

PROCEEDINGS

Association of State and Territorial Solid Waste Management Officials (ASTSWMO) August 20-22, 2003 Federal Facilities Managers Symposium “Learning From The Past, Building For The Future”

PLENARY SESSION: INTRODUCTION AND WELCOME

Moderated by: Jim Ussery, GA

This session marked the beginning of the second bi-annual Association of State and Territorial Solid Waste Management Officials (ASTSWMO) Federal Facilities Managers Symposium. Welcomes were heard from representatives from Oregon, Department of Defense (DOD), Environmental Protection Agency (EPA), and ASTSWMO's President.

OREGON

Dick Pederson, Oregon Department of Environmental Quality, began this session by welcoming everyone to Oregon and highlighting the City of Portland. He encouraged everyone to take advantage of their time and sightsee as much of Portland and the surrounding area as possible. He then discussed the need for building relationships between States and federal facilities through the use of partnering. In Oregon, there is no Department of Defense and State Memorandum of Agreement (DSMOA). However, the State is interested in signing one, especially given the concerns at Umatilla where 11% of the nations chemical agents are stockpiled.

DEPARTMENT OF DEFENSE

Don Schregardus, Deputy Assistant Secretary of the Navy (Environment), provided the audience with thoughts on the past, where in the 1970s, environmental programs were managed by the EPA, State programs were in their early infancies and DOD said that no laws applied to them. Through time, States began to take over growing environmental programs and DOD realized they had to comply. Today, States have emerged as leaders of environmental protection, EPA has taken a partnering oversight role and DOD is becoming more aggressive in their environmental role. Don finished his presentation by encouraging the audience to use their time during the conference to discuss issues and concerns with the other participating agencies.

ENVIRONMENTAL PROTECTION AGENCY

Mike Gearheard, EPA Region 10, Superfund Division Director, provided three points from EPA Region 10's perspective. Region 10 has worked together with the other shareholders to complete construction at 16 sites. This progress is a result of a shared commitment among the agencies to work together and be flexible throughout the cleanup process. Mike's second point focused on how the current decade's challenges are nothing new. These challenges, such as institutional controls and post-ROD disputes, should be resolved by now. The agencies should now be focusing their attention on current program issues such as Perchlorate and UXO budgets. The parties involved need to work together to solve these problems. In Mike's opinion, there seems to be less focus on problems and more focus on who is in charge. This needs to change, which

led to Mike's third point: partnerships make it work. Partners working together can solve real environmental problems.

ASTSWMO

ASTSWMO President, Jennifer Kaduck, Georgia Department of Natural Resources, welcomed participants on behalf of ASTSWMO and reminded the audience that the Federal Facilities Peer Match Directory, a very useful document, has been finalized and is now available on the homepage www.astswmo.org. She then discussed the importance of federal facilities to States and their economies and the need to work together without compromising the missions of these facilities. She recognized three individuals for their hard work and dedication: Howard Roitman for his 10 years with ASTSWMO; Bruce Venner for his 8 years with ASTSWMO; and Colonel John Selstrom, who is retiring from the Air Force after 29 years of service, for his 4 years working with ASTSWMO.

PLENARY SESSION: LEARNING FROM THE PAST, BUILDING FOR THE FUTURE **Moderated by: Jim Ussery, GA**

This session identified how States, EPA, and DOD have altered their approaches to federal facilities. The speakers highlighted joint initiatives and what it takes for these initiatives to be successful.

MAIN TOPICS:

1. One Cleanup Program
2. Defense Environmental Restoration Program (DERP) Progress
3. Change Over Time

One Cleanup Program

Jim Woolford, Director, EPA Federal Facilities Restoration and Reuse Office (FFRRO) focused his presentation on EPA's One Cleanup Program. The basis of the One Cleanup Program (OCP) is for cleanup programs to work together to achieve effective and efficient cleanups that protect human health and the environment. It is under the direction of EPA's Office of Solid Waste and Emergency Response (OSWER) and Office of Enforcement and Compliance Assurance (OECA). The program's success depends on partnerships and effective communication with the public and among cleanup programs.

The OCP involves three major initiatives: 1) more consistent and effective cleanups; 2) clear and more useful information about cleanups, and 3) better performance measures. Of these initiatives, Mr. Woolford concentrated his presentation on describing cross-program task forces found under the first initiative. These cross-program task forces conduct more detailed analysis of critical cleanup issues. One of these initial task forces is long-term site stewardship. Under EPA's long-term stewardship (LTS) there were several related initiatives presented. Of these, the Federal Facilities Environmental Executive Committee (FFEEC) initiative was discussed. The FFEEC is comprised of Assistant Secretary or Assistant Administrator-level executives from fifteen departments and/or agencies. The participants endorsed the committee concept in the inaugural meeting on July 29, 2003. The Federal principals agreed to support and form a senior-

level workgroup to tackle the top five priorities in fiscal year 2004. The goal of the committee is to identify and coordinate cross-agency cleanup issues at federal sites. The next steps of the committee are to actually establish the senior, career-level work group and collect the top two priorities from each agency. The work group will then recommend the priorities to the FFEEC. Meetings are scheduled for Fall 2003 and early 2004.

Mr. Woolford also touched upon the third initiative; better performance measures. The OCP will focus on measuring performance and results in four key areas: 1) amount to which human health is protected through waste cleanup activities; 2) amount to which the environment is protected through cleanup; 3) amount of land made available through cleanup activities for productive uses; and 4) economic benefit of cleanup activities.

In closing, the OCP does not propose combining all existing programs into one, but rather supports ongoing planning and coordination with State, tribal, and other federal agency cleanup programs and stakeholders. The program does aim to make effective use of resources, activities, and results.

DERP Progress

Kurt Kratz, Director, Office of the Secretary of Defense (OSD) Environmental Cleanup, discussed how the Defense Environmental Restoration Program (DERP) is working toward finality. The program has been aimed at completion with everyone interested in figuring how to get to the end. DOD looks at the program as a fiscal liability, with the overall aim of concluding it, and with the Services having the responsibility of planning how to reach completion. Mr. Kratz provided the audience with statistics on the amount of time it takes to complete a cleanup at an installation. BRAC, an accelerated program, takes roughly 39 years before a site reaches completion. DOD wants to figure out how to reduce that time.

In order to accomplish this, Mr. Kratz asked the questions, where are we now, where are we going and what are we doing? As far as where are we now, fifty-eight percent of BRAC and FUD sites have been completed with seventy-six percent of the installations completed. To answer where we are going, we need to look at performance versus process. There is concern that process will overtake performance resulting in a decrease in progress. We need to figure out how to finish what has been started while still maintaining both process and performance. To answer what is being done now, Mr. Kratz provided the audience with several examples of partnerships. Several working groups have been formed to address outstanding issues, i.e. DSMOA CA Steering Committee, the MRC, and the FUDS Improvement Workgroup. Long-term stewardship memorandums of understanding are used to ensure that land use controls are protective and conveyed with the property. DOD continues to work with the ITRC and ASTSWMO. Everyone is working towards the same result: getting things done as efficiently and quickly as possible.

Change Over Time

Howard Roitman, Director, Colorado DPHE Environmental Programs, focused his presentation on how there has been change over time. An example of this was the Range Rule, which was withdrawn by DOD due to the many concerns raised by the States. Another example is how the DSMOA process has improved over time.

There is now greater opportunity for idea exchange and communication. The success of ASTSWMO has benefited both DOD and the States. Mr. Roitman pointed out many characteristics for success within the process: mutual respect; dedication to problem solving and flexibility; constancy; ownership and responsibility; and recognition of the ultimate goal: overall protection.

PLENARY SESSION: ENCROACHMENT: PRESERVING THE ENVIRONMENT THROUGH PARTNERSHIPS

Moderated by: Howard Roitman, CO

In the past year, the word encroachment has become part of the federal facilities dialogue. This discussion highlighted the current status of DOD's Range Readiness Preservation Initiative (RRPI) and how States, DOD, and local governments have come together to protect human health and the environment while preserving the military's training mission.

MAIN TOPICS:

1. Preserving the military's training mission while dealing with issues of encroachment
2. Legislative measures, zoning and land use development
3. Species Conservation Program

Preserving The Military's Training Mission While Dealing With Issues Of Encroachment

Don Schregardus, Deputy Assistant Secretary of the Navy, discussed the importance of military training and testing to be in as realistic of an environment as possible, while protecting land and natural resources. Realistic training is important to maintain fighting skills and to ensure that people are less likely to get killed or hurt. The motto is "We must train as we fight; because we fight as we train".

