



*Promoting Environmental Data Integrity
for the
Department of Defense*

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Topics

- Challenges and Opportunities
- Data Quality Improvement Strategy
 - Intergovernmental Data Quality Task Force (IDQTF)
 - DoD Environmental Data Quality Workgroup (EDQW)
- Intergovernmental Training and Outreach

Challenges and Opportunities

DoD Data Integrity Policy and Procedural Guidance *10 February 2003*

- Complies with Public Law H.R. 106-554 as implemented by OMB data integrity guidelines
- Prescribes policy/procedures, assigns responsibility for “ensuring and maximizing the quality of information disseminated to the public” by DoD
- Issues guidelines for correcting information that does not comply with OMB data integrity guidelines

Challenges and Opportunities: Sound Science for Environmental Studies

- Data Quality Objectives (DQOs) must address *end uses of the data, decision criteria, and measurement uncertainty*
- Systematic planning must include quality assurance and chemistry expertise (*QAMs, project chemists, labs*)
- Analytical methods must be optimized for DoD and site-specific DQOs
- Data assessment must address data usability, not just contract compliance

Challenges and Opportunities: Improved Laboratory Procurement and Oversight

- 95% of DoD laboratory testing is outsourced
- Procurement must be based on *best value*:
 - Nationally-accepted accreditation provides baseline credentials
 - Laboratory quality systems must address DoD-specific requirements
 - DoD Components share resources for procurement and oversight
- Cost-effective oversight relies on shared resources

Challenges and Opportunities: Promoting Environmental Stewardship and Operational Readiness



Data Quality Improvement Strategy

IDQTF

- EPA Federal Facility Restoration and Reuse Office (FFRRO) lead
- Members: OSWER, EPA QA Staff, EPA Regions, DOE, and DoD
- Tasks:
 - Develop written consensus agreements for environmental quality systems
 - Outline roles and responsibilities for data quality oversight at Federal facilities

Quality Systems Consensus Agreements

Uniform Federal Policy

Part A – Environmental Quality Systems (UFP-QS)

- Management system for environmental data collection and use
- Final UFP-QS signed February 2003 by EPA, DOE, and DoD

Part B – Quality Assurance Project Plans (UFP-QAPP)

- Systematic approach for planning and conducting environmental data collection activities
- Final draft to be completed Summer 2003

Quality Systems Consensus Agreements

Roles and Responsibilities Guidance

- *EPA HQ*: support consistent quality systems implementation throughout EPA and states
- *EPA Regional offices*: support the use of “graded approaches” and consistent review and approval of QAPPs
- *Federal Departments/Agencies*: oversee the implementation of quality systems within their own organizations
- *IDQTF*: provide quality systems implementation outreach and assistance
- Final draft Fall 2003

Data Quality Improvement Strategy

Key IDQTF Initiatives for 2003/2004

- Issue Final UFP-QAPP
- Complete Roles and Responsibilities guidance
- Promote intergovernmental quality systems training and outreach

Data Quality Improvement Strategy

EDQW

- Navy lead
- Members: Army, Navy, Air Force, DLA and OSD
- Tasks:
 - Promote generation of environmental data of known and documented quality
 - Develop policy to ensure compliance with standards
 - Promote cost-effective resource management
 - Improve overall performance

Data Quality Improvement Strategy

Key EDQW Initiatives for 2003/2004

- Issue DoD *Data Quality* Instruction
- Improve laboratory procurement and oversight
- Promote sound science for DoD environmental data collection
- Conduct quality systems training and outreach

Proposed DoD Instruction 4715.XX

Environmental Data Quality Assurance

- *Implements DoD Data Integrity Policy and Procedural Guidance*
- Provides for formal issuance of key Quality Systems documents (DoD QSM, UFP-QS, and UFP-QAPP) as DoD Manuals
- Fosters systematic planning for environmental data collection
- Provides for development of metrics to monitor progress in quality systems implementation

Draft DoD Procurement Policy

- Addresses DoD IG Audit Report No. 97-098 citing inadequate laboratory oversight and inadequate contract remedies
- Provides guidance for implementing *Higher-level Contract Quality Requirements*, allowed under FAR 46.202-4
- Implements DoD and Intergovernmental Quality Systems Policy (*UFP-QS, UFP-QAPP, DoD QSM*)

Draft DoD Procurement Policy

(cont'd)

- Applies to all new procurements that involve environmental measurements
- Provides guidance and model contract languages (clauses) for use by Program Personnel and Contracting Officers
- Defines roles for QAMs and project chemists in laboratory procurement and oversight
- Defines prohibited activities (inappropriate sampling and testing practices)

Joint DoD Laboratory Assessments and Oversight

- NELAP accreditation provides baseline credentials
- Laboratory Quality Systems based on DoD QSM
- Joint assessments focus resources on DoD and project-specific requirements
- Joint laboratory database permits sharing of laboratory evaluation information
(e.g. assessments, corrective action, proficiency testing results)

Promoting Sound Science

DoD-Wide Sampling and Testing Guidance

Objectives:

