

U.S. Environmental Protection Agency Science Advisory Board

Final Minutes of Public Conference Call Meeting June 10, 2004

Committee: Contaminated Sites and RCRA Multi-Year Plan Advisory Panel of the U.S. Environmental Protection Agency's Science Advisory Board (SAB). (See attached Roster)

Date and Time: June 10, 2004 from 2-5 Eastern Time (See attached Federal Register Notice)

Location: By telephone only. Call was run from Science Advisory Board, Cubicle 3610E, 1025 F Street Northwest, Washington D.C.

Purpose: The purpose of this call was to provide the Panel with an overview of the EPA's Resource Conservation and Recovery Act Multi-Year Plan and its Contaminated Sites Multi-Year Plan. The charge to the Panel will be presented and discussed on this call.

Materials Available: The agenda, roster, biosketches, Federal Register Notice, and charge were circulated in advance of the meeting as were the *ORD Multi-Year Planning Guidance Update*, October 16, 2001; *ORD's Contaminated Sites Multi-Year Research Plan FY2003 Edition*, June 2003; *ORD's Resource Conservation and Recovery Act (RCRA) Multi-Year Research Plan: Fiscal Years 2003 to 2010*, May 2004; power point presentations relating to each provided as background material well before the meeting; overheads used by Dannel and Erickson in briefing the Panel on the conference call, and a June 5, 2003 Memorandum from the Office of Management and Budget on FY2005 Interagency Research and Development Budget Priorities.

Attendees: A full list of participants and a Panel roster are attached to the minutes. There were about two dozen people participated on the call including the panel, Agency staff from ORD, OSWER and the regions. The following people attended: Kathleen White and Tony Maciorowski of the SAB Staff Office; Panelists Jim Clark, John Crittenden, David Dzombak, Joseph Hughes, Byung Kim, Catherine Koshland, Reid Lifset, Michael McFarland, Susan Powers, John Smith, and Tim Thompson; Dave Carson, Patricia Erickson, Annette Gatechette, Bob Olexsey, and Lynn Papa of ORD/NRMRL/Cinti; Stephen G. Schmelling of ORD's Ground Water and Ecosystems Restoration Division in Ada, Bob Dyer ORD RTP, Mimi Dannel and Lori Kowalski of ORD/HQ, Harold Ball of Region 9, and Jan Young of OSW

Summary

The meeting went largely according to the agenda (attached) with some slight differences in times. The following actions resulted from the call:

1. ORD will add some presentations on collaborations to the agenda for the June 17 call.
2. ORD will provide some general information on funding and tech support for research under these two MYPs
3. The DFO will resend the documents with a list for convenience

4. ORD will provide the DFO with the website for the Strategic Plan which she will forward to the Panel. Goal Three is one of the most concise parts of the plan.
5. ORD will provide materials on PART and invite an experienced speaker to provide a brief background presentation, perhaps at the June 17 conference call.

The following summary provides more detail on these items.

At 2:00, SAB DFO Kathleen White opened the meeting. She called the roll of the Panel, expected Agency staff, and the public. She then made the following points:

1. Welcome to the conference call, which is the first in a series of face-to-face and conference call meetings at which a specially formed panel of the EPA Science Advisory Board will review the Contaminated Sites and RCRA Multi-Year Plans. There will be additional conference calls June 17 and 24 and a face-to-face meeting July 7-9. If necessary, a conference call will be held August 5 to wrap up the Panel's report.
2. After the Panel approves its report, it will be forwarded to a Quality Review Committee (QRC) of the Board which will consider it at a public conference call. The QRC may recommend it for approval, recommend it for approval with minor changes, or return it for further work. Once the QRC has recommended approval, the report will be considered by the Board. The Board, in turn, may approve the report, approve it pending certain minor changes, or return it to the Panel. Once approved by the Board, the report will be transmitted to the Administrator and the Agency will respond to it in writing.
3. The activities of the Science Advisory Board are governed by the Federal Advisory Committee Act, other government regulations (such as those on conflict of interest) and SAB policies.
4. In accordance with *Reorganization of the EPA Science Advisory Board (SAB), A Report of the EPA Science Advisory Board Staff Office (EPA-SAB-04-001)* and *Implementation Plan for the New Structural Organization of the EPA Science Advisory Board (SAB), A Report of the EPA Science Advisory Board Staff Office (EPA-SAB-04-002)* – especially section 5.2 item (b) of the latter, this panel was formed from a standing committee of the Board – the Environmental Engineering Committee, supplemented with additional experts from other SAB committees and other EPA FACA Committees. The additional experts are Dr. Thompson from the SAB's Ecological Processes and Effects Committee and Dr. Clark from the Board of Scientific Counselors. As stated in the Federal Register notice, the roster and biosketches were published at SAB's website and an opportunity was provided for comment. None was received.
5. The SAB website (www.epa.gov/sab) contains materials about panel formation and about this advisory.
6. All participants in SAB reviews complete confidential financial disclosure statements which are updated for each specific review and reviewed for