Encroachment affects the ability to train and reduce flexibility while training. Encroachment pressures include; commercial development, population, air quality, frequency management (like cell phones), noise abatement, air space congestion & competition, UXO and constituents, wildlife habitats, wilderness, and cultural sites. Examples of encroachment include residential homes and development near practice ranges such as at Fort Bragg, NC and Camp Pendleton, CA. Legislative changes and regulations are appropriate for some issues. The Sustainable Range Initiative is much more than just legislative clarification. Legislation is only one component of sustainable ranges. Several DOD initiatives include service programs, establishing key areas for buffers, regional workshops and the commander's guide. More money for conservation easement is needed. State legislative efforts include the Florida Greenways Project and legislation in Arizona and California.

The Defense Authorization bill is currently in Congress. DOD has asked for a change in the definition of harassment. Changes to the Endangered Species Act, Migratory Species Act and Marine Mammal Protection Act have already been agreed upon. Testimony in the House of Congress was heard on December 16, 2002 over RCRA and CERCLA issues. Committee hearings were held in April/May of 2003. The Energy and Commerce hearing is to debate the bill around September 2003.

Legislative Measures, Zoning And Land Use Development

Tara Butler, National Governors Association, focused on how civilian encroachment around military installations affects the ability to test and train. Eighty percent of military installations are experiencing higher urban growth rates than the national average. Increased city lights compromise the effectiveness of night vision equipment and night training exercises. Residential and commercial communities are potentially exposed to artillery fire, dust, noise issues and accidents. Economic tax revenue and jobs from the military total \$20 billion in Florida, 30 billion in California and 6 billion in Arizona. The Nation's Governors are concerned about the economic impact the next round of BRAC, which may close up to 20% of the nation's bases. Arizona has emerged as a national leader in protecting its bases from encroachment. In Arizona the military accounts for more than the top 5 employers combined and more than the entire tourism industry. In 2001, Governor Jane Hull signed into law the Preservation of Military Airports Act, which mandates the compatibility of city, town or county territory within the vicinity of a military airport and is enforced by the State Attorney General's office.

The best way to prevent encroachment is zoning to prevent abatement. Oklahoma passed a law restricting residential development within 5 miles from a military airport and efforts have been made to restrict lights and bird activity. The city of Aurora, Colorado has defined "clear zones" and "accident potential zones" which restrict nearly all-residential and commercial land use. Florida has enacted the Environmental Land and Water Management Act, which requires State approval of major development. The statute permits the governor and cabinet to designate "Areas of Critical State Concern" which protect land in the State where unsuitable development would endanger resources. A problem with zoning codes is that they are often rolled back by pressure from developers.

Encroachment can be alleviated through growth management and planning. States and the military have been acquiring land around installations in order to save them through land exchanges and purchasing the land. Another approach involves evoking a little known law and designating areas surrounding military installations as "areas of critical State concern", affording them special protection from uncontrolled growth and development.

Species Conservation Program

Robert Ashur, Program Manager for San Diego's Multiple Species Conservation Program, indicated that San Diego's geography is more than just coastland. San Diego has desert and mountain regions, which offer tremendous biodiversity including 37 endangered species. A better conservation approach has led to conserving more acres around species preservation habitats. Camp Pendleton Marine Corps Base has used innovative planning. The FY '03 DOD Authorization Bill provided services the ability to fund species conservation activities from existing Operation and Maintenance funding. The South Coast Wildlands Forum was formed with 14 stakeholders. The South Coast Conservation Forum formed a "No Regrets" priority parcel selection that provides a buffer and reduces conflicts between military activities and urban interfaces. DOD wants to preserve the land and doesn't want to own it or manage it. Slides were shown of parcels and land use around Camp Pendleton.

PLENARY SESSION: INSTITUTIONAL CONTROLS UPDATE

Moderated by: Jeff Deckler, CO

This session focused on the latest Institutional Control initiatives and how the various agencies involved in the cleanup of federal facilities utilize ICs.

MAIN TOPICS:

1. Uniform Environmental Covenants Act
2. DOD's Approach to ICs
3. Maine's IC Tracking Database
4. EPA's Federal Facilities Restoration and Reuse Office (FFRRO) policy on Institutional Controls

Uniform Environmental Covenants Act

William Breetz, University of Connecticut School of Law, showcased the Uniform Environmental Covenants Act (UECA) drafted by the National Conference of Commissioners on Uniform State Laws (NCCUSL). NCCUSL is encouraging States to consider and pass similar legislation. The NCCUSL is composed of a group of lawyers who meet to draft legislative acts. The goal is to produce a baseline statute for States with similar issues. BRAC groups and the National Association of Attorneys Generals (NAAG) met with the committee that handles real estate issues involving Federal Facilities. The development of the drafting was fully funded by DOD. The Act is based on common law real estate and doesn't infringe on State authority on active Federal Facilities and does nothing on limiting liability of investors. The purpose of the Act is to be a tool for States to get authority for Institutional Controls. The Act can be reviewed and commented on at the NCCUSL website <nccusl.org>.

DOD's Approach to ICs

Kurt Kratz, DOD, Director, OSD Environmental Cleanup, presented the DOD position on ICs and Land Use Controls (LUCs). DOD agrees that these are necessary requirements for State and landowners to maintain human health and protect the environment for future property use. It is in DOD's best interest to keep ICs and LUCs in place to maintain the remedy. It is important to DOD because, if the controls fail, DOD will have to come back and fix them. DOD follows several policies such as the EPA policy dated July 30, 1999, DOD policy dated March 2, 2001, EPA guidance document dated January 4, 2002 on what needs to be in documents pertaining to cleanup, and Department of the Army Principals and Procedures Agreement Concerning Land Use Controls dated April 9, 2003, all of which are posted on the DENIX website.

Maine's IC Tracking Database

Denise Messier, Maine DEP, discussed a situation where land in Maine was being sold without the deed restrictions running with the property. This became evident when a property was sold without the mention of a landfill. Initial recommendations were to: develop an IC Database and tracking system; develop an audit system for ICs; develop model documents and standard operating procedures; and train internal and external stakeholders. Implementation of the database required identifying a site versus project and site versus parcel. The question of which

document is the IC, the ROD or Consent Decree led to calling the main document the enabling document. For the purpose of Maine's tracking database, IC means a single restriction on a single medium at a single parcel. Unresolved issues are user friendliness, public access, FOIA request and QA/QC of data entry. It was also mentioned that military bases could include ICs as part of their Base Management Plan.

EPA's Federal Facilities Restoration and Reuse Office (FFRRO) Policy on ICs

Jim Woolford, Director, EPA FFRRO, started by outlining a situation where ICs are important in a Post-ROD dispute. The problem was that deed restrictions never ran with the land. In a Post-ROD dispute, IC implementation details are enforceable in the Remedial Design (RD). Currently, EPA is experiencing a backlog of approximately 90 RODs and other decision documents and 20 FFAs during one year of workload. The Final EPA IC Fact Sheet is expected to be finalized in the fall of 2003. EPA received over 600 pages of comments. The EPA IC Fact Sheet covers implementation, monitoring and enforcing ICs. It identifies information required in a ROD and clarifies that unlimited use is not equivalent to residential cleanup. The Fact Sheet on ICs Draft Guidance called "Institutional Controls: A Guide to Implementing, Monitoring and Enforcing ICs at Superfund, Brownfields, Federal Facility, UST and RCRA Corrective Action Cleanups", dated February 2003, is available from the U.S. EPA's Office of Site Remediation & Technology Innovations, www.epa.gov/superfund/action/ic

CONCURRENT SESSION: DATA QUALITY

Moderated by: Ed LaRock, CO

This session focused on the latest developments concerning data quality. In order to oversee Federal Facility cleanups, all agencies involved should ensure the environmental data supporting decisions are of appropriate quality, balanced and cost effective.

