**Army Environmental Cleanup Strategic Plan**

*Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 4-7 May 2009 in Denver, CO.*
Agenda

- Background, purpose, and scope
  - Army Cleanup Strategy
  - Components of Strategic Plan
- Updates to the FY10-11 Strategic Plan
  - Management Controls
  - Revised Metrics
  - Emerging Issues
  - Future Direction
Relation to Larger Army Strategy

- DoD objectives to "Restore contaminated property to a condition that is protective of human health and the environment, and sustains mission capability."

- Army Cleanup Strategy mandates "We must comply with all laws and continually build the trust of the American public by responsibly addressing past and present contamination...."

- Army's 2009 Objective Map has goals to
  - Sustain the Army's Soldiers, Families and Civilians
  - Transform to Meet the Demands of Persistent Conflict in the 21st Century
Cleanup Strategy Initiative

- DASA(ESOH) Guidance
- OACSIM Army Environmental Division – Lead Development
- Principals – Designated Agencies (AEC, BRACD, ACOE, IMCOM, NGB)
- Drafted Army Cleanup Strategy (April 2003)
- Drafted first Army Strategic Plan (May 2003)
Strategy and Strategic Plan

- **Army Environmental Cleanup Strategy**
  - Ensures consistency and accountability across cleanup program areas by establishing common objectives
  - Serves an enduring document to guide future strategic plans
  - Establishes ISO 14001 framework for cleanup; complies w/GPRA

- **Army Environmental Cleanup Strategic Plan**
  - Targets address OSD goals and Army unique objectives
  - Emphasizes performance based approaches
  - Provides accountability to achieve site cleanup and closeout according to a plan
Overarching Objectives

1. Address imminent and substantial threats to human health, public safety, and the environment
2. Conduct response actions to address contamination; archive documentation
3. Comply with statutes, executive orders, other external requirements
4. Ensure Army regulations, policy are developed within framework of this Strategy
5. Plan, program, budget, and execute cleanup using validated, auditable site-level data
6. Develop cleanup partnerships with regulators
7. Promote and support public stakeholder participation in cleanup process
8. Use cost-effective approaches and technologies to improve efficiencies
9. Perform semi-annual management reviews against established targets
Elements of Strategic Plan

- Overview and purpose
- Description of cleanup programs
- Management processes
- Priorities
- Emerging issues
- Future direction
- Programmatic area direction
  - Background
  - Priorities
  - Reporting mechanism
  - Management review process
  - Objectives
  - Targets
  - Success indicators
Revisions to FY2010-2011 Plan

- Impact of DERP eligibility changes
- Additional direction on management processes
- Streamlining of metrics for all cleanup programs
- Discussion of emerging issues impacting cleanup
- Description of future direction for Army cleanup
Expanded DERP Eligibility

- The 1986 (IRP) and 2002 (MMRP) eligibility dates have been eliminated
- Many CC sites will now be eligible for ER,A funding
- Eligibility for FUDS program will not change
- OSD released an interim policy for DERP eligibility in December 2008
- A revised DoD DERP Manual will follow in FY09
Cleanup Program Areas

- Active (Enduring & Excess) Installation Restoration
- BRAC Cleanup
  - Including Excess Installations Compliance-related Cleanup
- Formerly Used Defense Sites (FUDS)
- Compliance-Related Cleanup
  - IMCOM Installations
  - Army National Guard Installations
  - Army Reserve Installations
  - Special Installations Cleanup
    - AMC
    - MEDCOM
    - SMDC
### Revised Cleanup Program Areas

#### Army Environmental Cleanup Program Areas

<table>
<thead>
<tr>
<th>Defense Environmental Restoration Program (DERP)</th>
<th>Compliance-Related Cleanup (CC)</th>
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<tr>
<td>Active Installations</td>
<td>Remediation Overseas</td>
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<td>Excess Installations</td>
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<td>Base Realignment and Closure (BRAC)</td>
<td>National Guard</td>
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Cleanup Strategy Management was refined to follow ISO 14001

- **Plan** - Complete the FY10-11 Strategic Plan
- **Do** - Implement Activities According to the Plan
- **Check** - Evaluate Progress Against the Plan
- **Act** - Improve Elements as Needed
Management Processes

- Programmatic Cleanup Strategic Plan on POM cycle – OACSIM
- Annual PMP – Program Managers
- MAP (equivalent) – Garrison/Property
- Semi-annual ESOH & OACSIM management review
  - Traditional OSD program indicators
  - Army unique indicators
Account Management Control