- Address military-unique testing requirements for environmental media
- Implement the UFP-QS, UFP-QAPP, and DoD QSM
- Provide framework for developing site-specific data quality objectives (DQOs)
- Guide selection of qualified laboratories
- Guide selection of appropriate performance-based methods

Promoting Sound Science

DoD-Wide Sampling and Testing Guidance

Benefits:

- Focus analyses on site-specific constituents of concern
- Streamline data collection through use of field decision-support tools
- Promote data integrity (data can be substantially reproduced)
- *Ensures environmental decisions are based on data of known and documented quality, appropriate for their intended use*

Promoting Sound Science

EPA/DoD Perchlorate Testing Roundtable

- Discuss state of the art in perchlorate testing
- Identify most promising technologies
- Recommend path forward for method development
 - Develop standard, performance-based method documentation
 - Conduct method validation studies
 - Publish/promulgate method (e.g. 40 CFR 136, SW-846)

Promoting Sound Science

DoD Comments on Proposed Regulations

- RCRA – Methods Innovation Rule and Proposed Hazardous Waste Sampling Guidance
 - EDQW comments submitted February 2003
- CWA – Detection and Quantitation
 - EDQW comments submitted July 2003

Intergovernmental Training

- IDQTF:
 - UFP-QAPP training (under development)
- EDQW:
 - Army: DoD QSM Implementation for Project Managers (beta test August 2003)
 - Navy/CECOS: Environmental Quality Sampling (ISEERB-approved)
 - Air Force: Web-based UFP-QAPP project managers' training (complete)

Intergovernmental Outreach Planned Presentations for 2003/2004

- EPA Regional Conferences
- National Environmental Monitoring Conference (NEMC)
- American Council of Independent Laboratories (ACIL)
- Society of American Military Engineers (SAME)
- Others

Data Integrity: *The Payoff*

- Sound science for military-unique testing (e.g. perchlorate and munitions constituents)
- Best-value procurements and improved oversight
- Reduced costs
- Sustained operational readiness

Cost-effective data collection
Sound environmental decisions

Coming Up

2:00 - DoD Laboratory Evaluation Program Update

George Lee, AFIOH/SDC

2:30 - DoD Chemicals of Concern

Bill Batschelet, AFCEE/ERS

3:30 – DoD Laboratory Procurement Strategies

Carla Schultz, NSTECH

4:00 - Laboratory Subsampling

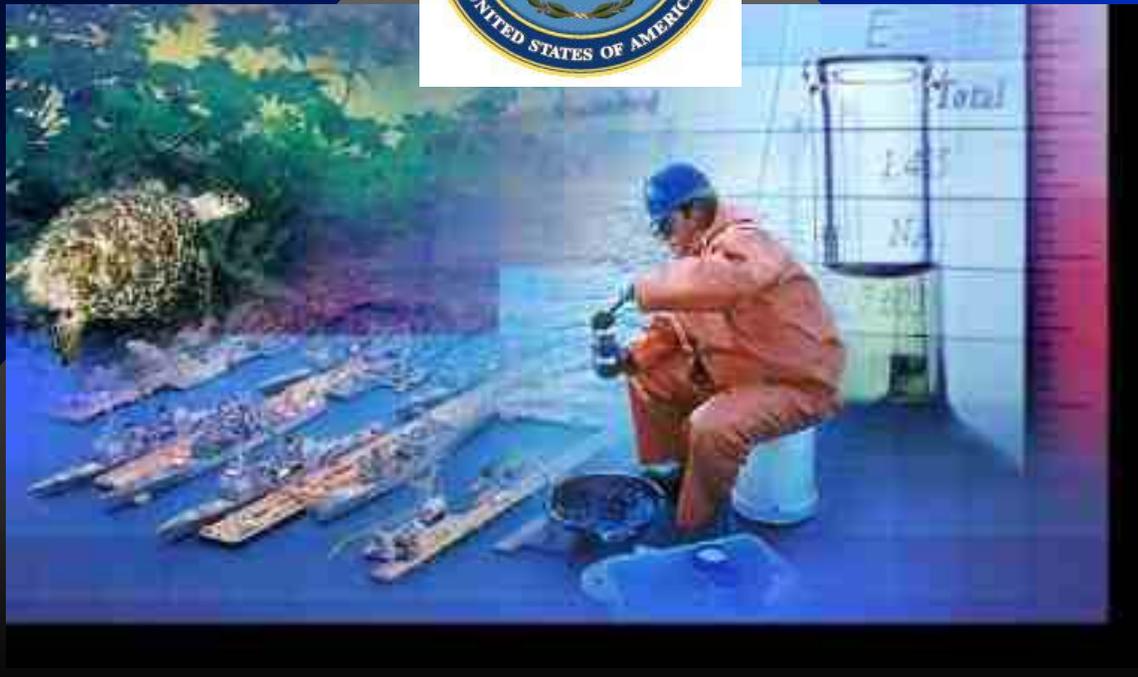
Bill Ingersoll, NAVSEA 04XQ (Labs)

4:30 - ‘Virtual’ Chemist

Brian Jordan, USACE, Albuquerque District

Improving Environmental Data Quality

... Because the Right Decisions Require Quality Data



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www.denix.osd.mil/denix/DOD/Working/EDQW/edqw.html