each specific review by the SAB's Ethics and FACA Policy Officer. All panelists have completed a course on government ethics prepared especially for Special Government Employees, like themselves. All required paperwork is current, signed, and in place for this panel. We'll go over this in more detail at the face-to-face meeting where the Panel will be offering advice and when our ethics officer can be present.

7. All materials available to the Panel will be available to the public. Individuals wishing to be on the DFO's distribution list for materials relating to this review should send an email to that effect to the DFO (white.kathleen@epa.gov) who will add them to her list.
8. Public comment is accepted at SAB meetings. Written public comments are encouraged, but opportunities for brief oral comments may also be scheduled in advance. No one from the public has requested time to comment on this conference call.
9. All consensus drafts, and possibly earlier drafts, will be available to the agency and the public.
10. Because this is a conference call, people should use the mute button unless they are speaking and identify themselves before they do speak.

At 2:10 Dr. Anthony Maciorowski, Associate SAB Director for Science, welcomed the Panel and attendees on behalf of the SAB Staff Office. The Multi-Year Plans are very important within the Agency, so advice on them is important.

The panel chair, Dr. Michael J. McFarland, then welcomed the participants and said that the Panel had an important opportunity to offer EPA advice on research supporting Strategic Goals #3. The purpose of today's meeting, as stated in the Federal Register, is to provide the Panel with an overview of the Contaminated Sites MYP and the RCRA MYP.

At 2:15 Robert Olexsey, Acting Associate Director of the National Risk Management Research Laboratory in the Office of Research and Development, provided the Panel with the Agency's perspective on the multi-year plans and this review. He is the delegated Agency Executive Lead for this review. He thanked the participants and assured all present that input from the SAB is extremely valuable to ORD and will be incorporated in their planning.

The Agency's new strategic goal structure has five goals instead of eight. Goal #3 is Land Preservation. Brownfields related research is discussed in this plan although, technically, the Brownfields program is in Goal 4, Healthy Communities. Despite the new goal title, contaminated sites and RCRA are long standing programs. Research is authorized under a number of laws including Superfund, RCRA, and Brownfields. Congress is increasingly inclined to focus research for the Agency.

They have had some success in bringing to bear more effective and efficient lower cost remedies which are now

ORD's #1 strategic goal is to support the Agency's mission by providing timely, relevant and quality research. They are requesting the MYP reviews now because, in a time of stagnant budgets, it is even more important to make sure the most important things are done first. Also the OMB PART reviews make the survival of programs

dependent on focusing on the highest priorities.

ORD's Executive Council is also making changes in how ORD gets its work done. For example, they are installing new national program directors, including one for RCRA and contaminated sites with the hope that the national program directors will be able to work across the "stovepipe" organization of ORD and EPA.

There was time for a few questions from the Panel members if any were pressing. Susan Powers returned to the question of the meeting – she wanted to confirm that the purpose of today's call was for the Panel to learn about the multi-year plans and how they fit into Agency programs. McFarland said that they were looking at the 100 000 foot level at this meeting, and lower down at subsequent calls.

Jim Clark, a member of the Panel and of the Board of Scientific Counselors, asked about the context of the word sustainability in the description of long-term goal #3. Olexsey said that EPA is wrestling with that issue now. In planning jargon, it is a "cross-cutting" issue so aspects of sustainability appear in multiple plans. ORD is drafting a sustainability research strategy and is trying to make sure that everyone sees it the same way. Sustainability considerations in the Contaminated Sites MYP relate to Brownfields areas and end use. Clark says for now he will look high and broad at sustainability.

