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# *Contact Information*

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