Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

Summary Minutes

Seventeenth Meeting of the Advisory Board on Radiation and Worker Health
August 18-19, 2003

Meeting Held at the Westin Cincinnati
Cincinnati, Ohio

Executive Summary

The Seventeenth Meeting of the Advisory Board on Radiation and Worker Health (ABRWH or the Board) was held at the Westin Cincinnati Hotel in Cincinnati, Ohio on August 18-19, 2003. All members, but one were in attendance. Others in attendance included staff of various Federal agencies, as well as members of the public. A list of those in attendance is included in the Summary Minutes of this Seventeenth Meeting. The Summary Minutes of Meetings 14, 15, and 16 were approved with no changes.

Monday, August 18, 2003

OCAS Program Status Report

Mr. David Sundin presented the Office of Compensation Analysis and Support (OCAS) Program report to date, providing current statistics on cases transferred from the Department of Labor (DOL), requests to the Department of Energy (DOE) for personal radiation exposure information and response. Additional statistics were provided on claimant interviews, completed dose reconstructions sent to DOL for final adjudication, cases assigned for dose reconstruction, and draft dose reconstruction reports sent to claimants. Recent accomplishments and developments were noted, including progress on site profiles and the OCAS office relocation.

Mr. Sundin indicated that a list of 44 additional physicians had been submitted to DOE recently, bringing the current total appointed to 123.

DOL Program Status Report

Mr. Peter Turcic reported that payments have been made in all facets of the Program. Initial decisions have been issued on approximately 90 percent of the 45,000 claims received, with 15,000 to 20,000 more anticipated by the end of the year. Mr. Turcic indicated the majority of claims continue to be for cancer, with nearly 57 percent being filed by survivors. Claims for payment of medical expenses are beginning to increase.

Mr. Turcic reported the goal of eliminating backlog had been accomplished and there was currently a working inventory. Average turnaround time for reaching a recommended decision or forwarding the case to NIOSH has been reduced to 142 days for claimants from Atomic Weapon Employers (AWEs) and 64 days for DOE facilities.

Status of Procurement

Dr. Jim Neton reported that more than one proposal had been received on the task order contract, which allowed movement forward to evaluation. A technical evaluation panel had been assembled for evaluation and scoring of the proposals. The procurement process is now at the past-performance evaluation stage. The process could be concluded fairly soon, provided negotiations with vendors is not required.

Board Discussion to Develop Task Order

Mr. Mark Griffon, Chair of the Workgroup, reported the development of draft documents to be considered: "Dose Reconstruction Procedure and Methods Review" and "Individual Dose Reconstruction Review." A third document, "Procedure for Processing Individual Dose Reconstruction Reviews," was provided to the Board for overnight review and discussion. Other items for future consideration were enumerated, including a tracking process, additional workgroups, lines of responsibility, and Board and contractor access to data.

Public Comment Period

Public comment was solicited on both days of the meeting. Public input on the first day included the following:

- Issues related to claimants taping their telephone interviews.
- Claimants' lack of knowledge about their exposures due to code names and secrecy issues.
- Questions were posed relative to finalization of the rule on adding classes to the Special Exposure Cohort (SEC).
- Completion of the site profile for Mallinckrodt Chemical

Works.

- Availability of DOE mobile screening units for former Mallinckrodt workers.
- A Request was made for access to Integrated Modules for Bio Assay Analysis (IMBA)software through the National Institute for Occupational Safety and Helath (NIOSH) web site.
- Suggestion was made relative to auditing site profiles.
- Concerns were raised relative to the Subtitle D claimants being sent by DOE to physicians panels. With abolition of the DOE advisory committee, this Board's intervention was suggested.

Tuesday, August 19, 2003

ORAU Contract Support Status

Dr. Richard Toohey reminded the Board that the Oak Ridge Associtaed University's (ORAU) effort is organized into six tasks. He described each one and the personnel types and numbers involved in each. He noted that the task previously called Computer Assisted Telephone Interview (CATI), had been changed to Claimant Contact, moving some responsibilities from dose reconstruction into an area of more people-oriented personnel. No activities have been added or deleted. A separate telephone interview facility has been set up near the Operations Center.

A 300-user nationwide computer network has been established, with security measures of prime importance. Telecommunications and data transfer has been established, with a high-speed link to NIOSH, as well as a link to the Dade-Moeller office in Richland, Washington. Other items discussed included the dose reconstruction production plan, clearing backlog, completion of Technical Basis Documents (TBDs)for both AWEs and DOE facilities, and development of efficiency protocols.

National Academy of Sciences Review of the Dose Reconstruction Program of The Defense Threat Reduction Agency

Dr. John E. Till, Chair of the Academy's committee which reviewed the DTRA program, discussed the committee's findings. The official charge to the review committee was described, as well as background on its efforts in conducting the review. Dr. Till

offered challenges to the Board in the furtherance of its oversight responsibilities. He particularly specified advancing the science, communication with claimants, documentation, and consistency in handling claims.

Status of Technical Basis Document/Site Profile Development

Dr. Jim Neton presented a companion piece to Dr. Richard Toohey's earlier report from ORAU. Dr. Neton explained the purpose of the site profiles was to support dose reconstructions. They were defined as compilations of TBDs covering specific sections. Each section is a stand-alone document.

A decision was made to develop the TBDs in parallel in an effort to move claims along. Currently 12 or 13 teams are working on their completion. Dr. Neton explained the process of creating, evaluating, and approving the TBDs prior to their release for use. He further emphasized the changing nature of the documents as more information is gathered. He described the procedure for tracking the documents to assure the most current version is in use by the dose reconstructors.

Dr. Neton announced the completion of the AWE site profile for Bethlehem Steel, with the Savannah River Site as the first completed DOE site profile.

Administrative/Housekeeping

Dr. Paul Ziemer noted that the members of the Board had been provided with copies of its current charter dated August 1, 2003. He directed the members to the paragraph relating to membership term, which had not been included in the original charter.

Mr. Larry Elliott advised the members that they would be contacted individually about their term of membership, which is a policy of both the Department of Health and Human Services (DHHS) and the Federal Advisory Committee Act (FACA). Mr. Elliott also reminded the Board members of the need to receive their voucher information in a timely manner as the fiscal year closeout is approaching.

Board Discussion/Working Session

Development of Task Order

Mr. Mark Griffon presented the Board with two documents for their review. The first document was a statement of work entitled "Dose Reconstruction Procedure and Methods Review," was discussed. After modification a Board motion to adopt was carried. The second document, a statement of work entitled "Individual Dose Reconstruction Review," was discussed. After modification a Board motion to adopt was carried.

The Board discussed at length a document entitled "Procedure for Processing Individual Dose Reconstruction Review." During discussion the Chair appointed an additional workgroup to address issues identified. The formal charge to the workgroup was expressed. A motion for provisional approval of the document was made, seconded, and carried.

Review and Approval of Draft Minutes, Meetings 14, 15, and 16

A motion to approve the executive summary and the minutes of the fourteenth meeting was seconded and unanimously passed.

A motion to approve the executive summary and the minutes of the fifteenth meeting was seconded and unanimously passed.

A motion to approve the executive summary and the minutes of the sixteenth meeting was seconded and unanimously passed.

ABRWH Schedule

The Board made a decision to meet next in St. Louis, Missouri on October 28th and 29th, with Richland, Washington designated as the alternate site if accommodations could not be secured in St. Louis on that date.

It was further decided to set the succeeding meeting in Amarillo, Texas on December 9th and 10th, with Las Vegas, Nevada as the alternate location.

Public Comment Period

Public comment was solicited on both days of the meeting. Public input on the second day included the following:

- A desire to have union health and safety representatives on the teams developing site profiles.
- A concern that site information gathered by the TBD teams may not be completely unbiased without worker input.

- The need for documentation, including identifying the source, of all information gathered for site profiles.
- Issues regarding a perceived resistance to transparency in identifying subcontractors working on site profiles.

With no further business posed, the meeting was officially recessed at 4:30 p.m.

End of Executive Summary

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The Advisory Board on Radiation and Worker Health
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention

Summary Minutes of the Seventeenth Meeting
August 18-19, 2003

The Seventeenth Meeting of the Advisory Board on Radiation and Worker Health (ABRWH or the Board) was held at the Westin Cincinnati Hotel in Cincinnati, Ohio on August 18-19, 2003. The meeting was called by the Centers for Disease Control and Prevention's (CDC's) National Institute for Occupational Safety and Health (NIOSH), the agency charged with administering the ABRWH. These summary minutes, as well as a verbatim transcript certified by a court reporter, are available on the internet on the NIOSH/Office of Compensation Analysis and Support (OCAS) web site located at www.cdc.gov/niosh/ocas. Those present included the following:

ABRWH Members: Dr. Paul Ziemer, Chair; Dr. Henry Anderson; Dr. Antonio Andrade; Dr. Roy DeHart; Mr. Richard Espinosa; Mr. Michael Gibson; Mr. Mark Griffon; Dr. James Melius; Ms. Wanda Munn, Mr. Robert Presley; and Dr. Genevieve Roessler.

Designated Federal Official: Mr. Larry Elliott, Executive Secretary

Federal Agency Attendees:

Department of Health and Human Services:
Mr. David Sundin, Dr. David Utterback, Mr. Brant Ulsh, Dr. Mary Schubauer-Berigan, R. DeLon Hull, Mr. Steve Ahrenholz, Mr. Russ Henshaw, Ms. Paula McCreary, Ms. Helen Buelow, Ms. Cori Homer, Mr. David Naimon, and Dr. Jim Neton.

Department of Labor:
Mr. Peter Turcic and Mr. Jeffrey Kotsch.

Department of Defense:
Mr. D. M. Schaeffer and Mr. Steve Powell.

Guests and Members of the Public:

John Alexander (ICWUC, Cincinnati, OH); Eula Bingham (University of Cincinnati, Cincinnati, OH); Denise Brock (U.N.W.W. of St. Louis Region, Moscow Mills, MO); Julia DeHart (Nashville, TN); John Dement (Duke University, Durham, NC); Lou Doll (Building Trades Site Rep, Cincinnati, OH); James East (PrSM, Knoxville, TN); Judson Kenoyer (Dade Moeller Associates, Cincinnati, OH); David Kocher (SENES Oak Ridge, Oak Ridge, TN); Michele R. Landis (PrSM, Knoxville, TN); Paula McCreary; Jay Maisler (IEM, Dayton, OH); Richard Miller (GAP, Washington, DC); John S. Morawetz (ICWUC, Cincinnati, OH); Louise S. Presley (Clinton, TN); Harry Richardson (LIUWA 265, Cincinnati, OH); Bob Tabor (FAT&LC, Harrison, OH).