Main Topics:

1. EPA Data Quality Task Force
2. State Data Quality Objectives Implementation Process
3. Visual Sample Plan

Strategic Planning for Information Quality at Federal Facilities

Mike Carter, EPA FFRRO, discussed specific topics related to information quality. The Intergovernmental Data Quality Task Force (IDQTF), consisting of members from EPA, DOD, and DOE was established to develop policy, guidance, training and tools that will improve data quality, to be implemented throughout the Federal Government. It has been recognized that the Federal Agencies need consistent environmental quality requirements across the country. The hazardous waste programs (CERCLA and RCRA) were targeted.

In response to the Office of Management and Budget, EPA has written "Guidelines for Ensuring the Quality, Objectivity, Utility, and Integrity of information Disseminated by the Environmental Protection Agency" (October 2002). The Guidelines contain policy and procedural guidance for ensuring quality of the information the agency disseminates. In addition, it outlines mechanisms for review and for the recipients of information to obtain any corrections disseminated by EPA.

U.S. EPA, DOD and DOE signed a Uniform Federal Policy for Implementing Environmental Quality Systems for organizations that collect and use environmental information in January 2003. The Uniform Federal Policy for Quality Assurance Project Plans provides guidance on a standard national approach for planning, conducting and evaluating information collection for all environmental variables.

Several electronic tools have been developed to assist in implementing environmental projects having appropriate data quality. Tools include; Visual Sampling Plan (VSP), Field Environmental Decision Support (FIELDS), Spatial Analysis and Decision Assistance (SADA), and Forms II Lite. Training is currently being developed by the IDQTF for developing Quality Assurance Plans.

State DQO Implementation Process & Demonstrations

Sebastian Tindall, Bechtel Hanford/DOE, highlighted the inadequate implementation of the Data Quality Objective (DQO) process, which has led to a systematic planning methodology (SPM) being developed to assist in project design, implementation and data analysis/interpretation. The SPM is designed to enable project managers to ensure defensible sampling designs, improve cost effectiveness, improve quality and reduce project time. Specific training courses have been developed to assist in implementing SPM Managing Uncertainty and Systematic Planning for Environmental Decision Making, Data Quality Assessment, and Visual Sampling Plan.

Mr. Tindall provided a detailed DQO Implementation Process Flow Chart, and discussed each of the steps involved in the DQO Process. Planning and Scoping meeting were emphasized along with the need for an experienced facilitator and technical staff. An electronic DQO e-Workbook is available to assist in the project development. Sampling design and costs can be optimized through the use of Statistical Cost Advisor spread sheets. This process was demonstrated by the author as well as the Visual Sample Plan (VSP) and illustrates sample design and locations. The entire process results in the DQO Process Summary Report documenting the “what, why and how” decisions were made. Training course information can be found at <http://www.doe.hanford.gov/dqo>.

Visual Sample Plan

Brent Pulsipher, Pacific Northwest National Laboratory demonstrated the electronic software tool Visual Sample Plan (VSP) (<http://dqo.pnl.gov/vsp>). This aspect of the project design ties into the DQO Based Systematic Planning Process and is sponsored by U.S. EPA, DOD and DOE. VSP software is a map-based program that is intended to assist in field sampling plan development. Specifically, the program helps determine optimal sample size and location providing a statistically defensible plan. The program focuses on soil, surfaces, sediment/soil layers, and UXO contamination and is expanding into ground water. Training specific to the use of this software is offered.

A demonstration of FIELDS (www.tiem.utk.edu/~fields/) was also presented. FIELDS Tools for ArcView is intended to aid in characterizing contaminant data. The program assists in sample design, contouring/interpolation, estimates mass and volumes of contamination, generates remediation scenarios and estimates human and ecological risk.

CONCURRENT SESSION: PRIVATIZATION

Moderated by: Jeff Edson, CO

Privatization of environmental cleanups at DOD sites is becoming more of an accepted solution to fund and cleanup sites. Privatization changes dynamics, roles, and responsibilities. The terminology is new. Legal agreements are necessary to be in place with redevelopment authorities.

MAIN TOPICS:

1. Privatization of Ft. McClellan, AL
2. ACOE, UXO Privatization Process
3. State Enforcement and Access Issues
4. Air Force Real Property Agency

Privatization of Ft. McClellan, AL

Steve Cobb, Chief, Governmental Hazardous Waste Branch, Alabama DEM, presented information on the Early Transfer and Cleanup Privatization Process for Fort McClellan in Alabama. In January 2003 the local reuse authority requested the Army to enter into the early property transfer process for approximately 4,565 acres, much of which had UXO related contamination. The goal is to transfer the property by September 2003 and to employ an expedited cleanup of the property, which means remedies for contamination would be in place within 5 years. The expedited cleanup was an important factor for redevelopment goals.

With the transfer the lead responsibility for UXO investigation and cleanup went to the local agency, although the Army agreed to investigate and cleanup certain areas. The process uses preliminary analysis and "likely case" cost predictions with additional study where required. Mr. Cobb highlighted some of the benefits of early transfer and cleanup privatization. When this process is utilized it guarantees an immediate provision of funds for cleanup. Coordination of cleanup and redevelopment plans allows for cost savings. It was noted that the private sector might also be able to complete the cleanup and redevelopment more quickly. Environmental insurance is another tool utilized in this process and can provide for added liability protections. Other necessary tools are the use of Consent Orders and Memorandum of Agreement (MOA) for establishing responsibilities of the parties involved in the cleanup, environmental closure and long-term stewardship of the property.

ACOE's UXO Privatization Process

David Douthat, ACOE, presented information on Privatization and Fixed Price Remediation Insurance (FPRI) as applied to Ordnance and Explosive Cleanups. Whether property is owned or once used by DOD, and if contaminated with Ordnance and Explosives as a result of DOD activities, it is the Army's charge to cleanup the contamination and make the property available

for future use by the community. Property transfers can take place as long as safeguards are in place to protect human health and the environment. The Governor must concur that the property is suitable for early transfer. Cooperative Agreements and Defense State Memorandum of Agreements establish terms, conditions, and responsibilities for involving states. Fixed price remediation (FPR) is a performance based contracting vehicle, which obligates the contractor to guarantee the fulfillment of a specific requirement.

The Army and the contractor agree on a fixed price, upfront, for the contract award. The contractor buys insurance to cover additional costs in case the cleanup becomes more expensive than the contract award. The cost savings are estimated to be 20% - 50% cheaper for private contractors versus the time and bureaucracy involved when government agencies are involved. FPR is outcome driven. Sites that are well characterized are the best candidates. FPR allows the transaction of contaminated property to proceed early in the cleanup process and it mitigates environmental liability concerns of the buyer, seller, tenant, and lender. With FPR come special considerations. Cooperative Agreements are needed on a State-by-State basis. Insurance policies involve considerable negotiation over the amount of the projected cleanup costs. In addition FPR cannot completely eliminate CERCLA liability.

State Enforcement and Access Issues

Ms. Isabella Alasti, CA, indicated that there are different definitions of privatization amongst the agencies. It can mean the "early transfer" of property, "early transfer" of property and authority, the transfer of remediation to contractors, or fixed price remediation. CERCLA allows for the early transfer of property prior to completed remediation. After the cleanup is completed the Service must deliver a warranty that cleanup is completed. In order for a property to go through the early transfer process California has determined that the following issues be addressed: the property must be suitable for the intended use and the use must be consistent with protection of public health and the environment; the transfer will not delay the cleanup; restrictions on use of the property must be in place during remediation, a schedule for necessary response actions and a budget will be provided to address remediation; and the public will be afforded an opportunity for public comment on the early transfer. The Governor must approve the early transfer. There are many controlling documents utilized in this process. Consent Agreements are entered into between State regulatory agencies, new owners, and parties controlling the cleanup and/or cleanup funds. The consent agreement contains specific provisions for access, modification, termination, and penalties for non-compliance.

Another document that can be utilized is a Federal Facility Site Remediation Agreement. This is developed as an agreement between State regulatory agencies and the relevant federal agency. It describes the federal government's obligations, responsibilities, and liabilities under CERCLA for portions of a property that are not part of an "early transfer". In summary in the "early transfer process" States may have substantial leverage to negotiate effective access and enforcement provisions in the controlling documents. It is imperative to specify all requirements of various State agencies early in the process. Early transfers of property should benefit all parties' involved State, local and federal government.

