



MARSSIM Revision 2

Consultation with the SAB-RAC

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Consultation on MARSSIM Revision 2

Introductions

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Introductions



MARSSIM Workgroup

Independently-chartered Workgroup

- Under the ISCORS Umbrella since 2007

Four Federal Agencies

- Department of Defense (Air Force, Army, and Navy representatives)
- Department of Energy
- Environmental Protection Agency
- Nuclear Regulatory Commission

CRCPCD Participation



Introductions

Chair – Kathryn Snead, EPA

Chair Emerita – Colleen Petullo, EPA



Introductions

EPA POC – Darrell Liles

EPA Members – Nidal Azzam, Gene
Jablonowski



Introductions

NRC POC – George Powers

Representing NRC – Mark Fuhrmann

NRC Members – Bobby Abu-Eid, John Tomon,
Duane Schmidt



Introductions

DOE POC – Alexander Williams

DOE Members – Carlos Corredor, John Moon



Introductions

Army POC – Dave Alberth

Army Members – Jerry Falo, Bob Cherry



Introductions

Navy POC – Steve Doremus



Introductions

Air Force POC – Ram Bhat

Air Force Member – Craig Bias



Document Overview



Document Overview

Family of Three Multi-Agency Documents

- MARSSIM – Published 1997, Updated 2001
- MARSAME – Published 2009
- MARLAP – Published 2004

Technical Documents - Not Policy



Document Overview

MARSSIM (Multi-Agency Radiation Survey and Site Investigation Manual)

- Covers real property (surface soils and building surfaces)
- Provides defensible and rigorous surveys for cleanup, especially Final Status Surveys
- Incorporates historical site knowledge and a graded approach to survey effort
- Recommends a two-tiered approach for surveys using scanning and direct measurements or samples



Document Overview

MARSSIM – Widely Used

NRC Decommissioning Sites

DOE, EPA, DoD, and State Cleanup Sites

Provides an already agreed-upon approach at sites with multi-party cleanup agreements



Document Overview

MARSAME (Multi-Agency Radiation Survey of Materials and Equipment)

- Supplement to MARSSIM
- Provides defensible and rigorous radiation surveys for cleanup, operations, or interdiction
- Incorporates process knowledge and a graded approach
- Addresses surficial and volumetric contamination and difficult-to-measure areas



Document Overview

MARLAP (Multi-Agency Radiation Laboratory Analytical Protocols)

- Provides defensible and rigorous protocols for radiation measurements performed in a laboratory setting
- Issued by a separate workgroup (MARLAP Workgroup) with specialized knowledge
- Included additional agencies: USGS, DHS, FDA, and NIST



Planned Revisions



Planned Revisions

MARSSIM not updated since 2001

- Mostly errata and typos corrected before that date



Planned Revisions

- Update treatment of measurement uncertainty
- Update measurement methods
- Scenario B (“assumed to pass until proven otherwise”)
- Increase emphasis on regulator interface during survey design
- User comments (“lessons learned”)
- Definitions/terms consistent with related documents
- Better discussion of “hotspots” and UMTRCA standards



Planned Revisions

Update treatment of measurement uncertainty

- MARSAME and MARLAP in line with the state of the science regarding measurement uncertainty
- Complies with current guidance from ISO and NIST



Planned Revisions

Update measurement methods

- MARSSIM written with the current (~1995) measurement technology in mind
- The state of radiation instrumentation improved
- MARSAME includes additional flexibility to take that into account



Planned Revisions

Scenario B (“assumed to pass until proven otherwise”)

- MARSAME allows the use of Scenario B
- Already in use in some states for MARSSIM



Planned Revisions

Increased emphasis on regulator interaction during survey design



Planned Revisions

User comments (“lessons learned”)

- Both regulators and contractors submitted comments regarding the useful or confusing parts of MARSSIM
- Ten years of use generated significant lessons learned on both sides



Planned Revisions

Definitions/terms consistent with related documents

- User comments led to changes in some key terms for the issuance of MARLAP and MARSAME



Planned Revisions

Better discussions of hotspots and UMTRCA standards

- MARSSIM didn't explicitly address UMTRCA
- Hotspot discussion underway



Public Comments



Collecting Public Comments

Collecting public comments

- Dedicated e-mail address:
marssim_workgroup@epa.gov
- Physical address: MARSSIM Workgroup, c/o Kathryn Snead, Workgroup Chair, USEPA, 1200 Pennsylvania Avenue, NW, Mail Code 6608J, Washington, D.C. 20460
- Public meeting: February 10, 2010, EPA East Building Conference Room 1117A, 1201 Constitution Avenue, NW, Washington, DC



Charge Questions



Charge Questions

Question #1:

The MARSSIM Workgroup has proposed a number of significant changes to MARSSIM, which if implemented, will result in Revision 2 of the document. *Please comment on the applicability and appropriateness of the proposed changes.*



Charge Questions

Question #2:

Does the SAB have any recommendations for additional changes or improvements? Why does the SAB believe that these additional changes are warranted?



Charge Questions

Question #3:

The list of changes proposed by the MARSSIM Workgroup represents the Workgroup's best judgment as to the highest priority changes, given limited resources for implementation. *Please comment on the appropriateness of the Workgroup's prioritization of the changes selected.*



Next Steps

Updates on the MARSSIM Revisions will be posted to the MARSSIM Workgroup website:

<http://www.epa.gov/radiation/marssim/>

Feedback on the comments received will be posted as part of the Federal Register Notice announcing the availability of MARSSIM, Revision 2.