Monday, August 18, 2003

Opening Remarks

Call to Order/Welcome

Dr. Paul Ziemer called the meeting to order at 1:00 p.m., welcoming the attendees. He reminded everyone to register their attendance each day at the registration table located in the back of the room, and instructed members of the public to sign up if they wished to address the Board during the public comment periods.

Announcements

Dr. Ziemer inquired of the Board if they chose to defer approval of the three sets of minutes until tomorrow's meeting. He noted that perhaps not everyone had yet had an opportunity to fully review them. The Board expressed a preference to do so, and action on the approval of minutes was deferred to the session the following day.

Ocas Program Status Report

Mr. David Sundin
Deputy Director, NIOSH/OCAS

Mr. David Sundin reported on the current status of NIOSH's Office of Compensation Analysis and Support (OCAS) Program. More than 13,000 cases have been transferred from the Department of Labor (DOL). In addition to the initial contact letter, the claimants have now been sent an update letter with the new telephone number. The case is logged into the computer system, with every document received scanned, as well as maintaining a paper filing system.

More than 13,000 requests for personal radiation exposure information have been sent to the Department of Energy (DOE) points of contact. This represents approximately 11,700 cases. Roughly 17,000 responses have been received as a result of some requests being responded to separately. Responses received represent approximately 9,600 cases. Some of those responses are not yet complete. About 12 percent of requests are more than 60 days outstanding. These cases continue to be highlighted in a periodic e-mail status report sent to each DOE point of contact and the DOE Office of Worker Advocacy.

Oak Ridge Associated Universities (ORAU) has made significant progress in completing telephone interviews. At least one interview has been conducted for more than 6,000 dose reconstruction cases in NIOSH's possession. Several secure interviews have been conducted to address concerns raised by the claimants regarding the disclosure of sensitive information. The number of completed dose reconstructions sent back to DOL for final adjudication continues to increase steadily. Nearly 1,200 cases have been assigned for dose reconstruction. As of this morning 350 draft dose reconstruction reports have been approved by the claimants and returned as final dose reconstructions to DOL.

The number of phone calls received increased substantially each quarter, but has leveled out this past quarter. OCAS currently receives approximately 80 per day. ORAU is now receiving and initiating calls, many related to the interview process. The web site continues to be an active source of information. Over 1,900 claim-related e-mails have been received.

A list of 44 physicians was recently sent to DOE in response to their request for additional physicians for their panel to evaluate claims under Subtitle D. That brings the number to 123. Last week another call was initiated for nominations of interested and qualified physicians.

Discussion Points:

- **Dr. Paul Ziemer** asked if an upper limit had been identified by NIOSH or DOE for the number of physicians for the panels.
- **Mr. David Sundin** replied that DOE had requested up to 500. It's doubtful that number could be identified who possess the necessary qualifications. It's also early in the process to work out capacity calculations, but that number was expressed at one point.
- **Dr. James Melius** asked for an update on receipt of exposure records from DOE for Iowa and Idaho.
- **Mr. Sundin** reported that the Department of Defense was in a position to provide records relative to Iowa, although he didn't know if they'd begun to flow. A large volume of records in Idaho needed basic indexing to allow retrieval of records. Once completed, responses should start flowing smoothly.
- **Dr. Melius** inquired when the backlog was anticipated to begin decreasing.

- **Mr. Sundin** responded that Dr. Toohey's later presentation would address that issue.
- **Dr. Melius** asked how the backlog was to be triaged, by site based on site profiles or on a first come/first served basis, or perhaps a mix.
- **Mr. Sundin** replied that it was a mix, but specifics would be presented in tomorrow's session.
- **Ms. Wanda Munn** wondered where the Board could see the specific requirements DOE had identified for the physicians being sought.
- **Mr. Sundin** indicated it was the role of NIOSH to determine what qualifications would equip a physician to serve on a physicians panel. Styled as an announcement, it had been sent to the two major occupational medicine societies. A copy would be provided to the Board.
- **Dr. Roy DeHart** asked whether the number of physicians named to the panel included those who had since withdrawn.
- **Mr. Sundin** replied that it did. DOE had mentioned a handful having withdrawn, but the exact number was not given. A current roster has been requested from DOE.
- **Dr. DeHart** inquired into the significance of claimant refusals regarding the telephone interviews.
- **Mr. Sundin** responded he had learned from the interviewers that there had been a few, but not a significant number.
- **Mr. Mark Griffon** asked if any aggregate analysis of the interviews was being done for use in building the worker profiles.
- **Mr. Sundin** replied that it was not.
- **Dr. DeHart** asked whether the goal of 6,000 reconstructions by year end remained an optimistic goal.
- **Mr. Sundin** indicated he felt it to be overly-optimistic.
- **Dr. Melius** asked if the update letter to claimants on the office move included an update on the status of their claim.
- **Mr. Sundin** replied that it had not. There are ongoing internal discussions with health communication specialists about what the message should be and how to craft it in a way that will be useful to the claimant.
- **Dr. Melius** asked about the status of staffing.
- **Mr. Sundin** responded that OCAS staff numbered 40 to 45, with four vacancies left.

DOL Program Status Report

Mr. Peter Turcic
Department of Labor

Mr. Peter Turcic announced that payments have been made in all facets of the program. This included both Special Exposure Cohort (SEC) and non-SEC cancers, as well as beryllium and silicosis. The majority of claims continue to be for cancer. More than $628 million has been paid in compensation benefits. Payment for medical benefits has increased to $14 million as people are starting to submit their bills for payment. Initial decisions have been issued in slightly more than 90 percent of the more than 45,000 claims received. Approximately 300 full-time equivalents are working on the program, not including contractor staff working in the outreach areas.

At present 13,700 cases have been referred for dose reconstruction, with more than 1,800 pending a final decision. Of the final decisions issued, nearly 9,500 have been approved and 12,500 denied. The most common reason for denial is for a non-covered condition. Claims for non-covered conditions are on a slight rise from facilities where closing or contractor change is anticipated. Outreach is planned to address the fact that there is no statute of limitations.

Performance goals were established setting a time within which 75 percent of cases would reach initial decision. AWEs were set at 180 days and DOE facilities at 120 days. Early in this fiscal year the focus was on elimination of the backlog, which has been accomplished. There is now a working inventory of approximately 4,000 cases. For the first quarter of this year, the average time for AWE cases was 242 days. Current time is about 142 days. DOE facilities dropped from 176 days to an average of 64 days.

District offices have been given a target time period of 21 days to reach a recommended decision once a dose reconstruction is received from NIOSH. The time to final adjudication from that point is dependent on the claimant's acceptance, request for review or hearing, which could change the time significantly.

Claims are anticipated to be returned from NIOSH in batches as a result of the site profiles. District offices have been paired. If one office gets an overload, it can be shared to the point of recommended decision. The case would then go back to the original District office for administration. The process will be seamless to the claimant.

Discussion Points:

- **Dr. Roy DeHart** asked if he was correct in his understanding that beryllium sensitivity only implied ongoing medical evaluations.
- **Mr. Turcic** confirmed Dr. DeHart's understanding.
- **Dr. James Melius** requested an update on the outreach to address the small number of claims for medical payments.
- **Mr. Turcic** explained that one problem area was Alaska, where they found pharmacies didn't want to accept their card. A meeting is planned at the end of the month to meet with medical providers to get more signed up. A mailing has been done for everyone entitled to medical benefits with a packet of information to provide handy access for bill-paying, phone numbers and assistance.
- **Dr. DeHart** inquired as to the fee structure used to reimburse providers and pharmacies.
- **Mr. Turcic** pointed out the current fee structure is a national cap set on California, so it is significantly higher than Medicare charges.
- **Dr. DeHart** asked if there was movement towards reimbursement based on usual and customary.
- **Mr. Turcic** replied that it is usual and customary based on the California fee schedule.

Status of Procurement

Dr. Jim Neton
NIOSH

Dr. Jim Neton announced that he could discuss the status of procurement of the contractor to assist the Board in its review process only to the extent allowed by the procurement regulations. He was able to report more than one proposal for the task order contract had been received. That allowed forward movement to an evaluation. An evaluation panel has been assembled and has met twice by teleconference for technical evaluation and scoring of the proposals. A competitive range was established. Those proposals within the range went forward to a request for past-performance evaluation. The past-performance evaluations have been received and are being FedExed to the technical evaluation panel members this afternoon.

Once that has been reviewed, the competitive range will be re-

evaluated or re-established. Cost proposals will be sent out and reviewed when returned. Recommendation to procurement will then be made based on technical merit.

This process could be wrapped up fairly quickly, provided it is not necessary to enter negotiations with vendors.

Dose Reconstruction Workgroup and Board Discussion to Develop Task Order

Mr. Mark Griffon
Dose Reconstruction Review Process Workgroup

As an update on the working group's progress, **Mr. Mark Griffon** announced that two documents had been prepared for the Board's consideration. The first was entitled "Dose Reconstruction Procedure and Methods Review" and the other "Individual Dose Reconstruction Review." It was hoped the Board could take action on those documents tomorrow. A third document, entitled "Procedure for Processing Individual Dose Reconstruction Reviews," was provided for the Board to review overnight and discuss in tomorrow's session.

Mr. Griffon identified a number of issues the workgroup had discussed and was continuing to discuss. He outlined the items he hoped to discuss tomorrow.

- Board and contractor access to data, both NIOSH and DOE. There were questions related to Privacy Act issues and whether the data could be available to the Board members on CD.

- Board and contractor access to site personnel and/or NIOSH staff. The interest was in DOE site personnel and NIOSH staff who had worked on individual dose reconstructions so that assumptions, et cetera could be discussed.

- Board and contractor access to claimants for follow-up. Discussion is suggested on whether the Board feels it is necessary to follow up with the claimants regarding phone interviews and surrounding issues. If so, what would it take to allow the Board to do that.

- Board recommendations derived from individual case review reports and summary reports. The issue is how to communicate to NIOSH and HHS, more particularly where case findings would

have made a difference between a favorable and unfavorable claim.

- Establish a process for the Board to review the contractor's response to individual tasks. The question is one of the lines of responsibility for refining the scope the contractor agrees to do under a specific task.