Air Force Perspective on Lowry Privatization

Mr. Al Lowas, AF, identified the following major players in the Lowry Privatization: the Lowry Redevelopment Authority, the Lowry Assumption Corporation, the Colorado Department of Public Health and Environment, U.S. EPA Region 8, the Air Force Real Property Agency, and the Public. Four documents were developed to implement the privatization of Lowry Air Force Base: an Environmental Services Cooperative Agreement (ESCA), a Consent Agreement, an Enforceable Agreement and, a draft Finding of Suitability for Early Transfer. The ESCA is an agreement between the redevelopment authority and the Air Force and includes provisions for payments for attainment of project milestones, regulator oversight, and insurance to cover unanticipated costs associated with unknown contamination and long term monitoring of environmental conditions.

The Consent Agreement was developed for the Redevelopment Authority, the Lowry Assumption Corporation and the Colorado Department of Public Health and Environment and defines the process for cleanup and associated timelines. The Remediation Agreement was developed to identify the process for subcontracting cleanup services. The primary purpose of the Enforceable Agreement is to provide assurances regarding Air Force funding of necessary site remediation. Currently the Air Force is preparing a Finding of Suitability for Early Transfer (FOSET) for the Governor's signature. Three issues pending resolution relate to indoor air risk assessment, land use controls, and State environmental covenants requirements.

CONCURRENT SESSION: CIVILIAN FEDERAL AGENCIES

Moderated by: Jennifer Roberts, AK

This session focused on the apparent inconsistency among civilian federal agencies in their approach to States during CERCLA cleanups. In some cases individual States have worked with individual federal agencies to secure adequate funding for State involvement. Other States have been unable to secure such funding from the same agency, and a State getting funding from one agency may not be able to get it from another.

MAIN TOPICS:

1. CERCLA Authority
2. The Use of Memorandum's of Understanding/Agreement

CERCLA Authority

As with Superfund cleanups, States believe that their involvement in the process is critical to ensuring that the cleanup meets State requirements and can ultimately be closed out with the agreement of all parties. Failure to involve the States creates the risk that States may want to revisit those cleanups in the future. In addition, States can bring CERCLA expertise to the table that the civilian federal agencies do not have. In the past, States have encouraged EPA to assist the civilian federal agencies in implementing their CERCLA authority. This would speed the process and prevent the civilian federal agencies from making "beginners mistakes". However, it seems that in many cases the civilian federal agencies continue to operate independently, without either EPA or State assistance.

Jennifer Roberts, AK noted that a report issued in 1996 might be of some assistance. The report is entitled the Federal Facilities Environmental Restoration Dialog Committee Report (FFERDC). It outlines roles and responsibilities for cleanups at Federal Facilities, and would indicate that all cleanups should include States. Although mostly geared to Department of Defense cleanups, the Departments of Interior and Agriculture were parties to the document. As such, States should be able to use the principles in the document to leverage a role with the Civilian Federal Agencies that participated in the report. The report is available on the EPA OSWER website.

Ty Howard, UT, then discussed the Silver Creek watershed project, which was a cleanup of a mine near Park City, Utah. In this particular case, watershed stakeholders put sufficient pressure on the Bureau of Land Management to perform the cleanup, and to keep the stakeholders involved. The State was able to use EPA Superfund block grant money to fund their involvement. This may be another tool to use when the civilian agency will not fund State activities. Ty also noted that, through the ASTSWMO Current Issues Focus Group, the State of Missouri has had three of these cleanups go through their Voluntary Cleanup Program as an alternate tool. Several States have MOUs with Civilian Federal Agencies, many on a site-specific basis.

MOUs/MOAs

Tom Askew, ID, spoke at length about Idaho's MOU with the Bureau of Land Management. A full FTE is provided to Idaho through this agreement, to provide various services. Idaho not only reviews and comments on cleanup plans, the State writes sampling plans, provides consulting services on landfill closures, performs preliminary assessments and site investigations, and more. It is estimated that Idaho may save the Bureau several million dollars a year through this arrangement. It was therefore theorized that the reason Idaho could get so much funding is that they provide a much greater service than most States think of when they envision their participation in these cleanups. Demonstrating a value to the civilian federal agency may be a key in obtaining funding. Tom also noted that the Department of Interior has a pot of money that is available for State MOUs, but that not many States ask about it. Lastly, Tom noted that for the Bureau of Land Management, inclusion of a site on CERCLIS is critical to their commitment of funds – they do not respond to RCRA.

Bruce Venner, NJ, noted that they have five civilian federal agencies that they deal with in New Jersey, and have four site-specific MOUs to fund State participation. He did not think a model agreement would work for all civilian agencies (i.e. some States have used DSMOA as a model to negotiate MOUs with other agencies). He noted that New Jersey uses their enforcement authority against civilian federal agencies as a tool to require State involvement and approval.

There was no final conclusion of the session. However, several new ideas were brought to the table to use in negotiation with civilian federal agencies. Getting consistency among the various federal agencies may not be as important as simply ensuring that for every State that wants to participate in a civilian agency cleanup, there is an appropriate tool to meet their needs.

CONCURRENT SESSION: POLLUTION PREVENTION 101

Moderated by: Stephanie Riddle, IN

This session focused on a variety of pollution prevention (P2) tools that are currently being utilized at federal facilities by DOD, States and EPA. Representatives from EPA Region 10, University of South Carolina and the Army effectively communicated the application of some of the P2 tools in EPA Region 10 and EPA Region 4 and throughout some of the western States.

MAIN TOPICS:

1. DOD Partnering with the States
2. Addressing State and Regional Priorities Through P2 Partnerships
3. Federal Network Of Sustainability – Leading By Example

DOD Partnering With The States

Hugh McAlear, Army REC (EPA Region 5), outlined the increasing momentum of P2 partnerships/charters that are being forged between DOD and many of the States. From DOD's perspective, the two primary reasons for developing P2 charters was to foster a working relationship among government agencies and to promote/implement P2 as a preferred strategy for advancing the protection of the environment. Since the inaugural P2 charter was signed between DOD and Texas in 1996, more than half of the States have recognized the significance of P2 partnerships and have similarly signed charters. However, some of the States that have not signed formal charters have adopted a P2 cooperative arrangement (i.e. Minnesota).

Some of the present influences that have facilitated P2 partnerships are homeland security and force protection, regulatory compliance through P2, EMS (i.e. ISO 14000) and environmental sustainability. As a result, many benefits have been realized from both the DOD and State perspectives. DOD has communicated benefits such as increased student intern considerations, receipt of Governors Award via State recognition program, more effective rapport/interaction with State agencies, and increased awareness of P2 innovative technologies and training (i.e. NEPA). From the States' perspective, benefits such as a marked reduction in hazardous waste generation, interface with DOD on new equipment/ideas and the utilization of DOD as a community outreach vehicle were realized.

Current examples of successful DOD/State P2 partnerships consist of the development of environmental awareness training modules (presently at 3), development of a prototype automated small arms cleaning system with Illinois, annual regulatory training workshops, potential test bed for solid waste treatment – with the focus on reuse and various international and community outreach endeavors with the Polish military and local household hazardous waste programs.

In summation, the DOD/State P2 partnerships have evolved into more compliance-based cooperative efforts. And, consistent with other cooperative efforts, communication continues to be both paramount and the most critical tool in the P2 box.

Addressing State & Regional Priorities Through P2 Partnerships

Christine Steagal, University of South Carolina – P2 Partnership Coordinator, addressed partnerships in DOD Region 4 from both a state and regional perspective. The initial P2 partnerships were first established in 1998. Presently, partnerships exist in all 8 (Region 4)

States, which consist of over 90 military installations. The P2 vehicles used in the regional partnerships involve networking outreach, brochures/quarterly newsletter, annual meetings and information communicated on the web (i.e. DENIX).

The top 7 regional priorities identified were an affirmative procurement program, P2 training that is shop level, EMSs, hazardous materials management, construction and debris materials, recycling and continued environmental compliance through the implementation of environmentally sound P2 practices.

Although staff/graduate students at the University of South Carolina continue to provide considerable expertise, the regional partnerships consisting of multiple levels of stakeholder dedication on their respective steering and executive committees, also provide invaluable input. Basically, the structure of the committees is derived from a State P2 rep, military rep, Region 4 rep, University of South Carolina rep and several service RECs. In an effort to provide enhanced regional assistance, Congressional funding was successfully petitioned for and received in June 2002.

At present, Region 4 is currently working on 13 P2 tasks, ranging from an EMS/ISO 14001 alliance to P2 through the optimization of building deconstruction for DOD facilities. So, what's next for this active region? EMS training, outreach efforts among non-Region 4 states/regions, identifying long-term funding requirements and the effective communication of project reports.