Dave Dzombak had a general question based on his preliminary reading of the plan and Olexsey's comments. Is there any reconsideration of the Bevel amendments? Will mining wastes become more of a waste in upcoming years? Erickson responded that they dealt with mining by putting it in an appendix that addresses additional research they would do should additional resources become available. ORD is very aware of the scale of mining wastes. The land resources, groundwater, and tech support areas touch on mining issues.

McFarland reminded the Panel that EPA is looking at an era of limited resources, so that allocation becomes important.

At 2:30, Mimi Dannel, Chief of the Research Coordination Staff in the Office of Science Policy addressed the Multi-year Plans: Process and Context. (Please see her slides for the substance of this presentation.) Her presentation was generic –applying to all MYPs, not just the two this Panel will be reviewing.

In summary, MYPs provide a framework for integrating research across the labs and centers with EPA's GPRA goals. Each plan describes research in a particular area for 5-10 years. There is a common structure: narrative, performance and accountability information. ORD assumes level resources and generally updates the plans every two years unless there is a pressing reason to do so sooner.

The Agency Strategic Plan sets out the GPRA goals and what is needed from ORD to achieve them. These goals inform the ORD's Research Strategy and the Multi-Year Plans. The environmental outcomes set by the program offices and regions are external to the research program, but the performance goals and missions – which link to the program outcomes – are reflected in the Multi-Year Plans. Thinking on performance goals is evolving and may change. An important element is the logic model which links the outcomes to the research required to strengthen decision-making to attain them. Long term goals have to be narrow, measurable, and have a time-frame. These get converted into Annual Performance Goals – an APG is the year in which the research culminates, not the portion that is done each year over several years. The

Annual Performance Measures are research outputs, like journal articles that will lead to meeting the APGs. Within each MYP there is a flow diagram for each long-term goal.

Another use of the MYPs is in OMB's Program Assessment Rating Tool (PART). It is important that the MYPs help OMB understand the importance of the research to meeting the Agency's environmental goals. The White House Office of Science and Technology Policy (which deals with federal research) is another audience. It has to be very clear why investing in research in these areas is relevant and appropriate and to assure them of the quality of the research.

The MYPs are the basis for ORD's budget request. If there are changes in budget, the MYPs help set priorities. The MYPs are also used in the accounting structure. Finally, the MYPs are a communication tool within the Agency. While representatives from the program offices and regions are involved in writing the plans, the audience is wider. The MYPs also provide a means of communicating externally.

At 3:00, McFarland asked about timing. The Presidential Budget comes out in the spring. When is the Part conducted and how does it affect allocation. Dannel said that the programs responding to PART submit the information to OMB in April. There is some back and forth about that over the summer.

EPA develops a budget, sends it to OMB, gets the pass-back with more information on resources about Thanksgiving. That's when EPA learns about the impact of the PART exercises.

About a year ago McFarland was involved in a cross-Agency Science Plan. He asked how the MYPs address cross-Agency issues. How are the plans reconciled so that nothing falls through the cracks? Dannel said that there are a variety of ways that is done. For example, sometimes there is an overlap in the writing teams; coordination among the lead authors; coordination within the laboratories; etc. Olexsey said EPA's budget is 7% of the federal environmental research budget.

Jim Clark had heard a presentation as a member of the BOSC and found Dannel's presentation helpful. He asked how far down in the bureaucracy does an understanding of these plans go? Does each researcher know where his or her projects fit? Dannel says that's the goal, but at this time, not every researcher fully understands where his or her research fits in the larger plan. Clark thinks this is good because it helps with leveraging.

McFarland called for additional questions from Panel or others. Hearing none, he thanked Dannel and moved on to the next presentation.

At 3:05, Patricia Erickson, Acting Assistant Director for Land, NRMRL, provided an Overview of the Contaminated Sites MYP. She sent out one set of slides which provide an overview, then more detailed information on the two plans. (Please see her slides).