Discussion Points:

- **Dr. Roy DeHart** asked if Mr. Griffon had a feel for when this could be forwarded to the contractor and begin the review process.
- Mr. Griffon deferred to **Dr. Jim Neton**, who indicated that selection of a vendor could happen in a matter of a week or two, if all goes well and doesn't end up going through negotiations. A task order could be issued upon award of the contract, possibly early October.
- **Mr. Larry Elliott** agreed that October was a good target date. He suggested that consideration should be given to adding a task for the Board's contractor to do the monitoring assignment.
- **Mr. Elliott** asked for clarification of Mr. Griffon's remark regarding defining the scope, pointing out that the scope of work is defined in the award. He asked if Mr. Griffon meant scope within a task. Mr. Griffon did.
- **Mr. Elliott** explained the process. Once the contract is awarded, a meeting is held with the contractor to present the tasks. The contractor then has usually two weeks to prepare a proposal against the task. The proposal is evaluated and if any negotiating is required, it's done and usually the proposal is refined against the task.
- **Mr. Elliott** further noted that a number of things had to be considered just in preparing to issue the tasks in final form, such as timing, whether action by the full Board is required, whether some things need to be done in closed session. He offered NIOSH's assistance wherever possible.
- **Dr. Paul Ziemer** suggested an opinion of counsel may be necessary regarding the extent to which the Board may delegate activities to a workgroup.
- **Mr. Griffon** asked for discussion on the issue of Board or contractor access to claimants for re-interview.
- **Dr. Ziemer** suggested the necessity may become more or less apparent as the Board moved through the review process.
- **Dr. Melius** noted that in his training session he spent some

time considering to what extent the interview summary was an adequate document for a dose review. He expressed reluctance to a wait and see approach, preferring to deal with issues as completely as possible early. If modification is needed later, it can be done.

- **Dr. Melius** also reminded the Board that should the re-interview process be added, it would have to receive OMB approval. That alone could take some months, once what should be done and how to do it has been agreed upon by the Board.
- **Mr. Griffon** agreed, pointing out that the interview summary has been a recurrent theme during public comment periods.
- **Ms. Wanda Munn** expressed continued concern that the concept of re-interview would be viewed as an appeal process, which all are in agreement it is not. She urged the Board to keep that very clearly in mind because how things are perceived by the claimants is key.
- **Dr. Ziemer** noted that a procedure spelling out how the Board will evaluate the quality of the interviews might lead to a determination of whether follow-up is needed. He urged caution in that the Board is auditing, not doing the job for NIOSH or ORAU. If there is reason to believe the interviews are inadequate, which may emerge from audit, it is NIOSH's duty to correct that issue.
- **Mr. Griffon** explained not everything an interviewee brought up was going to be apparent from the summary. And the question had been raised about relevant information being missed if the interviewer didn't have site-specific knowledge. The suggestion is to re-interview a small percentage to determine if the form captured all the relevant information. The audit contractor would be asked to do a sampling to say it didn't capture every word, but it captured all the relevant information on 95 percent of them, for example.
- **Dr. Antonio Andrade** asked for clarification on two points. If the Board deals only with settled cases, by definition there would be no re-interview. If interviews are found to be generally inadequate, that should be stated up front and it becomes a quality improvement issue for NIOSH to deal with. If the Board looks at closed cases adjudicated either way, the results can be anticipated. Positive adjudications will give high marks to staff and there may be contentious issues with those for whom compensation was denied. Those human issues will have to be dealt with.
- **Mr. Elliott** offered clarification on the first point. The Board and its contractor will review only adjudicated claims.

No appeal cases will be looked at.

- **Dr. Genevieve Roessler** opined that while the motivation for wanting to evaluate interviews is understandable, it cannot be an unbiased process and has only down sides.
- **Dr. Melius** pointed out the Board was not conducting a consumer satisfaction survey. The issue is whether there was different information relevant to the claim that would have changed the way the dose reconstruction was done, in either direction.
- **Dr. Andrade** indicated his belief that the information that was tracked and actually written down is a good indicator to the claimant as to whether important information was captured, and those mechanisms are in place now.
- **Dr. Ziemer** suggested the workgroup ponder two issues: developing the criteria by which the interviews will be evaluated, and how to decide which ones to interview if granted that power.
- **Dr. Melius** remarked that the only quality control is the fact that the interview summary is sent to the interviewee for review and comment. The summary comes from one person. That's the process the Board is being asked to look at.
- **Dr. Ziemer** acknowledged the point, but noted that something to look for might be at what point the claimant agrees with the interview summary. Is there evidence that agreement was reached out of the claimant's frustration rather than because the interview captured the information. Then it becomes a matter of was there other information the claimant didn't know about, and that's not a deficiency in the interview process.
- **Dr. Melius** disagreed, noting many claimants were of limited education, had been sworn to secrecy about their work activities, and were given little information about their exposures. Asking them to recreate what happened decades later is the challenging issue the Board is trying to assess. The issue is what kind of information is being derived from the interview and the Board should take a serious look at how it's being done.
- **Dr. Ziemer** indicated that had been his point, how to determine the adequacy of the interview, given the limited knowledge of those being interviewed. What are the measures to be?
- **Dr. DeHart** opined that the point of the audit was to assure the interview had captured corrections made by the interviewee. If the summary is returned with three or four additional things, has that information been incorporated

into the record. That is appropriate to do with the record.

- **Mr. Griffon** reminded the Board they were to review the document entitled "Procedure for Processing Individual Dose Reconstruction Reviews" overnight for discussion tomorrow.

Public Comment Period

Ms. Denise Brock
United Nuclear Weapons Workers of St. Louis, Missouri

Ms. Denise Brock informed the Board that she had used a speaker phone and a tape recorder during her mother's interview, which they later used to review the interview summary. She noted that their comments had been resolved. An inquiry was made into whether that would not be more easily accomplished by the government.

Ms. Brock agreed with Dr. Melius' assessment that many workers had little information about their exposures. She read a portion of a letter from one of the workers she represents which commented on that issue, noting that her activities had received considerable publicity in Missouri from both reporters and legislators. Their questions had revived memories of living with her father's illness as a child and she reflected on some of her personal issues. It was pointed out that the workers had protected their government, many dying in the process. Those still living or their survivors were being asked to come up with details of events, documentation of which has been destroyed.

Ms. Brock inquired into the time frame for finalization of the rule for adding classes to the SEC and completion of Mallinckrodt dose reconstructions. She inquired into the inclusion of epidemiologic studies and if there were enough information available about claimant dose if individual data were not available.

Ms. Brock asked if DOE had mobile units available to come in and screen workers, and wondered why DOE never attended meetings of the Board.

Mr. Richard Miller
Government Accountability Project

Mr. Richard Miller commented that his review of the site profiles indicated a NIOSH version of the Integrated Modules for Bio Assay Analysis (IMBA) and inquired if it might be made available to the public on the NIOSH web site. He noted that whatever program was needed to convert dose would be valuable. If not, the program would lose transparency.

Mr. Miller observed that it appeared more site profiles would be done than had been discussed. Noting this was an effort to gain efficiency, he wondered if it would make sense for the Board to consider auditing all site profiles, perhaps lessening the number of dose reconstructions reviewed.

Mr. Miller asked if the increase in ORAU staffing could be addressed, indicating who the people were and where they came from.

Mr. Miller noted that DOE had abolished its advisory committee and was now sending cancer claims dually filed under Subtitles B and D to the physicians panel without benefit of the NIOSH probability of causation findings. He wondered if it would be appropriate for the Board to intervene.

With no further comments, the Board officially recessed until the following morning.

Tuesday, August 19, 2003

Dr. Paul Ziemer called the meeting to order at 8:30 a.m.

ORAU Contract Support Status

Dr. Richard Toohey,
SENES Oak Ridge, Inc.

Dr. Richard Toohey reported that ORAU was approaching a year on their team contract with NIOSH for dose reconstruction support. He reminded the Board of the organization of their effort into six separate tasks. Task one, database management, is the computer operations, utilizing 17 full-time equivalents (FTEs).

Task two is data collection for claims and petitions. This group of 29 FTEs scans in monitoring data from DOE, data collected from field trips to records repositories. It includes some health

physicists who review claimant files looking for gaps in monitoring data to determine if the case is ready for dose reconstruction. QA personnel look at DOL-supplied information to check for problems that might cause delays.

Task three is dose reconstruction research, headed by Mr. Judson Kenoyer of Dade Moeller & Associates. The primary effort of these 102 FTEs is currently development of technical basis documents or site profiles.

Task four was originally called the Computer-Assisted Telephone Interviews (CATIs) of claimants. The name has been changed to Claimant Contact. Activities including dose reconstruction assignment letters, closeout interviews with the claimants, dose reconstruction and OCAS-1 mailings, and the 800 number operation have been consolidated into that task. At present 21 FTEs are assigned to handle these activities.

Nothing has been added or deleted, but those items were reassigned from task five, dose reconstruction reports. ORAU felt it would be more logical and would allow them to be handled by personnel with better people skills. Task five is manned by 98 FTEs, primarily health physicists, actually doing the dose reconstructions.

Task six is technical and program management support with a staff of 18 FTEs.

This totals 285 FTEs. The number of actual people is more, approximately 320 including part-time personnel.

The big number is on task three. A decision was made that generating the technical basis documents needed to be done first. It was going to take a long time to do using only ORAU resources, so some work was contracted out and there are now 13 technical basis document teams. ORAU personnel oversee the task and work with them. OCAS staff was involved early on to help expedite the eventual review process. A year from now that number of 102 is expected to be down to around 30.

The Cincinnati Operations Center has been set up about 15 minutes away from NIOSH. A separate telephone interview facility is a block away. A 300-user nationwide computer network has been set up. Security protection was very important, so great care has been taken with anti-viral software, firewalls and the like. Telecommunications and data transfer has been established. There is a high-speed link to NIOSH, as well as a link to the Dade Moeller office in Richland. This expedites the physical

production of the dose reconstruction report.

ORAU was originally hoping to do 6,000 dose reconstructions by year end. Current best estimate is about 4,000. As of last week, 850 dose reconstruction reports had been completed and turned in to NIOSH. The majority of those were from Bethlehem Steel and the Savannah River Site. Weekly average for the last month has been about 75. That's being increased to 100 to 125. The plan is to be doing 150 a week in September and 200 a week by October, holding steady at that rate.

Dr. Toohey then addressed the question of clearing the backlog of cases. The operational definition of clearing the backlog, the goal of NIOSH, is to have no claims in the hopper over one year old. On the assumption that 200 cases are completed a week, but 100 new ones are arriving weekly, the point of no claims over a year old will be reached in April of 2005. By fall of 2005 it is anticipated the average age of a claim will be about 90 days. If new claims continue to arrive at a rate of 100 per week, there will always be a 90-day supply on hand, or about 1,200 to 1,500 claims in the hopper.