Federal Network Of Sustainability – Leading By Example

Barbara Lither, EPA Region 10 Senior Policy Advisor, provided us with the current P2 efforts being implemented not only in her region, but the Pentagon and throughout the nation. As communicated, the primary purpose of the Federal Networks for Sustainability (FNS) is the following: effective leadership, interconnecting federal agencies, information sharing via a clearinghouse, training network members, showcasing sustainable programs and becoming the catalyst for real P2 change. One area that the FNS provided focus on, was the reality that the U.S. Government is the world's largest purchaser of consumer products and services. With that, an initiative was launched to increase to 100% use of recycled copy/office paper (18.1 billion sheets were purchased last year), building sustainable buildings (which decreases adverse environmental impact, enhances staff health, etc.), decrease the dependency on the exchange of paper documents while increasing the electronic flow of deliverables, increasing EMSs and purchasing/using green energy(s).

While the FNS program initiated in Washington State, the goal is to inspire all branches of the military via unified/parallel efforts. As we are all aware of the heroic efforts made to rebuild the damage sustained on September 11, 2001, another important effort has been underway. That is the *greening* of the Pentagon via efforts such as the use of environmentally safe construction materials, alternative sources of energy, leading-edge climate control systems, etc.

Subsequent to the presentations, no questions were raised. However, some comments were offered by the State of Pennsylvania. It was communicated that Pennsylvania has signed an FNS agreement with the Navy. Also, Pennsylvania is actively promoting green construction for State offices and is currently seeking some form of certification(s) for green construction practices.

PLENARY SESSION: MUNITIONS

Moderated by: Ruben Zamarripa, MO

All parties involved in the cleanup of federal facilities face challenges when it comes to munitions and explosives of concern, i.e., site assessment/characterization, cost, and cleanup levels. This session showcased some of the latest initiatives underway to address the need for policy and technology improvements for munitions cleanup.

MAIN TOPICS:

1. DOD Unexploded Ordnance (UXO) Update
2. State Perspective on Munitions Response Program (MRP) and Site Prioritization Protocol
3. Interstate Technology & Regulatory Council (ITRC) UXO Workgroup Update

DOD Unexploded Ordnance (UXO) Update

Colonel John Selstrom, DOD Special Assistant for UXO Matters, focused on the Munitions Response Committee (MRC) that has been dealing with issues of range inventory, UXO and sites like Vieques in Puerto Rico, the Massachusetts Military Reservation and Camp Bonneville in Washington State. In November 2000 the Range Rule was withdrawn and in 2001 DOD went to ECOS, ASTSWMO and contacted 542 tribes to draft a new munitions rule. Thereafter, the MRC was formed in July 2001. The MRC is working on several White Papers regarding UXO. Definitions of operational, transferring and transferred ranges were discussed. A slide was presented showing the organization of operational test and training ranges and the MRC. Another slide was shown depicting the life cycle of a typical military range. Munitions and explosive constituents (MEC) is now the current term used to replace and include unexploded ordnance (UXO).

Congress enacted Section 311 of the FY '02 National Defense Authorization Act requiring DOD to develop the Munitions Response Site Prioritization Protocol, which will be listed in the Federal Register on August 22, 2003 for a 60-day comment period. The Munitions Response range inventory has been posted on the DENIX website for public review and comment. The inventory became available on May 31, 2003 for comment by States and Territories and is to be updated in January 2004. Section 312 of the Defense Authorization Act established an account for the Munitions Response Program called DERA. Money can now be transferred within DOD from the Installation Restoration Program (IRP). Section 313 requested cost estimates for clean up of operational ranges. The estimated cost to clean up UXO and discarded munitions ranges anywhere from 15 to 83 billion dollars, while munition constituents cost range from over 1 billion to 14 billion dollars.

There is still a need for improving technology when conducting munition responses. Typically 99 dry holes are dug where only scrap metal is found for every 1 UXO item found. No site can be assured a cleanup of 100% and most require further site management. The military buys millions of dollars of worth of ammunition each year. Tungsten M16 bullets cost DOD 17¢ and lead bullets cost 16¢ each, but the cleanup of lead bullets costs 25¢ per bullet. The tungsten bullets will eventually pay for themselves versus the clean up cost in the long run. The problem is getting the military to shift their thinking and realize the long term potential. There are still

issues involving the Munitions Response Program to be resolved regarding life cycle management, wildfires, firefighting, training and the industrial work force.

State Perspective on MRP and Site Prioritization Protocol

Clint Willer, TN, gave a presentation on how the Munitions Response Program (MRP) and the Prioritization Protocol could help the States/Territories. Discussed was the length of doing munitions cleanup; for instance, some can take 26 years or more. 10 U.S.C. 2710(b) required DOD to develop, in consultation with the States and Tribes, a proposed protocol for assigning each defense site a relative priority for response activities related to UXO and discarded military munitions. The inventory posted on DENIX is a coordinated effort to identify all of the sites impacted by UXO in each State. Site names, site status and sensitivity of disclosing locations due to security risks need to be resolved. The Protocol will give States a better idea where their sites fall and will help establish budget priorities. Stakeholders will have a direct input on the final sequencing. It is still unknown if there will be adequate funding to address the number of sites on the inventory and in the FUDS program. Will additional funding become available under a separate Munitions Response budget?

Interstate Technology & Regulatory Council (ITRC) UXO Workgroup Update

Jeff Edson, CO, highlighted the ITRC UXO Work Group's current efforts. The group was established five years ago and currently meets 3 to 4 times a year. ITRC will play a role in getting States prepared for implementing the Munitions Response Program. ITRC offers UXO Basic Training. The training includes two days in the classroom and is geared towards regulators and land managers. The training is similar to the EPA Management of Ordnance training course. One ITRC training course is left and is scheduled for October 28-29, 2003 in Austin, Texas. Five hundred attendees have taken the UXO training so far. You can visit the website at itrcweb.org

ITRC puts out Technical/Regulatory guidance documents. The Munitions Response Historical Records Review document for ASRs was developed in 2003 involving regulatory input. The Characterization and Remediation of Soils at Small Arms Firing Ranges was also developed in 2002. Currently, the group is working on a Geophysical Prove Out document. Future projects include conversion of the UXO Basic Training course to an Internet training course in 2004 and for the public in 2005. For questions or comments about ITRC please email itrc@wpi.org

CONCURRENT SESSION: LESSONS LEARNED AND THE FUTURE OF BRAC

Moderated by: Clarence Smith, IL

This session focused on the various lessons learned from the States since the first BRAC round in 1988. Representatives from Illinois and Colorado provided programmatic and project specific examples of BRAC issues and discussed potential improvements that would be beneficial for the future of BRAC.

MAIN TOPICS:

1. Presentation of the BRAC Paper Developed by the Base Closure Focus Group
2. Asbestos at Lowry: What You Need to Know Prior to Transferring Property

Presentation Of The BRAC Paper

Clarence Smith, Illinois, provided an overview of a draft BRAC paper under development by the ASTSWMO Base Closure Focus Group to help facilitate improvements for future base closure remedial programs. He explained that the focus group has established six main areas for improvement in future BRAC rounds, and then provided some background discussion to help explain the rationale for each main area that is being singled out for improvement.

The six main areas for improvement are:

- Ensure consideration of long-term operation and maintenance and institutional control liability in out-year funding and resource allocation
- Identify lead agency/regulator roles and responsibilities early in the process, and establish realistic and enforceable schedules
- Ensure early State involvement in the BRAC process, especially in the preliminary cleanup scoping activities and budgetary planning
- Ensure DOD recognition and compliance with State clean-up statutes, regulation and enforcement authorities
- Identify statutory language that has broad support that amends Section 120(h) of CERCLA to give States the authority to approve all transfer of BRAC property
- Resolve the inadequacies surrounding the use, application, monitoring and enforcement of institutional controls.

In his concluding remarks, Clarence emphasized that there will be another BRAC round in 2005, and that the next BRAC round can be improved by ensuring stable funding, hands-on DOD management of fixed-price contracts, recognition of land-use limitations, early State involvement in the BRAC process, DOD recognition of State authorities, and funding for monitoring and enforcement of institutional controls.