In summary, these two MYPs do not exist in a vacuum and the researchers have to work back and forth with the other areas, especially pollution prevention, economics and decision sciences, and human health. Sub-objective 3.1 looks forward at opportunities like sustainability and resource conservation while Sub-objective 3.2 deals with existing programs, Sub-objective 3.3 deals with providing sound science. The science in these MYPs is much more applied than in some other MYPs. She addressed contributors to the two MYPs in general terms and the audiences for the plans. Page 7

of her handout is a flowchart for the development and use of the plans.

The Contaminated Sites MYP covers Superfund, Oil Spills, and leaking Underground Storage Tanks, Corrective Action (also known as ‘the trust funds’). There are some practical difficulties coordinating the language in the plans when the numbering of the goals changes.

At 3:20 Erickson began talking about the Contaminated Sites MYP and its layout, including appendices. She spoke briefly about Brownfields which is in Goal Four; the research dovetails so nicely with the Contaminated Sites MYP, however, that the research is in this plan. Brownfields research is authorized, but not appropriated annually; the funding comes to ORD on a short (1-2 year) time horizon from the program office.

The four long-term goals have changed from the risk paradigm to media to facilitate client and stakeholder use, especially in the regions and program offices where there are more generalists. The four long-term goals are contaminated sediments, groundwater, soil and land research, and multi-media. Within the goals are themes, described on pages 13-16 of her handout.

There was time for questions at 3:40 and the first one was on what “trust” meant in this context. Erickson explained that these are separate allocations from research, but not earmarks the way a particular facility or topic might be. The money is authorized in laws (like Superfund) for a particular purpose; the same authorization specifies a portion of that money will be used for research that enhances that program. Smith noted that much work has been done in some of these areas by other agencies. He asked how EPA would build upon information already collected. Erickson responded that the MYP does not convey this as well as ORD actually does it. Much of the research EPA does is collaborative with DOD and DOE so the researchers are talking at the project level where the various entities are trying to leverage their resources and make the best use of their various expertise. She proposed going into collaborations in more detail on the next call as they won’t appear in the MYPs. Annette Gatchette said that, programmatically, they do sit on the review panels for other federal agencies and their employees sit on EPA’s to help coordinate.

Susan Powers and Dave Dzombak asked about the Sub-objectives and Long-term Goals – where do they come from? The Strategic Plan tends to run for a five year period; the current one is 2003-2008. The various program offices, ORD, and stakeholders developed the Strategic Plan. She worked on Goal Three where much of the work is done by the states and their input is very important. There are multiple layers – the Administrations priorities, the Agency’s priorities, legislated mandates. It was done in an open way, with web postings so that the public could comment and participate in that manner. The Contaminated Sites MYP was developed in parallel with the Strategic Plan. They prioritized on the basis of input from the participants – their first question was whether the research responded to the needs the program offices would face in the next five years and then, are the resources balanced. Jan Young of OSW, who is on the Research Coordination Team, confirmed this was her understanding as well. She added that there is an emphasis on including elements where progress can be measured.

At 3:50, Erickson began her overview of the RCRA MYP, referencing page 18 of her handout. This MYP is written in a slightly different way. It does more story telling. There are two long term goals, one on multi-media decision-making and one on waste management. She directed the Panel’s attention to Appendix B which details OSW’s

research needs. OSW is refocusing on the recycling and conservation end of RCRA which have not received much attention in the last five years. Appendix B provides an synopsis of the program office's thinking. Appendix C is the regional needs.

It might not be clear from the language that Long Term Goal 1, *Support scientifically defensible and consistent decision-making at RCRA waste management facilities by providing a tested multimedia modeling system, at least 10 supporting technical reports, and technical support*, includes the work in support of recycling and conservation. The SAB's 3MRA Panel reviewed the model last year; this used to be the biggest part of Long Term Goal One. Because that report is not yet final, ORD has waffled a little about language in the draft MYP; it plans to sharpen it up when it has the final report. Some related MYPs (such as pollution prevention) are evolving into others; as these get completed it will be easier to see what will be done elsewhere, what they can count on others to do, and what should be done under RCRA MYP Long Term Goal One.

Long Term Goal Two is classically their research relating to waste. The word "sustainability" is used loosely here. As sustainability gets a sharper definition, the language here may need to be changed.