A decision was made to use an approach which would do the most good for the most people in the least amount of time. That is batch processing. Once a site profile or technical basis document (TBD) is done, as many claims as is possible to do will be done from the site. The order in which the site is decided upon is based upon number of claims from the site. Savannah River Site and Y-12 claims are pretty equal, but only about half the Y-12 claimants worked only at Y-12. Half also worked at X-10 or K-25. Y-12 is being addressed, along with Oak Ridge National Lab (ORNL)and the Oak Ridge gaseous diffusion plant. It is hoped all three will be completed at the same time.

Hanford and Iowa ordnance plant or Iowa Army ammunition plant are nearing completion. Rocky Flats and Los Alamos will be finished up later in the fall. The TBDs for Idaho and a few other sites will be completed this year, but those claims won't actually be processed this year. There is about a one-month lag time after the document is approved before claims can be done from a site, due to a number of factors.

Some delay is built into the process. The dose reconstructor assignment letter gives a claimant two weeks to object to the assigned dose reconstructor. To date only two claimants have raised that issue out of more than 1,200 assignments. The telephone interview has to be scheduled, and then the claimant

gets two weeks to review the interview summary.

It takes about a month to put data from the site profile into spreadsheets which serve as templates for dose reconstruction. Those spreadsheets are gone over with NIOSH and a verification and validation procedure is followed.

With the spreadsheet and the monitoring data having been entered up front, the dose reconstructor enters some specific personal information. Much of this is downloaded from NIOSH's NOCTS database. Still done by hand is the entry of some of the bioassay data into the IMBA program to do the internal dose calculation. The process has been streamlined as much as possible, but there is still about a month of work in generating spreadsheets, getting them debugged and distributed.

Bethlehem Steel was the first AWE site completed. Currently being developed are its clones, or other plants which performed the same operations. The Blockson Chemical document is in its second round of comment and review. Blockson clones or other phosphate processing plants will follow from that. A draft of the Huntington Pilot plant, which recovered nickel that had been contaminated with uranium, is being reviewed by NIOSH. Still an issue is the efficiency of the recovery process. A draft of Mallinckrodt Chemical Works is undergoing internal ORAU review and should be forwarded to NIOSH for their review in a week or two.

Once site profiles are done and approved, claims from the site are processed in the order received. Total processing time for a given site is anticipated to be only a few months.

One supplemental dose reconstruction team has been assembled thus far. It consists of four senior health physicists, two external dosimetrists, and two internal dosimetrists. Their assignment is to start a claim and work it through. This is done to keep people who have been in the queue for some time from being neglected until their site profile is completed.

Some claims from other sites are being done under efficiency protocols. Potentially compensable cases would be workers at primarily DOE facilities whose records show positive bioassay results for inhalation exposure to actinides or transuranics, and who have either lung cancer or a cancer of an organ which tends to concentrate that radionuclide. An internal dose assessment of their bioassay data will be done using the IMBA program. If the probability of causation is equal to or greater than 50 percent at the 99 percent confidence interval, the case is like;y compensable and the dose reconstruction is finished. There are about 100 of

those cases from Y-12 to date, as well as some from Hanford, Rocky Flats, Idaho, and some other sites.

The other end of the spectrum is the potentially non-compensable cases. The criteria for those cases are low exposure potential, exposure records show either zero or small internal and external dose, and the cancer is in an organ which does not concentrate the radionuclides to which the claimant was exposed. This was tried at the Savannah River Site and written up in ORAU technical information bulletin number one, posted on the OCAS web page.

The next step is to extend the efficiency procedure complex-wide and develop a maximum intake scenario complex-wide. It would be submitted to NIOSH for review and approval, but would open up a lot of claims that could be processed without the full technical basis document being completed for a site. ORAU would want to extend the procedure to AWE site where exposures are primarily to uranium.

Discussion Points:

- **Dr. James Melius** inquired as to the number of supplemental dose reconstruction teams, when they were established and what their productivity would be.
- **Dr. Toohey** replied there was currently one team, but ORAU hoped to establish two more. The program had started within the past few months. Because they're working without a TBD, they have to do all the records research independently, so their productivity is about one or two a week.
- **Dr. Melius** asked the status of the posting of conflict of interest statements and bio sketches and what was being done about the new subcontractors.
- **Dr. Toohey** responded that it was his belief that bio sketches and conflict of interest statements for everyone involved in performing, reviewing, or supervising dose reconstructions are posted on the ORAU web page. It was not contemplated for the subcontractors because they are not directly involved in dose reconstruction, which was the essence of the conflict of interest requirement.
- **Mr. Michael Gibson** asked if people doing the site profile could have a past history at the site, but not give their background and potential conflict of interest.
- **Dr. Toohey** explained ORAU had proposed using personnel with experience at a site because they knew what was going on there, but they had not proposed giving background or potential conflict of interest

- **Mr. Robert Presley** asked if a procedure existed for expediting the claim of a terminally ill claimant from one of the other sites.
- **Dr. Toohey** replied that the NIOSH compassionate processing procedure would push them to the head of the queue to capture their interview. Actual dose reconstruction may not be accelerated, depending on quality of the data and if it can be done without the site profile. However, the supplemental dose reconstruction team would also have the task of doing special processing.
- **Mr. Mark Griffon** asked what data was used for the Savannah River internal dose determinations and if it had been verified.
- **Dr. Toohey** replied it was Savannah River's monitoring records and incident reports. Existence of a high intake comes off an incident report, but quantification of the intake comes from bioassay data.
- **Dr. Paul Ziemer** requested clarification on the types of personnel from a site who may now be involved in site profiles. He specifically wondered if someone who had been responsible for generating some of the data now used would be in the position of defending it.
- **Dr. Toohey** responded with the example of a key subcontractor looking at external dosimetry data who probably knows more about external dosimetry across the DOE complex than anyone. He had been responsible for generating some of the data, yes. Whether he's defending it is unknown. He's providing it, and then it's subject to scientific review and analysis by people who did not generate it.
- **Dr. Ziemer** asked for the composition of a typical team.
- **Dr. Toohey** replied a typical team is approximately six people who in general probably did not themselves work at the site. People who did or still do work at a site are used as resources for the team. His previous example was an exception.
- **Dr. Jim Neton** noted that each team has a NIOSH health physicist assigned as a monitor of the TBD or site profile. The document is both reviewed by ORAU and reviewed and signed by NIOSH, issued as a controlled document. Ultimate approval of the document comes from NIOSH, not the person who may have worked at the site.
- **Mr. Gibson** inquired how many teams had field workers on them to guide them to events. And if an event was later discovered to have happened and the report were generated when bioassay data weren't adequate, how is the dose

determined.

- **Dr. Toohey** responded the teams consisted of health physicists. In the other situation, available data would have to be used. In dose reconstructions the effort is to determine what the maximum could have been, and claimant-favorable assumptions are made to maximize that.
- **Dr. Melius** asked if the conflict of interest rules had been relaxed for those doing dose reconstructions as requested at the last meeting.
- **Dr. Toohey** replied the consensus of the Board had been that it was not a good idea and it had not been pursued.

National Academy of Sciences Review of the Dose Reconstruction Program of The Defense Threat Reduction Agency

Dr. John E. Till,
Risk Assessment Corporation

Dr. John E. Till, President of Risk Assessment Corporation and Chairman of the review committee of the National Academy of Sciences which reviewed the Defense Threat Reduction Agency (DTRA) dose reconstruction program, presented insight into the committee's findings. Dr. Till prefaced his remarks by noting that he was speaking as an individual and not for the National Academy of Sciences. The Academy report would be published on Friday, August 22.

Dr. Till suggested that it is often forgotten how science evolves, and the message should be conveyed to the claimants that this science is in its infancy. Understanding of it is improving all the time.

Dr. Till noted that he knew it would be a difficult task when he accepted the job as chairman of his committee, having been involved in dose reconstruction work for some time. He knew it to be tedious, complex, and how much information is always missing. He challenged the Board, the scientists working on the program and NIOSH to advance the science, not simply fulfill the law. While he had some insight into what he was getting into, he had no idea how ultimately complicated it would be. He indicated the Academy report did not deal with the issue of compensation, but was to determine if the science was being done and the law being fulfilled. He cautioned against allowing personal feelings to be involved in what was being done.

While the Academy is normally a closed organization, Dr. Till's committee approached its charge in a manner unlike the strict rules for how they work. The committee felt it was important to meet the veterans and talk to them, and so they did.

They were obligated by their charge to develop a statistically significant sample from which to work. They determined to sample 99 of the 3,700 dose reconstructions that had been performed. They wanted two-thirds to be in a higher dose category of above one rem. Concerned that this approach would result in neglecting the veterans from Hiroshima/Nagasaki, a separate sample of about ten was taken from that group. They also encouraged those veterans who wanted to do so to send the committee their files. About two dozen were received. For a year and a half every committee member reviewed every file.

The committee wanted the report to be understandable to everyone who read it, Congress, scientists, and the veterans. Some of the report probably didn't reach that goal, but parts are deliberately written in language that it was hoped the veterans would understand what the committee was saying. The committee wanted to be detailed, and Dr. Till challenged its members to be specific, including case numbers, so that anyone who wanted to could go back and see what they were talking about.

Dr. Till explained the report included an outline, a chapter on the process of the committee, which was what he had just described. It went into chapters on the dose reconstruction process, findings, and other findings not strictly dose reconstruction. Their charge was interpreted broadly to give DTRA, Congress, and the veterans more than what had been asked for. Finally there was a chapter on conclusions and recommendations.

Although the veterans program had been reviewed before, the right questions had not been asked. Issues that had been described in a 1985 report still existed. Dr. Till noted the importance of challenging those who verify what's being done and being sure the right questions are asked or the answers sought will not be found.

Dr. Till observed that few areas of science had changed as much as the ability to grasp information and the ability to manage huge amounts of data, even within the last five years. He suggested that should be kept in mind when criticizing what happened in the DOE complex 20 to 50 years ago. He cautioned that what is being seen now may be changes in science and changes in the expectations of scientists and data management rather than people not doing

their job. He noted that it was difficult to make that charge, not living in that era, because by the time this Board completes its job, what is being done will be much different from what's being done today.

Dr. Till advised that if there were not a policy on changing science, there should be one. One of the findings in the Academy report was that in a lot of the methods the most current information was not being used to calculate dose.

The charge to the Academy committee was outlined as: Whether the dose reconstruction of the sampled doses is accurate; whether the reconstructed doses are accurately reported to the VA; whether the assumptions made about radiation exposure are credible; and whether the data from nuclear tests used by DTRA as part of the reconstruction of sampled doses are accurate. The committee was also asked to recommend whether there should be a permanent system of review for the dose reconstruction program.

Answering the recommendation first, **Dr. Till** said the report found it to be absolutely recommended. He noted that, in his opinion, the DTRA program had suffered from lack of a group to advise them on science and challenging them on issues such as conflict of interest, communication, and quality assurance.