- Garrison/property MAP (or equivalent) coordinated through the Commands
- Program execution managers (PEMs) work plan coordinated with Command prior to submitting to Army Environmental Division
- Project site/installation level issues shared with the Commands on a routine basis
- Command talk to PEM and installation/property to resolve all issues in a timely manner and raise unresolved issues to HQ in case of an impasse
- Remedy solutions meet regulatory requirements and stakeholders (Commands, installations/properties, RAB, Regulatory community, etc.) acceptance
Management Schedule

- FY10-11 Strategic Plan 23 March 2009
- Draft FY10 PMP for review 30 September 2009
- Comments on PMP provided 15 October 2009
- Final FY10 PMP 31 October 2009
- FY09 EOY Mngt Review November 2009
- FY10 Mid-Year Mngt Review April 2009
- Draft FY11 PMP for review 30 September 2010
- Comments on PMP provided 15 October 2010
- Final FY11 PMP 31 October 2010
- FY10 EOY Mngt Review November 2010
- Develop FY12-13 Strategic Plan February 2011
- FY11 Mid-Year Mngt Review April 2011
Priorities

Priority A
Targets and Success Indicators

Priority B
Targets and Success Indicators

Priority C
Targets and Success Indicators

Foundation Targets and Success Indicators
Streamlining Metrics

- Previous Strategic Plans included targets and success indicators for each on the nine strategy objectives
- Metrics were occasionally redundant and or immeasurable
- Metrics for each of the cleanup programs were reevaluated and streamlined
- New success indicators are all definable, measurable, and achievable
Emerging Issues

- Emerging contaminants
- MMRP progress
- NCP programmatic expectations
- NDNODS
- Operational range program
- Vapor Intrusion
Emerging Contaminants

- Army cleanup program has focused on reactive compliance with current regulations
  - Address new contaminants
  - Address revised regulatory standards

Several emerging contaminants have been assessed and judged to have a significant potential impact to Army cleanup programs
- Perchlorate
- TCE
- RDX
- Naphthalene
- Hexavalent Chromium
- Beryllium
- PFOA
MMRP Progress

- The Army is continuing to execute the MMRP to the fullest extent possible
- Army MMRP activities include
  - Army MRSPP Policy (issued 9 February 2009)
  - RI/FS Guidance (draft)
  - “How Clean is Clean”
NCP Programmatic Expectations

- The Army continues to work to resolve disagreements with EPA over the interpretation of NCP programmatic expectations.
- The Army will continue to make cleanup decisions that:
  - Consider risk
  - Consider technical practicability
  - Make protection of human health and the environment a top priority
ND NODS program identifies former training areas where Guardsmen used munitions for training that were never owned by the military.

- Anticipate completion of the ND NODS inventory by December 2009.
- While inventory development was eligible under the DERP, addressing contamination on these properties will be the responsibility of the CC program.
Operational Ranges

- In FY2009, the Army plans to complete Phase I assessments for all 378 facilities to determine whether a release or substantial threat of release of MC has occurred from an operational range to an off-range area.

- As the Phase II quantitative assessments begin, the Army will make all efforts to:
  - Use consistent standards for evaluation
  - Smoothly transition any off-range migration to the appropriate cleanup program
Vapor Intrusion

- The large number of current and former Army operations capable of causing contaminant exposure via vapor intrusion could pose a significant risk.
- VI issues have not been historically included in RCRA, CERCLA, or UST investigations.
- While differing procedural guidance and standards for VI assessment pose challenges, current EPA guidance is consistent with the current DoD approach.
Future Direction for Army Cleanup

- Green remediation
- SMART Cleanup
- Transition to Obama administration
Green Remediation

- The Army is responding to EO 13423, "Strengthening Federal Environmental, Energy, and Transportation Management"
- The Army is encouraging project managers to seek opportunities to reduce its environmental footprint and minimize the impact of its cleanup actions
- Actions include:
  - Preserve natural resources
  - Minimize energy use
  - Minimize carbon dioxide emissions
  - Maximize recycling and reuse of materials
SMART Cleanup

- Sustainable Management of Available Resources and Technology (SMART) Cleanup
- Includes future reuse of a contaminated site as an early consideration during development of site remediation strategy
- Feasibility studies (FS) can be used to evaluate land reuse and cleanup levels resulting in "unrestricted use"
The Strategic plan incorporates and addresses known priorities and concerns of the new Administration.

Goals include:
- Reducing US dependence on foreign oil
- Increasing investment in alternative/renewable energy
- Reducing greenhouse gas emissions
- Complying with applicable regulations and requirements
Sustain the Mission. Secure the Future.

Goals are to:

- Foster a Sustainability Ethic
- Strengthen Army Operations
- Meet Testing, training, and mission Requirements
- Minimize Impacts and Total Ownership Costs
- Enhance Well-Being
- Drive Innovation
Questions?

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