During the Q&A session, several attendees suggested that preliminary evaluations should be performed to determine suitability for various land uses before land use authorities lock-in the future land use. One attendee suggested that the BRAC Closure manual be updated to include early transfers and other recent developments in the BRAC program. An EPA attendee indicated that EPA is waiting to see if there are further changes to the BRAC process before updating their guidance and before implementing updated training programs. It appeared that most of the attendees agreed that the next BRAC round will encompass bases that are already fairly far along in the remedial program, and some of which will have RCRA permits. At the end of the session, Clarence requested that States provide comments on the BRAC paper that was sent out via e-mail on August 15, 2003.

Asbestos At Lowry

Jeff Edson, CO, utilized recent discoveries of asbestos in soils at the former Lowry Air Force Base as a case example of why BRAC sites need a thorough evaluation before property transfer. The findings of asbestos debris by developers after property transfer has resulted in significant public concern, and has led to the issuance of several compliance advisories and a RCRA order requiring an updated RCRA facility assessment over the entire base. Based on the compliance advisories, home owners have been asked to keep their windows closed and to stay off of dirt areas, and developers have been required to sample the indoor air of recently built homes and to

take interim actions such as the placement of straw mats and to undertake wetting procedures as part of an emissions control plan to reduce the amount of asbestos exposure from contaminated soils while completing development in the neighborhood.

A soil assessment via sampling grids has been implemented to establish the extent of asbestos. Since Colorado does not have a soil standard for asbestos, removal determinations are made based on the presence or absence of asbestos. Since the Air Force does not agree with the need for the removals, they are not providing any funding. Also, since the sampling grids did not include sampling beneath roads, sidewalks or other permanent features, Colorado is not sure if institutional controls will be utilized for some of these areas.

The following are some lessons learned from Lowry: demolition in place was common practice, conventional CERCLA investigations do not normally include assessment for asbestos, aerial photographs provide valuable historical information, and there is no federal or risk based standard for asbestos in soil.

During the Q&A session, there was discussion about the relevance of the 1% asbestos ceiling tile criteria. Several attendees suggested that this construction-based criterion was not based on exposure risk, especially from soils. One attendee suggested that States might want to look into a toxicity study that was performed as part of a Montana vermiculite case.

CONCURRENT SESSION: RADIATION ISSUES

Moderated by: Jeff Deckler, CO

The radiation issues session focused on U. S. Army ACOE of Engineers (ACOE) Formerly Utilized Sites Remedial Action Program (FUSRAP) issues dealing with assessment of federal liability, site funding and prioritization, and federally mandated performance measures.

MAIN TOPICS:

1. EPA's Low Activity Waste Rule
2. NRC's Status of Rulemaking regarding Disposition of Solid Materials
3. Formerly Utilized Sites Remedial Action Program (FUSRAP)
4. Monitoring for Radioactive Waste at Solid Waste Facilities-Pennsylvania experience

EPA's Low Activity Waste Rule

Dan Schultheisz, EPA ORIA, discussed and presented the upcoming EPA proposal that will ask for comments on Alternatives for Disposal of "low activity" radioactive waste disposal. The alternative being considered is disposal of low activity or mixed waste in Subtitle C facilities. EPA expects to issue an Advance Notice of Proposed Rulemaking this fall to generate comments on the issue. EPA would like input such as: is this a reasonable approach, is it workable/nonworkable, what problems will this present, and any other constructive comments.

EPA's questions to its stakeholders are: Are we realistic, are there other ways to address disposal options for this waste, should States individually take on this issue, what can EPA do to assist, what are the next steps? The waste in question would include TENORM, FUSRAP waste, mixed waste, NORM, and AEA material. Currently, there are few facilities available to

generators; if changes are made to allow this low-level material in Subtitle C facilities, what problems could there be to workers, the facility and the public; and is this an appropriate use of Subtitle C facilities? Regulation is not consistent from State to State. There is also the long-term care issue. RCRA facilities are required to monitor for 30 years. Many of the radioactive materials being considered last for generations.

NRC's Status of Rulemaking Regarding Disposition of Solid Materials

Ms. Charlotte Abrams, Chief of the Rulemaking and Guidance Section at NRC headquarters, addressed the issue of how certain solid materials, which their licensee has to deal with, is split into three categories:

1. Material that although located at a licensed facility, has not been impacted by the radioactive material at the site (i.e. desks computers, furniture);
2. Material that has been impacted but can be "cleaned" or has low levels of contamination; and
3. Materials with significant radiological contamination that must be disposed of at a licensed facility. Currently, NRC reviews requests for release of the first two categories of materials on a case-by-case basis.

For the past four years, NRC has been considering establishing a guidance/rule that would define how the material is managed.

Stakeholders, which include the recycling industry, citizen groups, and State/local regulators, have expressed concerns at public meeting and in written comments regarding how to deal with public perception (either real or imagined), unknown threats of recycled material, loss of control of radioactive material, adverse economic impacts, and health risks.

The NRC is considering at least two other alternatives to a free release of this type of material. The alternatives would be to dispose of the material in either a RCRA "C" or "D" facility or disposal only at a NRC licensed facility. At this time, NRC has not made any decision. The NRC is targeting Fall 2004 for a proposed rule and guidance.

Ms. Abrams also noted that the NRC is requesting comments on security issues with licensed portable gauges. The website for comment is: www.nrc.gov/materials.html.

FUSRAP Issues

Ms. Tomiann McDaniel, ACOE Headquarters team leader for FUSRAP, provided information on recent ACOE policy regarding federal liability and ACOE performance measures to be used to meet the Presidents goals.

The ACOE has developed a policy that establishes how they will assess federal responsibility at FUSRAP sites. The policy will be applied to new sites or sites that do not currently have active remediation. States had asked for the opportunity to comment on drafts and to work with ACOE to develop this policy. ACOE elected not to provide drafts but instead issued the policy and are asking for comment. One possible outcome of this determination is that ACOE will suspend cleanup operations at any given site. States believe that once the site is included in the program, ACOE has the obligation to clean it up, and can always pursue responsible parties for cost

recovery. ACOE is planning to use cubic yards of soil remediated as their performance measure to meet the President's request that agencies have some sort of performance indicator in order to evaluate efficiency. They are soliciting ideas from the States about other measures that might be better.

Monitoring for Radioactive Waste at Solid Waste Facilities

Dave Allard, Director, Bureau of Radiation Protection for the Pennsylvania Department of Environmental Protection, provided information and guidance on how Pennsylvania has taken an active part in monitoring for radioactive materials to avoid having NRC licensed or other similar waste material disposed of in the State's permitted RCRA Subtitle D facilities. Examples of management of licensed sources were given. Materials being dealt with include medical waste (both human and animal), TENORM, and other unauthorized disposals. Pennsylvania takes a common sense approach of defining what the waste is, what its risk is, can it be safely disposed of at the solid waste facility or should it be taken to an NRC low level licensed facility.

Pennsylvania establishes action levels and provides management guidelines to the facility operators. All facilities are required to monitor for radioactive materials. In many cases, state-of-the-art monitoring devices can determine specific radionuclides (i.e. medical isotopes), and allow for direct disposal of these materials. This avoids the risk of sifting through the garbage to find the source, and the inconvenience of isolating the load until it decays. States and facilities have to deal with a quagmire of federal regulations. The State would like to initiate an ANSI standard to address the monitoring and management of these materials.

PLENARY SESSION: FORMERLY USED DEFENSE SITES (FUDS)

Moderated by: Brian Stonebrink, AZ

This session highlighted the successes and problems of the MAPs, the development of the EPA FUDS database and an update from the FUDS Improvement Workgroup (FIWG).

MAIN TOPICS

1. FUDS Improvement Work Group
2. State Perspectives of the FUDS Management Action Plans (MAPs)
3. EPA FUDS Database

FUDS Improvement Workgroup

Jennifer Roberts, AK, briefed the attendees on the FUDS Improvement Working Group (FIWG) which began as the result of an ECOS resolution in August 2000 to work on FUDS issues including lead regulator, decision points for closure, States Management Action Plans (MAPS), PRP sites, a national FUDS database, and the ACOE Engineering Regulation. The draft Engineering Regulation or "FUDS Manual" was released by the ACOE in January 2002. The ASTSWMO Current Issues Focus Group coordinated a review and comments of the second draft in July 2002 and identified many State issues including State involvement, public participation, ineligible FUDS, and identification of new sites. As a result of these comments, many of these issues have improved. In July 2003, the group decided to shift the focus of the FIWG to a "problem clearinghouse" as a FUDS Forum. FUDS funding was presented with a \$213 million

budget for 2004; a “plus up” by Congress was still being considered. Estimates to complete or have a remedy in place by 2025 for 80 to 90% of the sites include \$10 billion for munitions sites and \$3.7 billion for hazardous, toxic, and radiological waste (HTRW) sites (excluding program management). To reach the DOD goal of remedy in place by 2020 for HTRW sites will require at least \$315 million a year. Funding munitions sites remains a concern.