In answer to its charge, the Academy committee found the average dose calculated was pretty good, but was concerned about the upper bound. Credible upper bound doses from external gamma, neutron and beta exposure were often underestimated, sometimes considerably. As with this Program, the upper bound is what was used for compensation.

As to whether the reconstructed doses are accurately reported, the committee determined that the numbers calculated were accurately reported to the Veterans Administration (VA) and the veterans, although the numbers calculated may not be the correct upper bound.

Regarding whether assumptions made about radiation exposure are credible, the Academy report indicates many key assumptions and methods used are not appropriate, often leading to underestimation of the upper bounds of doses.

Whether the data used by DTRA to reconstruct the sample doses are accurate, the Academy interpreted as meaning is there enough information to reconstruct the doses. The committee was amazed at how much information was collected at the tests.

Quality control was found to be a problem. There was difficulty following the logic of the calculations, the documentation. **Dr. Till** cautioned that documentation was absolutely crucial. He advised making sure anybody who knew anything about the science could take the records and follow every assumption made and how the numbers were calculated. And if something is not being used, make it clear why. He noted that it was important to mention that if the thousands of reconstructions were redone, there would be little difference in the number of awards made.

Dr. Till made particular note of the fact that the DTRA program, like EEOICPA, was very favorable to the claimants. But there was a lack of understanding of the level of dose required for compensation. He opined it was a huge communication problem and urged this Board to resolve that issue as it moved forward. The Academy committee found the veterans had a lot to say about what they went through, and suggested listening to the claimants was also of importance.

There were three factors **Dr. Till** described he felt were important to the success of the program. Regarding benefit of the doubt, if you don't have something and there's a chance it could have happened, assume in favor of the claimant or in favor of the assumption that makes the dose higher. As to consistency, deal with all claimants in the same way with the same fairness, using the same assumptions where there is a choice.

The third factor was uncertainty. **Dr. Till** expressed his concern that people are being misled when it is suggested that uncertainty accounts for all the lack of knowledge; it is a part of the lack of knowledge. He noted caution should be used in what scientists can and cannot defend.

Dr. Till described some of the cases reviewed by the committee which illustrated his points made to the Board. He commended the Board for its work. He noted the Board's earlier questioning and challenging of ORAU on credibility, conflict of interest, and details of what was being done, and urged its continuance.

Discussion Points:

- **Dr. Roy DeHart** noted the issue of inconsistency related to the SEC being raised repeatedly in public comment and asked Dr. Till how he would deal with it.
- **Dr. Till** advised sticking with the plan. He noted there would be cases for inconsistency and that may be one of them.

He urged consistency in the science. If lawmakers want to change the law, let them do it.

- **Dr. Genevieve Roessler** inquired what this Board could do better in the way of communication.
- **Dr. Till** suggested being aggressive, establishing a track record of what you've done, whether it's successful or not. A newsletter to explain probability of causation, what it's going to take, what is known about it could be helpful.
- **Mr. Larry Elliott** noted that brochures speaking to probability of causation and dose reconstruction are sent with claimant letters. Topic pages on both are also on the web site.
- **Dr. Till** expressed a belief that most claimants don't and won't look at the web because they don't know how. He also suggested including in a newsletter statistical information regarding numbers or percentages of awarded claims so that people would understand.
- **Mr. Mark Griffon** asked if the Academy committee had developed a procedure for evaluating against criteria; and if so, if it were available to the Board.
- **Dr. Till** responded that the list of some ten specific criteria his panel had when it received its first set of cases was abandoned because the cases were so different it couldn't be applied. It evolved into several key issues, as usually happens.
- **Ms. Wanda Munn** inquired into when do you decide to revisit if science changes; and made the observation that this program may be seeing more claims by survivors, resulting in less first-hand information.
- **Dr. Till** replied the report had made no recommendation how it be done, simply that changing science be recognized. It is a policy decision for the Board to make. Perhaps it will choose to fix the science in time so that everyone is treated the same. As to the survivor issue, the buddy system, people who knew the individual and had similar work style, is a legitimate, defensible manner of coming up with a dose estimate.

Status of Technical Basis Document/ Site Profile Development

Dr. James Neton,
NIOSH

Dr. James Neton indicated his presentation was a companion piece to Dr. Toohey's earlier update. He would provide more detail of how TBDs are put together. Because they serve as a road map for how a dose reconstruction is done for a particular site, there was a need for one for at least the major DOE sites. They are limited in scope, a summary to provide the dose reconstructor site-specific information. They are dynamic documents. If further information is obtained through site searches or from claimants, they will be amended.

Dr. Neton defined a site profile as a compilation of technical basis documents set out as a series of chapters on areas needed to do a dose reconstruction. The areas of facility/processes, environmental dose, external dose, internal dose and diagnostic X-ray dose are described in detail. Each section is a stand-alone document, allowing progress to be made in claims processing without waiting for completed site profiles.

The site profiles try to be true to the concept of the hierarchy of data used for dose reconstruction. From personal dosimetry down to source term and radiation control limits, they follow what was intended when the rule was written.

Because it takes some three to four months to complete a site profile, it was decided to do them in parallel. There is a formalized process and they are issued as controlled documents. A NIOSH health physicist is assigned to the TBD or site profile team, informally reviewing the process as it goes along. NIOSH is involved in resolving comments before the document is sent for official review. At that point they are officially commented on in writing. ORAU is required to respond. There are both critical review and non-critical review comments. Critical review comments must be addressed. Comments are considered, reviewed, and a consensus opinion is reached as to how to proceed.

From that point it goes into the ORAU document control process, after being signed by both Dr. Toohey and Dr. Neton as authorizer for the document to be released for use. It is assigned a revision date and revision number, and tracked for which reconstructions were done with which revision of the TBDs.

Any reliable source of information is used in assembling the documents. Among the best have been site TBDs that the DOE sites put together themselves. As DOE radiation control programs matured, TBDs were required for the external/internal programs. They tend to not only document what's currently being done, but usually have a historical discussion at the beginning, which is a

good starting point for obtaining additional information.

Also useful are safety analysis reports completed for certain projects. These talk about process descriptions and potential radiation exposure environments. Workplace environmental reports are used when they can be found. Facility data, which would be area monitoring results from air samples, surface smears, survey swipes, if they can be obtained; internal memos and correspondence are sometimes useful. Any available publication, particularly peer reviewed publications, are obtained. Previous dose reconstruction reports would be used as a starting point. They are evaluated to determine whether they may be applicable to this effort.

Information submitted to NIOSH by claimants has been beneficial. In the case of the Bethlehem Steel TBD, a claimant had rich sets of data which led to other sets of data and helped in the development of the document. Anywhere information can be obtained, it is.

Parameters of interest are the areas the site profile attempts to address. Medical X-ray dose is addressed by year due to dramatic changes in X-ray monitoring technology since the early '50s.

Occupational internal dose for unmonitored workers is addressed by looking at inhalation based on air monitoring data that are readily available. If the information is not readily available, the approach defaults to source term analysis using claimant-favorable assumptions. If the person is not inside the facility where equipment generating airborne radioactivity is used, knowledge about site ambient radionuclide activities is needed.

If the probability for occupational external dose is low, a maximum background dose can be determined based on the area or coworker data. Data from coworkers probably exposed to higher levels would be used. If exposure probability is high, coworker data or claimant-favorable assumptions would be used. Also addressed is the release of any noble gases. An attempt is made in the TBD to address uncertainties in the external dose calculation, as in all other forms of exposure.

Occupational internal dose for monitored workers is difficult to reconstruct. Bioassay cards 50 years old have cryptic notations. Results don't have units of measurement, just a letter or a number. Sometimes special notations were used for radioactive materials, probably for security reasons. A lot of research is needed to deciphering the coded information. Method of analysis needs to be taken into account. Wherever there's a question, the

TBD will err on the side of being favorable to the claimant. While the Internnational Commission on Radiological Protection (ICRP) has never come out with a concrete statement as to what the uncertainties are associated with internal dose, it has been the subject of discussion among the health physicists. Dr. Neton indicated he felt they were close to putting brackets on it.

Regarding occupational external dose for monitored workers, there are badges, but the badges have to be interpreted. The site profile will have the type of radiation energy, the range of energies for photons and neutrons. The energy interval to which the worker was exposed has a direct effect on the probability of causation calculation. If the labor category is known, it will be described in the document. Exposure geometry is important, dose correction factors, handling of missed dose, detection limits, badge exchange frequencies, dosimeter correction factors, where possible, are included in the document so that the professional judgments exercised by the health physicists in doing the dose reconstruction are consistent. To the extent possible, putting the uncertainty with the dose is included in the documents.

Dr. Neton noted that if site profiles are developed for the top 11 claims-producing DOE sites, theoretically dose reconstructions could be initiated for over 10,000 claimants. The first DOE site profile was completed as of July 15 for Savannah River Site. It covers operations from 1952 to the present at 29 separate facilities on-site. At 188 pages it is a comprehensive, technically detailed document. It was not written from a layman's perspective, though there is a readable executive summary. It has some gaps where information was missing. They are identified and what areas are not covered will be added as they can be. The decision was made to get the document in place rather than waiting for every piece of information to be complete.

As a controlled document, once they're issued, they're maintained. The dose reconstructor should only be working with the latest revision. Revision one is currently being worked on for the Savannah River Site which will add another 50 pages of data to help interpret internal doses. When ORAU distributes it, they make sure that that document is in effect in the field. All dose reconstructors will be made aware that as of the distribution date, that is the document that should be used to perform dose reconstructions.

The Atomic Weapon Employer (AWE) sites represent a smaller percentage of claims, 12 to 14 percent. The number of claims from the top ten AWE sites totals about 1,200. Bethlehem Steel TBD is

done and the majority of those claims have been moved through the process. Blockson Chemical and Huntington Pilot Plant are under review.

Most of the AWEs were uranium facilities and did limited scope work. While not exactly the same, they tend to fall into similar categories. There can be a skeleton approach, with details of other factors contributing to claimant dose being worked out. The efficiency process Dr. Toohey discussed will add more claimants who can be moved through without having a TBD or site profile. And while these documents and strategies cover the vast majority of claims, there will always be a few that will be problematic.