David Dzombak thought it would help, in terms of thinking about prioritization, if one knew what the budget numbers are and, secondly, what portion of the research budget goes to technical support. Erickson responded that, in RCRA, relatively little effort goes to technical support – perhaps \$100 k for site-specific technical support. The funding for each plan, assuming level funding, is provided in the front of each plan. There's about \$10 million for RCRA and \$30 million for Superfund. In the past, OSWER has provided money for site specific technical support and ORD has provided people – some dedicated and many that are tapped into as needed. ORD likes to have some of this because it educates them on the gaps in characterization and remediation. It also gives them a network of people and sites where they might field test technologies.

McFarland mentioned the four long-term goals for Contaminated Sites, the two for RCRA, and the shift from a risk paradigm to a media focus based on information from the regions and program offices. He thinks the Panel will have to address whether the Agency has a scientifically defensible approach to priority setting. He thinks that, from a practical standpoint, this shift is defensible, but wonders how ORD characterizes the scientific basis for the shift. Surely the program offices and regions still incorporate risk in their thinking. Erickson sees this as a change in presentation rather than research programs. The long-term goals are set in the context of doing what the program offices do. It is difficult to characterize contaminated sediments, contaminated groundwater is an extensive problem and expensive to remediate. Within those problems, where's the uncertainty? ORD is not abandoning the risk paradigm, they are trying to apply it within the framework of the problems the programs are facing. McFarland found that explanation helpful.

At 4:15 Patricia Erickson presented the charge (which is attached to the minutes). ORD is seeking the advice of the Panel as it updates these plans and combines them into a single plan. In general, they are looking for comments in three areas:

1. The long-term goals select and articulate the high priority science, engineering, and technology needs of the Agency to meet its strategic goal for preserving and restoring the land.

2. The plans define a pathway that tracks program progress toward achieving the long-term goals, consistent with the current state of the art, the role of ORD in the research community, and available resources.
3. The diagrams and Annual Performance Measure and Annual Performance Goal (APM/APG) tables are effective tools to communicate the work we plan to do and will be useful in documenting accomplishments.

Susan Powers asked what for the output of the review would take and the DFO responded that it would be a written report to be considered by a Quality Review Committee and approved by the Board before being forwarded to the Administrator.

Jim Clark asked whether, in considering utility, the Panel should consider utility for all audiences and Erickson responded, "yes."

Byung Kim asked if they were being asked to review the content of the plans or the content plus the process. Erickson responded that they were being asked to review the content. Olexsey thought that, while the Agency might be interested in the Board's ideas on the process, they really want the comments on the content. Dannel noted that previous SAB committees had commented on content. (This is probably the RSAC review of the Pollution Prevention and Water Quality MYPs).

McFarland noted that there are sub-questions below the three overall areas identified above by Erickson. He proposes to assign a lead writer for each component of each question to be supported by one or more other panelists. He hopes that, at the third conference call, the leads could provide some comments which could be used as a basis for discussion on that call. The lead authors would then refine these to better reflect the potential consensus of the Panel before the face-to-face meeting.

He noted Erickson had provided excellent presentations with a focus on the Agency's needs. On the next conference call, the Panel will have an opportunity to drill down further into the reports.

At 4:30, Erickson provided a brief overview of the background documents. She reviewed that the Panel has ORD's *Contaminated Sites Multi-Year Research Plan FY2003 Edition*, June 2003; ORD's *Resource Conservation and Recovery Act (RCRA) Multi-Year Research Plan: Fiscal Years 2003 to 2010*, May 2004. Despite the dates, these really represent 2003 thinking.

The Panel also has slides which describe how these MYPs differ from the 2001 plans. Considering this information would allow the Panel to address whether than plans are moving in the right directions – more than a snapshot, that is.

The MYP Writing Guidance used to develop the 2003 MYPs will allow the Panel to see how close the MYPs approach what was requested.

John Crittenden, Dave Dzombak, and Tim Thompson were a little confused about what they'd been sent and asked for a list, which appears at the front of these minutes. The DFO will resend the documents with a list for convenience

Susan Powers would like to understand Goal Three a little better and asked for some additional brief information. Erickson will provide a website for the Strategic Plan. Goal Three is one of the most concise parts of the plan.