State Perspectives of the FUDS Management Action Plans (MAPs)

Kevin Frederick, WY, highlighted the Wyoming MAP approach which used the 2001 DOD “Management Guidance for Defense Environmental Restoration” guidance document and the 2001 Department of the Army “New Initiatives for FUDS Program” memorandum. Advantages of the MAP process include determining schedules for sites, funding under DSMOA, flexibility of MAP content, organizing inventory lists and records, and causing regular communication between the State, EPA, and ACOE. The major disadvantage is that it requires a lot of staff time, which takes staff away from other duties. Advice is to prioritize work and maintain process momentum.

John Handzo, VA, discussed the Virginia MAP with the primary purpose being to better understand the 268 FUDS in the State, of which 140 were found to be ineligible. The MAP brought the State, EPA, and ACOE together as a team to maximize funding for site cleanup and also found 20 new sites. A benefit of this was to involve the public and fund a time-critical removal action at a beach area, which delighted the public. Other benefits include building consensus to prioritize sites and reduce costs over time. Concerns include continued funding and ensuring data is shared to better understand and identify historic sites.

Richard Haynes, SC, informed the attendees that their State MAP was completed and signed by both the State and ACOE in July 2003. While EPA Region IV did not sign, they will be part of the FUDS team to address issues. The MAP was used to summarize site status and file information, prioritize sites, and project funding needs. Eligible sites were identified and the PA/SI process will be used to evaluate five No DOD Action Indicated (NDAI) sites per year. Concerns were that the process took 18 months to complete, freedom of information act versus security at some sites, and that the ACOE would not commit to detailed cleanup requirements in the plan. The ACOE will involve the State in remedial action work, especially at a site near Myrtle Beach where several 250-pound bombs have been found.

EPA FUDS Database

Renee Wynn, EPA FFRRO, began her presentation by sharing the good news that EPA will rejoin the FUDS Forum after leaving the FIWG 18 months ago. Components of the EPA FUDS Database were presented. Each region will help prepare the database using the EPA Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) database in addition to State and ACOE data. It will cover both privately and federally owned sites and will be coordinated with the ACOE and appropriate federal and local agencies. Tier I sites will be those handled by the States unless a site is elevated to the National Priorities List (NPL). Tier II sites will be those where the EPA is conducting the site work itself. The EPA policy will be listed at www.epa.gov/swerffrr.

PLENARY SESSION: PERCHLORATE

Moderated by: Ellie Grillo, MA

This session focused on a variety of Perchlorate topics that many regulators, facilities, and members of the regulated community and citizens are concerned with. Representatives from EPA FFRRO, DOD, University of Massachusetts and the Center for Public Oversight effectively communicated varying current perspectives and involvement.

MAIN TOPICS:

1. EPA Perchlorate Policy and Involvement
2. DOD Perspective and Involvement
3. What the Science is Saying
4. A Community Perspective

EPA Perchlorate Policy And Involvement

Jim Woolford, Director, EPA FFRRO, provided an initial overview/background of Perchlorate, including its chemistry, current military and common applications, human health risk assessments and some pending regulatory actions. Basically, Perchlorate is both a stable/mobile salt that first saw widespread use by the DOD in the 1950s, for a variety of applications. Today, NASA and various militaries utilize Perchlorates, in addition to widescale uses in automobile airbags, fireworks, etc. A total of 25 States have a confirmed Perchlorate presence, while 29 States have reported some form of a Perchlorate release. Perchlorates are currently manufactured and/or used in approximately 40 States, with the bulk produced in Nevada. RCRA, CERCLA and CWA have been utilized to address Perchlorate contamination.

A total of 8 States have issued advisory levels for Perchlorate, which ranges from 1 ppb to 18 ppb. At present, the National Academy of Science (NAS) is reviewing toxicity assessment data, which may ultimately become the national standard. NAS's expected response on a national standard is between 12 to 15 months. Subsequently, EPA would establish a proposed MCLG and MCL within 24 months followed by an 18 month period to finalize. Presently, EPA's draft Health Risk Assessment proposes a reference dose that translates into an MCL of 1 ppb. However, during this interim period, EPA continues to recommend a provisional cleanup/action level range between 4 to 18 ppb. DENIX, EPA and NAS websites all contain updated/detailed Perchlorate information.

DOD Perspective And Involvement

Kurt Kratz, DOD, clearly stated that DOD recognized the current threat from Perchlorates and is utilizing a tremendous amount of resources. DOD is evaluating potential detection limits as low as parts per trillion. Although ordnance personnel favor the use of Perchlorate partly due to its predictable nature, DOD is actively looking for a substitute. To bolster the requirement for additional data/information, DOD conducted a voluntary survey in 2001 in which 312 to 609 installations participated. Also, mandatory surveys are currently being conducted via the CWA and NPDES programs. The Secretary of Defense has been tasked to conduct a study with the CDC, which is due in 2005. Additionally, both a construction appropriations bill and defense appropriations bill have been initiated to conduct further study.

DOD communicated that the 2002 Perchlorate sampling policy continues to be the standard. DOD is currently evaluating various remedial technologies to address Perchlorate contamination, such as in-situ/ex-situ bioremediation, ion exchange, permeable reactive barriers, etc. DOD is exploring the possible replacement of Perchlorate in practice grenades. Prior to a national standard being implemented by EPA, DOD will continue to adhere to individual State advisory levels for Perchlorate. Also, DOD is pursuing analytical methods that are more appropriate than the current EPA 314 method.

What The Science Is Saying

Dr. Thomas Zoeller, University of Massachusetts, provided some medical guidance as well as background on the human health effects from Perchlorate. Information was provided on some of the likely effects that Perchlorates may have on the thyroid gland, for both adults and children, and possible effects during pregnancy and on newborns.

The Greer Study was cited, which involved 37 adult volunteers who ingested Perchlorate doses in water to 0.5 ppm for a period of 14 days. Additionally, this study evaluated iodide uptake at 14 days, as well. The results of this study concluded that the doses prescribed for 14 days resulted in no medical problems. The true no effect level was later calculated at 5.2 ppb, per day. Additionally, this study indicated that a dose between 180 to 200 ppb would most likely not cause a problem, for a 14-day period. As envisioned, newborns are the most sensitive population. Also, mother's milk and tap water were considered the most likely sources of Perchlorates for the most sensitive population. Information on the Greer Study is available on the ASTSWMO website. Currently, the science presented in the Greer Study is being debated.

A Community Perspective

Lenny Siegel, Executive Director of the Center For Public Environmental Oversight, provided some thoughts from a national community perspective. He stated that Perchlorate contamination is a big issue in many of our communities, and that 10s of millions of people may be affected by Perchlorates, from private water supply wells to the City of Realto, California, whose municipal water treatment has been unable to remove the contaminant to within acceptable health levels.

Mr. Siegel stated that the presence of Perchlorates in drinking water is a local issue, regardless of one's political affiliation, and seems to be getting larger through time. He cited the presence of a Perchlorate plume in Santa Clara, California that is approximately 10 miles long. He stated that the NAS delay with promulgating a national standard or MCL, essentially was delaying many cleanups from commencing. Furthermore, he stated that if the future MCL was raised considerably, many Perchlorate sites would simply vanish from the books. In California, he stated that an advisory level (possibly 2 – 6 ppb) should likely be in place by the end of this year.

In conclusion, it was stressed that DOD act now to conduct pilot studies prior to a State standard being in effort. He recommended that the first large-scale pilot study should be conducted in Realto, California, to address the treatment problems with the municipal water supply.