Discussion Points:

- **Dr. James Melius** asked if this was a change from the original plan of sequential site profiles built from individual dose reconstructions.
- **Dr. Neton** indicated that was partially correct. Doing them sequentially was the plan, but a few at a time. Doing them all in parallel is a change, but it was needed to get the claims out the door. Basing the site profiles on dose reconstructions and worker profiles was not the idea. The idea was to have site profiles to move claims and process claims, and as experience was gained from exposures with those workers being processed using the site profile, the worker profile databases could start to be populated. Worker profile databases can't be established until dose reconstructions are done.
- **Dr. Melius** inquired if the site profiles were technical resource documents for people doing individual dose reconstructions that will allow them to complete those individual dose reconstructions.
- **Dr. Neton** replied the site profile covered standard operations at a facility and standard work practices. If a person was involved in some very unusual incident or unusual circumstance, it might not be in the document. Then it would take a little longer and a little more investigation to complete a claim.
- **Dr. Melius** noted the Savannah River Site document appeared to be primarily a paper review and asked how the information was being gathered, and if labor representatives were included.
- **Dr. Neton** responded that it was not merely a paper study, but was primarily based on paper data capture. Site contacts or site conference calls with current personnel at the facility did not include labor representatives, to his knowledge.

- **Dr. Melius** observed it appeared to be a closed process between NIOSH, ORAU, and the contractors ORAU had hired, and wondered if there were plans to include those people in the other documents underway.
- **Dr. Neton** replied that there were no formal plans, but if labor representatives had useful information, it would be considered. And while he wouldn't characterize it as a closed process, it typically involves health physicists who are knowledgeable about a facility's exposure conditions. Labor's input had not been solicited.
- **Dr. Melius** queried whether that might not be valuable, as well as that from retirees and other people around a site.
- **Dr. Neton** noted there was a balancing act in getting the documents completed and into use. But since they are dynamic documents, including worker data is a reasonable idea when time permits.
- **Mr. Larry Elliott** added that the Bethlehem Steel document did use information contributed by a worker, a claimant, noting that it was unfair to say NIOSH didn't accept and use that input. He pointed out that Savannah River Site does not have an organized labor group. Advantage was not taken of the opportunity to seek or solicit information from anyone other than those people previously mentioned by Dr. Neton. Once the documents are on the web site or available to the public, any comment or input would be welcome.
- **Dr. Melius** contended that he had seen nothing to indicate interest in or solicitation of input. It was on the web site as a completed document and looked like an official, final document with no hint that input was being sought, and he felt that should be corrected. Noting that he had not read the document, he asked if there was anything in it indicating sources of information, particularly the individuals spoken with.
- Dr. Neton deferred to **Mr. Judson Kenoyer**, who indicated that the original draft referenced specific conversations with people on site, but wasn't sure about the document as printed. He added that some of the most valuable information retrieved is from direct interaction with people who worked on-site in the early years. He noted they had gone to more and more face-to-face interviews with retirees.
- **Dr. Melius** expressed concern that the documents were being rushed into because the program needed to get going and wondered what valuable information might be left out that would have affected someone's dose reconstruction.
- **Dr. Neton** acknowledged that was a good point and it would be

considered, but emphasized the document would not be released if it were not felt to capture the essence of the exposure profile of the site. He noted that if information came to light, there was a commitment to re-evaluating processed claims, using that information, to ensure a claimant was not inappropriately characterized.

- **Dr. Melius** suggested external peer review might be considered as a way of soliciting both technical input as well as soliciting more information from people.
- **Dr. Neton** pointed out the line had to be drawn at some point. A contractor was being hired in about three months to do nothing but review the TBDs. Layering review upon review impedes the process.
- **Dr. Melius** expressed concern that the credibility of the program was going to be dependent on the documents. He felt having them done without knowing who was involved was a serious mistake which could jeopardize the process if the wrong people were involved or misinformation got out about who was involved and why it was kept secret. He suggested giving serious consideration to opening up the whole process of gathering information, reviewing and soliciting input, as well as transparency for people involved in the process.
- **Dr. Genevieve Roessler** asked how information was being obtained to calculate radon dose and how what non-workplace radon might have been was being taken into account.
- **Dr. Neton** replied that there are radon monitoring data for a number of facilities. To the extent it's available, it will be used to model exposures. If it isn't available, but how much radium was there is known, it could be back-calculated based on emanation rate and equilibrium situation, what could have been there at the upper limit. It's included in the TBD if it's occupationally-derived. The second part, what portion of radon exposures at these facilities is occupationally-derived, is tricky. That concept is being wrestled with and a policy is currently being formulated on that position.
- **Mr. Mark Griffon** asked for a definition of "readily available."
- **Dr. Neton** responded that the documents had to be produced in a reasonable time frame. Information consolidated and available, either electronically or in one room as paper records, would be considered for use in the TBDs. If information is distributed around a site in multiple facilities, contaminated facilities, it isn't beneficial to hold up the TBDs to retrieve those records. There seems to either be an electronic database or not and the records are

not retrievable, so what the cut point is hasn't had to be defined.

- **Mr. Griffon** inquired if DOE had a role in the collection process if a set of records were identified that may not be easily retrievable.
- **Dr. Neton** replied that DOE had a role in making records available for capture, so they would consolidate them to a certain point. NIOSH or ORAU would do a data capture effort, scanning all the records, if possible, and obtaining images of them.
- **Mr. Griffon** noted that concerns have been expressed that past reports and past DOE databases may be suspect. He suggested it would be a valuable exercise to verify the bioassay records.
- **Dr. Neton** reiterated that as information becomes available it will be reviewed against the TBDs. He reminded the Board that where information is lacking, the TBDs are claimant-favorable. He noted that in two instances as additional information became available, it would tend to reduce the doses or estimated exposures rather than increase them.
- **Dr. Melius** offered a hypothetical scenario of a completed site profile, but a group of claims came in and dose reconstructions are attempted, but the site profile is not sufficient to determine compensability, what would be done with those claims.
- **Dr. Neton** replied they would not be moved through just for the sake of getting them out. They would be held up until there was sufficient information for Labor to make a decision.
- **Dr. Henry Anderson** observed that as he scanned the Savannah River Site document he had difficulty identifying the specific data gaps and suggested it might be helpful to initiate a data call-in asking for additional information. He further suggested that since a number of sites had been involved in lawsuits, a search of documents produced through discovery might be a useful source of information.

Administrative Housekeeping and Board Work Schedule

- **Mr. Larry Elliott** drew the attention of the Board to the August 1, 2003, copy of their Charter. He asked them to take note of a new provision regarding term of membership on the Board which had not been in the original charter. Membership term is the Department of Health and Human Service (HHS) and Federal Advisory Committee Act (FACA) policy. He informed the Board members they would each be contacted directly

regarding membership and term of membership.

- **Dr. Henry Anderson** asked if "term" meant everyone would serve only four years.
- **Mr. Elliott** reminded the Board members they were Presidentially appointed and that the White House had designated staggered terms, so that each year there would perhaps be moderate turnover. FACA provides a specified number of terms or number of years. The charter indicates terms of more than two years are contingent upon renewal of the charter.
- **Dr. Paul Ziemer** inquired as to whether the White House had already made that determination.
- **Mr. Elliott** replied that such determination had been made. The Board had been alphabetically grouped into three categories. The first category would leave the Board in one year, the second in two years, the third in three. The possibility of reappointment would be up to the President.
- **Mr. Elliott** reminded the Board members of the process of submitting preparation time by e-mail, and requested all travel vouchers be submitted as soon as possible as fiscal year closeout was approaching.
- **Dr. Ziemer** reminded the members that Ms. Homer also needed their calendars for the remainder of the year.

Board Discussion/Working Session
Development of Task Order

Procedure for Processing Individual Dose Reconstruction Reviews

Mr. Mark Griffon distributed copies of the document reflecting edits resulting from the previous day's discussions.

Dr. Paul Ziemer indicated he was presuming the document's form and content met the requirements of its purpose, and inquired if the contractor would use it to develop the cost document for final approval.

Mr. Larry Elliott replied that the task order would be delivered to the contractor, who would be allowed two weeks to prepare a proposal. The proposal would include how the specified work would be conducted, describe the skill categories required, and provide a cost estimate. The proposal would be returned to the person or group specified by the Board's process for evaluation and, if necessary, negotiation.

Dr. Ziemer asked Mr. Griffon if he were seeking Board input and reaction or approval of the document.

Motion

On behalf of the Dose Reconstruction Workgroup, **Mr. Mark Griffon** moved adoption of the Statement of Work. Needing no second, the motion was on the floor for discussion.

- **Mr. Robert Presley** inquired whether periods of time should be changed into numbers of days.
- **Mr. Mark Griffon** replied that, as in the original contract language, NIOSH could be allowed to make technical edits.
- **Mr. Larry Elliott** advised the Board that once the task has been developed, it will be sent to the procurement office, which determines those types of edits to ensure proper procurement procedure.
- **Mr. Elliott** noted that he felt the second sentence under "Purpose and Description of Work," beginning "This task may be extended to be a periodic annual review..." could be a bit of a problem. Future work cannot be promised. The task can be resurrected or a new task issued. He felt the procurement office would require removal of the sentence because it could build expectation. Procurement will require each task to stand alone.
- **Dr. Paul Ziemer** indicated the succeeding sentence would, as well. He proposed, without objection, deleting the second and third sentences, reading "This task may be extended to be a periodic annual review of procedures since it is likely that procedures will be modified as the program evolves. The focus of the periodic reviews will be to assure overall consistency of the program from the earliest cases that were completed."

The Chairman called for a vote and the motion received unanimous approval.

Individual Dose Reconstruction Review

Mr. Mark Griffon noted that, as a result of the previous discussion, two sentences should be deleted from this document, as well. He called the Board's attention to the last two sentences of the third paragraph, reading "The Board anticipates that the next four years will also involve a review of 2.5% of the total

cases. For purposes of this proposal the contractor should only consider the first year workload."

Mr. Larry Elliott agreed that would be advisable.

Mr. Griffon informed the Board that two new paragraphs had been added on the last page. Those paragraphs were entitled "Period of Performance" and "Reporting/Deliverable Requirements." The intention had been to assign procedure numbers, but on reflection suggested deleting that reference to "Board #XX."

> On behalf of the Dose Reconstruction Workgroup, **Mr. Mark Griffon** moved adoption of the Statement of Work. Needing no second, the motion was on the floor for discussion.

- **Dr. Paul Ziemer** called the Board's attention to Paragraph 1.B.1 on page 2 of the document, the sentence beginning "Evaluate whether NIOSH appropriately addressed all of the reported work history..." He asked if this simply called for review of the interview in terms of documentation on hand.
- **Mr. Mark Griffon** confirmed the interpretation was correct.
- **Dr. Roy DeHart** inquired if the Advanced Review, outlined in Paragraph 2 on page 3 of the document, was the first inclusion of site profile.
- **Mr. Griffon** confirmed it was, noting the Basic Review did not go into that depth.
- **Dr. Antonio Andrade** called the Board's attention to Paragraph 2.B.1 on page 3. He suggested the words "Evaluate the effectiveness of the phone interview..." might be too open-ended, causing the contractor to call for clarification. His concern was raising the issues discussed yesterday on re-evaluation.
- **Mr. Griffon** replied they may have some question on what "effectiveness" means, but re-interview is not an option.
- **Dr. Andrade** suggested one way of evaluating effectiveness might be responses from interviewees with numerous additional comments. If it happens repeatedly it could suggest something faulty with the interview process.
- **Dr. James Melius** queried whether site profiles shouldn't be included in the basic review now, given that they will be basic procedural documents used in nearly all dose reconstructions.
- **Mr. Griffon** noted that had been new information, but that site profiles probably would be referenced in all dose

reconstructions. He noted that there will be a separate task for a more extensive site profile review.

- **Dr. Ziemer** added that Paragraph A.2 of the Basic Review requiring the reviewer to evaluate the data used by NIOSH opens the door if site profile was part of that data.
- **Mr. Larry Elliott** called the Board's attention to Paragraph 3 on page 4, "Blind Dose Reconstruction." He suggested it would be beneficial to specify who would select those cases.
- **Dr. Ziemer** asked if they could just agree an appropriate explicit sentence would be added.
- **Ms. Wanda Munn** suggested it might be cleaner to do on page 1, third paragraph, to say "10 Blind Review cases specifically chosen by the Board."
- **Mr. Griffon** asked why not simply add a sentence at the end of that paragraph stating the Board shall select all cases for review.
- **Dr. Ziemer** announced, without objection, that the third paragraph on page 1 would be modified by adding at the end a sentence to read "The Board shall select all cases for review."
- **Ms. Munn** returned to a concern about the meaning of "effectiveness" as used in Paragraph 2.B.1 on page 3. She suggested changing the sentence to read "Evaluate the completeness of the phone interview in ascertaining that all relevant work history information has been addressed."
- **Dr. Ziemer** speculated it would come down to the meaning of "completeness."
- **Ms. Munn** countered that the interview form had been identified as being as complete as could be gotten in terms of material that needed to be covered. Is the material on the form adequately represented in the NIOSH report of the interview.
- **Dr. Ziemer** suggested deleting the words "the effectiveness of" from the sentence.
- **Dr. Melius** noted it would be easier to limit what the contractor was directed toward rather than trying to describe the evaluation.
- **Dr. Ziemer** announced, without objection, that Paragraph 2.B.1 on page 3 would be modified by deleting the words "the effectiveness of."

The Chairman called for a vote and the motion received unanimous approval.

Board Discussion

Mr. Mark Griffon informed the Board that there were several matters the workgroup had discussed earlier in the morning. He noted some had been answered in discussing the previous two documents. One that was remaining was the steps involved in moving forward, and whether the entire Board would have to act on any meetings with the contractor, if executive session would be required, et cetera.

Mr. Larry Elliott indicated that while he did not have the answers, the questions had been captured and the answers would be pursued expeditiously.

Mr. Griffon advised the Board, the workgroup had discussed meeting in Cincinnati for a day to work through remaining questions and report back to the full Board at the next meeting.

Mr. Elliott responded NIOSH would support the workgroup and assist with scheduling. Mr. Elliott added that it would be beneficial to come forward with the task which spoke to tracking of the Board's cases. Since the discussion had indicated the Board wanted to review and approve the tools used by the contractor, that might be included in the tracking task, as well. In any event, the Board would have to specify what those tools are to be and that it wants to see and approve them.

Mr. Griffon indicated the workgroup had not had an opportunity to discuss the tracking task due to time constraints. However, he had envisioned looking at it along with case selection. He suggested a reasonable task for the contractor was to work with NIOSH in establishing a baseline matrix of all the cases and laying out parameters of interest for the Board. That would provide something to select from.

Mr. Elliott asked if the review process itself had been discussed, noting NIOSH needed a sense of how it was anticipated to operate. He specifically mentioned language in the approved task orders relating to selected Board members working with the contractor in the review.

Mr. Griffon replied that it had been discussed involving reports back to the full Board and caution needed regarding Privacy Act issues. He suggested that could be the next item of discussion.

Dr. Paul Ziemer raised the issue of reviewing 25 cases every two months, as mentioned in the section on deliverables in the second

document just approved. Noting that it was not a trivial task, he wondered what the workgroup had considered in terms of Board panels. He suggested if the work were spread out to smaller panels it would lighten the workload.

Mr. Griffon responded that the document suggested two members.

Dr. Ziemer asked if the workgroup were then intending members have personal responsibility for two cases per month.

Dr. Antonio Andrade reminded the Board they were about to discuss the process for case selection, focusing on the idea of developing a matrix listing the types of cases the contractor would review. He suggested that a rough matrix had already been developed. Given the dose reconstructions to date, it was not going to be possible to fill out that matrix in a way that starts to populate all the areas. He opined this might be a task better developed over time, possibly to a point it could be released to the contractor, by the end of the year when it is expected there will be several site profiles developed and different types of dose reconstructions done. He suggested giving this consideration, defer discussion and develop the task for issuance at a later date.

Mr. Griffon explained he was anticipating two parts to the process. The first would be to develop the matrix on the existing cases in the system, all the ones in the hopper. The tracking would be the second part. He noted the tracking task was not ready for Board approval anyway.

Dr. James Melius agreed with Dr. Andrade that there wouldn't be enough cases to select from until year end. He noted the assumption had been there would be a random group of cases from which to select. Doing them in batches will complicate the process. He suggested consideration of alternative measures. One would be an early task for the contractor to examine the database, work with NIOSH, see how information is available, what would be feasible and easy to select on, what would be a potential procedure. This would stop development of a selection procedure that would be burdensome or impossible to accomplish. Alternatively, the workgroup could do it when they're meeting. Either would be helpful if done before the end of the year. At the end of the year a selection process can be more fully developed.

Dr. Roy DeHart reminded the Board that they could only review finalized cases.

Dr. Ziemer inquired whether there was an appeal period after adjudication.

Mr. Elliott responded claimants can object to a recommended decision within 60 days.

Dr. DeHart asked if NIOSH anticipated having cases ready for Board review by end of the year.

Mr. Elliott replied that the issue was being looked into. If they're in an appeal stage, they're still tied up. There are statute of limitation issues. Six years is too long for the Board to wait. There is still some coordination with DOL as to when a case has achieved a point of adjudication that can be audited. It is not anticipated compensable cases would be contested. Currently those are in the range of 45 to 47 percent. While some of those are still in recommended decision, there should be a goodly number from which to select by the end of the year.

Mr. Elliott returned to Mr. Griffon's comment about the 13,500 cases in the hopper to put a matrix together. He informed the Board that it was not its contractor's responsibility to do that. That was a NIOSH job and NIOSH had a robust tracking system. While it may not do everything the Board wanted, he proposed the Board decide what it wanted the matrix to contain and the parameters it wanted populated, and the IT staff would work to put it into place.

Dr. Melius remarked he thought it would work better if it were more of an interactive process. It may be possible to select cases based on things already in the database without making extra work for the staff. If it were done jointly, it may help both. He suggested a joint effort.

Dr. Henry Anderson suggested a pilot phase and a production phase. Rather than spend a lot of time finalizing something that may ultimately be unworkable, perhaps begin with 25 or so and have a month or two delay to process those.

Mr. Griffon noted the workgroup had some draft parameters and suggested that was an issue that could be addressed when they met and were in front of the database.

Procedure for Processing Individual Dose Reconstruction Reviews

Mr. Mark Griffon suggested the Board turn to the "Procedure for Processing Individual Dose Reconstruction Reviews" draft which had been provided for their review. He indicated the language in the fourth bullet on page one regarding interface with individual claimants still needed to be discussed. He suggested it might be deleted from this process and handled separately. That is the question of re-interview and is not currently a part of the dose review process, which this document is addressing.

He noted that Section B addresses the 25 cases every two months, and suggested adding some verbiage based on discussing within the workgroup that morning. One matter was that the Board needed a conflict of interest plan related to its review work. Another was the question of Privacy Act issues and the idea that the rotating Board members could work with the contractor and have in-depth conversations relative to individual cases. The workgroup had also discussed the possibility of going into executive session for the full Board to discuss individual cases where there may be identifiable information.

Mr. Larry Elliott agreed it could happen that way. He noted any Board member who wanted to see an individual claimant's administrative record could be accommodated separately. However, in order to go into executive session it would have to be announced in advance by *Federal Register* notice.

Dr. James Melius inquired into the possibility of announcing a provisional executive session, that a period of time at each meeting would be set aside for review of confidential information.

Mr. Elliott responded that it was being researched. It was both FACA-related and legal-related, so some questions had to be answered.

Mr. Griffon directed the Board to section D.3 on page 2, suggesting its deletion as it was directly related to re-interview.

Dr. Paul Ziemer asked for clarification of the word "experts" in section D.1 and wondered whether the fact that it was enclosed in quotation marks indicated it would workers.

Mr. Griffon indicated it did include workers, people with years of experience. Moving forward, Mr. Griffon suggested adding a sentence related to the Board's consideration of a standing executive session for in-depth discussion of individual cases.

Dr. Ziemer asked to return to section D-1, inquiring if the Board could legally go back to any expert, whether they are workers or worker representatives, and discuss particular cases.

Mr. Elliott observed that the generalities of the claim could be discussed, such as job title, years employed, et cetera. Privacy information such as name or Social Security number cannot be revealed. He noted that when coworker interviews were sought, it had to be done with a claimant waiver.

Mr. Griffon indicated clarification might be needed, as the intent had been background information potentially related to a case.

Mr. Griffon suggested editing sections E.6, F.3, and G.3 by changing the word "periodic" to "semi-annual" in order to make it consistent with the task order previously approved. He also suggested editing section F.3 further by adding the words "along with the contractor" after the words "The full Board."

Mr. Elliott offered an edit to section G.3 that would allow recommendations to NIOSH be made at whatever time information becomes available.

Dr. Ziemer raised an idea for the Board and NIOSH to consider related to the interview issue. He wondered if it might be possible for NIOSH to consider taping two to three percent of the interviews on a random basis. That would serve their quality control purposes and the Board's purposes of having a record against which interview summaries could be compared. That would eliminate re-interview, which was only for the purpose of evaluating the interview process, anyway. Additionally, that sample could be used to audit the interviews aside from the case audits.

Dr. Melius opined alternatives should be considered. He expressed concern that a process is needed to make sure the interviews collect the appropriate necessary information. He also expressed a belief that NIOSH needed an internal process for continuing improvement of interviews and information-gathering, as well as the Board's ability to review it.

Dr. Melius suggested perhaps another workgroup could be formed to address that issue, explore the alternatives, report back to the Board and have a more complete discussion.