Subsequent to the presentations, some questions/comments were raised. Some comments involved the presence of ordnance on ranges. The comment was that ordnance, once detonated

on a range, conceivably represents less of a threat for Perchlorate than practice ordnance. Additionally, it was stated that a lot of published studies on the effects of Perchlorates have been conducted in Las Vegas, Nevada. Also, California presently has some unpublished studies on this subject. Some of these studies are tracking different zipcodes where children have been affected, and comparing to varying levels of thyroid dysfunction. Jim Woolford stated that EPA is compiling a nationwide list of Perchlorate sites, in addition to evaluating at 5-Year reviews.

PLENARY SESSION: EVOLUTION OF DSMOA

Moderated by: Anne Malewicz, MA

As the DSMOA program has matured, areas where more improvements were needed have become apparent. In an effort to introduce efficiencies into the cooperative agreement program, DOD, ASTSWMO and senior managers from each of the service components formed a DSMOA Steering Committee to resolve issues cooperatively. This panel highlighted the initiatives proposed by the Steering Committee, outlined next steps for DSMOA training and funding initiatives outside of the DSMOA program.

MAIN TOPICS:

1. DSMOA Steering Committee Update
 - a. Streamlining
 - b. Training
 - c. Funding
2. State of California's Development of Funding Outside the DSMOA

DSMOA Steering Committee Update

Kurt Kratz, DOD presented a brief overview of the DSMOA Steering Committee. He noted that the goal of the DSMOA Steering Committee was to improve the DSMOA process. The issues with the DSMOA Process that the Steering Committee are currently addressing are: oversight and communication; work plan (execution plan) development; reporting; inconsistent service implementation; unobligated funds; and funding by Services.

The Steering Committee agreed upon improvements such as the need for ACOE program automation; improved training for the program; legislative relief on funding procedures; updating and streamlining the program and increasing flexibility to accommodate all participants.

Streamlining Subcommittee

Gary Moulder, PA, highlighted the work of the Streamlining Subcommittee, which has focused on two main issues:

1. Performance Reporting
 - a. Requirements
 - b. Financial/Budget Issues
 - c. Communication and coordination issues
 - d. Administrative and Procedural Issues

2. Reducing the Administrative Burden of the DSMOA Process

The current format for the DSMOA Reports is to include a narrative report with an Execution Plan modified with Option A or B. Most States submit lengthy narrative reports quarterly or semi-annually, while the reports reflect more site status than DSMOA progress. In recent discussions at the DSMOA training sessions it appears that most service components are not utilizing the Performance Reports.

The Subcommittee's recommendations are to:

- Use approved Execution Plans modified to report actual performance;
- Eliminate Narrative Reports;
- Add brief narrative section for comments, remarks, and challenges;
- Electronic submission-web based; and
- Report success stories successfully.

The automation process will be done in two phases. Phase one will include the contract execution, database design, hard and soft ware purchase, data load and data launch. The ACOE plans to have this completed by February 2004. Phase two will include the automation survey, representative summaries, abbreviated plans and schedules and initial funding.

DSMOA Training

John Pike the Regional Environmental Manager for the Air Force in Dallas, Texas summarized the training efforts undertaken to improve performance in the DSMOA program. The old DSMOA program had several problems:

- General confusion
- No standard approach to the Program
- Poor adherence to DSMOA CA Program milestones
- Loss of DSMOA Funds
- Deterioration of DOD/State partnerships

The root cause of these problems was determined to be poor understanding of the cooperative agreement process. So it was decided to provide comprehensive training. The objectives of this effort were to provide cost effective and focused training before the next Cooperative Agreement cycle. The organization of the training initiative created by the DSMOA Training Committee included the Air Force as the lead of a multi-service effort with input from ASTSWMO. Funding for this training was provided by all of the services. The training was designed in a "workshop format" with a regional approach. Uniformity was stressed with continuous feedback and improvement. A detailed training manual was provided to every participant. The training was a huge success, however it will be necessary to sustain the training and maintain the synergy.

Clint Willer, Director of Federal Programs for the Tennessee Department of Environment and Conservation, spoke about the DSMOA training initiative from a State's perspective. Mr. Willer agreed that the regional approach worked best and that it was important to jointly train the installation and State Program Managers since the DSMOA Program is a "bottom up" process. Mr. Willer noted that the ACOE had made some dramatic changes and acknowledged that if the installation work plans are accurate and the State's cost estimates are good, then the process will

work much better. A video is being developed to help continue the DSMOA training. He also noted that basic training for State/Territorial program managers is available on the DENIX website.

DSMOA Funding

Kellie Kachek, ACOE, Omaha CX spoke about the funding mechanisms under the DSMOA Program. There are two methods currently in use for funding Cooperative Agreements: Advances and Reimbursement. The Reimbursement method is the preferred method and can be “Fixed Price or Cost Reimbursable”. Both have advantages and disadvantages.

Both Fixed Price and Cost Reimbursable are funded annually and are run on a pay when billed basis. However the Fixed Price option establishes fixed amounts, requires invoices and the total amount is obligated upfront or it can be phased in. With the Cost Reimbursable method, a target amount is established, payment vouchers are used and the total estimated amount is obligated.

With the Fixed Price option actual costs are paid up to the fixed amount, there are no close out audits, there is a steadier flow of funds for the Components, funding to States is more timely and the obligated Year One funding stays with the CA during the full performance period. The downside of the Fixed Price method is that Components are at risk of losing funds if they are not used. Also with the Fixed Price method the entire CA must be funded upfront.

The benefits of the Cost Reimbursable method is that it pays for actual costs incurred, however audits are required at closure, there is a need to provide additional funds if actual costs incurred exceed targeted amounts and the audit agency must approve vouchers prior to making payment to the States. The Cost Reimbursable method also requires that the entire CA be funded upfront.

The Cooperative Agreement may be issued for up to 24 months and funding can be phased in based on the annual receipt of funds.

A new feature of the DSMOA process is that funds obligated in Year One remain obligated during the cycle of the Cooperative Agreement and additional work and funding can be added in Year 2. The ACOE recommended business practices for the DSMOA process are:

- The ACOE will issue funding (Approved Amount) assistance letters with approved amounts to all States in early October.
- The Components will provide full funding of approved amount to the ACOE, as soon as funds become available.
- ACOE will fund Cooperative Agreements in phases based on the work completed and invoiced by the States.
- The ACOE will maintain a small management fund to prevent the loss of Component’s funds and guarantee State funding up to the approved amounts.

The benefits of this approach are that the ACOE will reimburse States when they bill and there is no delay with Cognizant Audit Agency approval. Sufficient funding will be provided at the beginning of the CA and one year funding won’t have to be de-obligated. This will prevent loss of funds to the Components and no cognizant Audit Agency required for closeout. A Fixed Price

approach to CA provides the most benefit to States and the Components and the ACOE recommends that all States in the DSMOA Program adopt this method.

Funding Outside the DSMOA

Isabella Alasti, Staff Council with the California Environmental Protection Agency spoke about the State of California's development of funding outside of the DSMOA. The State of California found that the costs of the DSMOA Program were very high and difficult to control and that the Program was negatively affecting State and DOD relationships. Differences were identified in the DSMOA method of cost reimbursement and the California cost recovery system. The Navy decided that the process of reimbursing the State could be better done outside of the DSMOA program. The Navy plan would:

- Avoid the middle-man (ACOE). The navy portion of ACOE management and support costs reduced about six cents for each dollar reimbursed to the State;
- Eliminate loss of funds; and
- Avoid tying up funds up-front and fiscal year crossover problems.

The Navy did have some drawbacks such as the formal agreements and first payment took a long time, the dispute clause has not been tested, and large increases in workload do make it difficult to compare to DSMOA.

The Navy cost reimbursement provides a direct relationship between DOD and the States. A pilot program was started in 1999 and 56 of 65 bases transitioned to cost recovery as of 2003. The benefits of this system are:

- The cost recovery is automated and generates an invoice faster and cheaper;
- The indirect rate is now the same for private sites;
- Reimbursement is received within 60 days;
- Cleanups are held to a uniform standard; and
- Invoice format is consistent.

It was noted that some agencies might not have the resources and or authority to implement a cost recovery system. In this system it is also necessary for the State to initiate the cost recovery process, which can require additional staff.

After this session, ASTSWMO Secretary-Treasurer, Jeff Deckler, CO recapped the events of the past three days of the symposium. He thanked everyone for all the hard work and great participation from the speakers, moderators, poster session presenters and the attendees. We look forward to seeing everyone in 2005!