Ms. Wanda Munn observed such a record might also be helpful in determining trends with respect to the reaction of people being

interviewed.

Dr. Ziemer noted it could only be done with the interviewee's knowledge. Both the interviewer and interviewee would have to be told the interview may be taped, but it would be important for the interviewer not to know a specific interview was being recorded. The interviewee would also have to have the option of refusing to allow recording.

Mr. Elliott reminded the Board the audit was of the process, of the quality control, and quality assurance measures in place. He offered a further option of a Board member or the contractor observing the interview process.

Mr. Elliott indicated he was very much interested in seeing the best job possible done with the interviews. He encouraged counsel and staff to speak their minds, noting they could identify issues they were aware of. Mr. Elliott also encouraged the Board to think of ways to perform its audit and identify ways NIOSH can improve the process without going back to the claimants after the fact.

Mr. Michael Gibson expressed concern that having a Board member sit in on an interview might be intimidating to interviewees.

Dr. Ziemer asked if presence of a Board member observing would have to be made known to the interviewee.

Mr. Elliott replied he hadn't thought it through, but felt it would perhaps take some legal review to determine those issues.

Mr. Robert Presley disagreed with Mr. Gibson, observing that some might be glad to have a Board member listening. They would know the Board was taking an interest in what they were doing or saying.

Dr. Henry Anderson noted NIOSH was already sitting in on some interviews for quality control. He asked if notes were taken or if the interview form was filled in by both the interviewer and the NIOSH observer. If that were being done and the notes were available, those could be used to make a comparison. He expressed a concern for potential loss of information because what is not important to the interviewer may be important to someone else because of special knowledge.

Mr. Elliott responded that those issues would be examined in the Board's audit and would be evaluated appropriately. He noted that

the claimant controlled the process. The claimant can come back and object to things not being included in the report. The Board will see how many times those edits have been made to make corrections. Mr. Elliott suggested the Board should go through the process of the audit, figure out what areas can be improved upon, where deficiencies are, and that information would be very welcome.

Dr. Andrade agreed and noted that type analysis was easily done and should be done and be a part of the review process. He liked the idea of observing or sitting in on interviews, and felt Mr. Gibson and Mr. Presley were both correct. If there were two sets of note-takers, with those notes compared at the end, that would give a level of information that could indicate whether a person might be biased in taking certain types of information.

Dr. Ziemer observed there was no desire to have either the interviewee or the interviewer know a specific conversation was being audited. An audit would have to be blind to that. And two people asking questions might perturb the system.

Dr. Andrade clarified his suggestion was to present the interviewee with the possibility that information would be taken by two people, one being a Board member. The interview would be conducted as usual, but a second person would be taking down their own set of responses.

Dr. Melius observed that the Board was to audit completed cases. Interviews would not be being conducted on completed cases, so that would involve a change in the directive parameter of the audit process. He again suggested setting up a workgroup to look at current practices, alternatives, what could be done legally, et cetera. He noted it would be helpful to get this issue moved along due to its difficult and contentious nature.

Mr. David Naimon advised the Board that counsel had looked into the matter of taping in great detail, and felt the option of listening in may have some of the same issues. There would be a significant legal question in some states as to whether it's possible to have someone listening in without the interviewer or interviewee knowing. If tapes were made for even a sample of the interviews, they would potentially have to be added to the administrative record for that claim. That would raise the possibility of the claimant asking for copies, so there would be an issue of providing them.

Mr. Naimon further noted that one state required every party to a

phone call give his consent on tape. That would require every person who was going to participate saying it was okay, then the tape would be turned on and they'd have to say it again to verify that each person had said it. He agreed with Dr. Melius that it is a very complicated question.

Dr. Ziemer observed that it had not been his intent to resolve the issue, but rather to get some ideas out to get people started thinking about options.

Dr. Melius asked if he could formally propose a workgroup.

Dr. Ziemer recognized him for that purpose, noting the Chair was empowered to appoint workgroups, and asked for volunteers, noting five would be an upper limit. Mr. Richard Espinosa, Dr. Andrade, Dr. Melius, Ms. Munn, and Mr. Gibson indicated interest. Dr. Ziemer asked for staff support.

Dr. Melius volunteered to chair the workgroup.

Dr. Ziemer announced the formal charge to the workgroup would be to explore potential options the Board may consider for the purpose of auditing the interview process. He asked for a report at the next meeting of the Board, and further requested the workgroup keep the Chair of the Board informed on its deliberations, expressing his personal interest in the question.

Mr. Elliott indicated a staff person would be made available, though he could not say yet who it would be. He also noted that the general counsel's office was at the ready to assist.

Dr. Ziemer expressed the importance of creativity, while being sensitive to the issues. The Board had requirements, NIOSH had needs, and the desire is to find a way that will be helpful to all groups involved.

Dr. Anderson asked if the claimants who recorded their interviews told anyone they were doing so, and how many interviewees had other people sitting with them in their interviews.

Mr. Elliott responded that he couldn't answer either question. He had just learned of that being done and he had asked staff to find out whether or not it is recorded on the interview that it was taped. He indicated that they were aware that a number of people, particularly survivors, had people sit with them. Or people who were hard of hearing, couldn't sit for long periods of time or had difficulty understanding have had people sit with them, and the

names of those people have been taken.

Mr. Richard Espinosa recommended labor unions and advocacy groups be solicited for comments on the phone interview.

Dr. Ziemer asked how he was suggesting that be done.

Mr. Espinosa surmised it could be done by the workgroup, noting that the Los Alamos Project on Worker Safety and other labor unions such as the Paper, Allied-Industrial, Chemical & Energy Workers International Union (PACE), sheet metal workers, and iron workers would have input on what they'd like to see done.

Dr. Ziemer replied that it would have to be an all or nothing sort of thing, so that Los Alamos couldn't be singled out for input.

Dr. Melius suggested that might be something the workgroup could bring up in the appropriate context after some options had been developed.

Dr. Ziemer cautioned that at this point the idea that the Board was proposing recording interviews should not be floated because that was not what had been discussed.

Motion

Dr. James Melius moved to provisionally approve the draft document entitled "Procedure for Processing Individual Dose Reconstruction Reviews." **Dr. Roy DeHart** seconded. The motion received unanimous approval.

Review/Approval of Minutes

Motions

Mr. Robert Presley moved to approve the executive summary and minutes of the Fourteenth meeting. **Ms. Wanda Munn** seconded. The motion received unanimous approval.

Mr. Robert Presley moved to approve the minutes of the Fifteenth meeting, held by teleconference. **Ms. Wanda Munn** seconded. The motion received unanimous approval.

Ms. Wanda Munn moved to approve the executive summary and minutes of the Sixteenth meeting. **Mr. Robert Presley** seconded. The motion received unanimous approval.

ABRWH Schedule

The Board determined the schedule for the next two meetings should be set now to avoid conflicts at the end of the year. It was suggested and agreed that the Board should convene on October 28 and 29 in St. Louis, Missouri, with Richland, Washington as the alternate city should accommodations not be available in St. Louis for those dates.

It was suggested and agreed that the subsequent meeting of the Board would be held on December 9 and 10 in Amarillo, Texas, with Las Vegas, Nevada as the alternate city should accommodations not be available in Amarillo for those dates.

Public Comment Period

Mr. John Alexander
Center for Worker Safety and Health Education
Cincinnati, Ohio

Mr. John Alexander informed the Board that the earlier discussions related to composition of the site profile teams had piqued his curiosity, so over the lunch hour he had approached a retired colleague to get his opinion of who he would want on such a team. Without hesitation he had replied he would want his union representative. In response to who he would not want, his answer was the company's safety representative, adding he would want an outside source doing the work.

Mr. Alexander went on to say he felt this example reinforced Dr. Till's belief that the program should be managed in a way that would withstand scrutiny. He noted the Board's task orders are to review any information to reconstruct exposure. He asserted that from his personal experience that would include union health and safety reps. He urged the Board to ensure the site profiles discovered what actually happened on the sites.

Dr. Eula Bingham
University of Cincinnati Medical Center
Cincinnati, Ohio

Dr. Eula Bingham related to the Board some of her experiences as a member of a team conducting a study at the Savannah River Site. She noted that, as Dr. Till had done earlier, she would encourage the importance of documentation. She emphasized it was at the heart of good science, which was what the program was going to be judged on. She urged NIOSH and ORAU to document the source of information received from a site, noting that some sources will say whatever is convenient.

Mr. Richard Miller,
Government Accountability Project
Washington, D.C.

Mr. Richard Miller commented that EEOICPA was a program priding itself on transparency and having an open process. He made the observation that this meeting was the first time he'd heard resistance to that transparency.

Mr. Miller noted that some of the names listed in Dr. Neton's earlier presentation would probably be disqualified under the ORAU conflict of interest criteria because they are experts in litigation defense. Mr. Miller suggested that if there was a sensitivity to there being something that doesn't reflect well, the answer is not to follow the DOE example of non-disclosure.

Mr. Miller raised additional questions as to what will happen if something really objectionable is found. He further noted that the manager of the site profile teams should be aware of whatever unconscious filtering biases team members might be operating under.

Board Discussion

Dr. Paul Ziemer noted the site profile teams consisted entirely of technical people and wondered whether it wouldn't be of benefit to include the union health and safety person from a site, as had been suggested. He felt it would be sensible for NIOSH to consider how to address that issue.

Dr. Ziemer further observed that he had assumed the editors or authors of the site profiles would be identified in the reports themselves, not only for the sake of transparency, but because the Board members would like to know.

Mr. Larry Elliott indicated that was perhaps an oversight and that issue will be looked at. He commented further that the issue of a balanced perspective would be addressed. Mr. Elliott addressed

the perception of the term "controlled document." He noted that while those with a government base understood the term, he was hearing it interpreted from a civilian perspective as meaning a closed system. He commented that was a benefit of the meetings and reiterated, on behalf of NIOSH and ORAU, appreciation for the input from the public.

Mr. Richard Espinosa suggested having a union or worker rep set up a forum for the site profile teams so that former workers could provide a history and current workers could connect the history to current conditions.

Mr. Mark Griffon offered his experience from group interviews conducted in risk mapping sessions. He disclosed the most productive sessions included former workers, management or supervisory personnel, and perhaps a former health physicist. He noted the workers knew where things were and what they worked with, often knew code names. Technical people helped put radioisotopes with the code names. Supervisory personnel presented how it looked on paper. The ensuing dialogue of what was versus what should have been yielded the best results.

Dr. Ziemer suggested many sites may have retired health physicists and/or retired union health and safety people with valuable institutional memory.

Mr. Robert Presley informed the Board of a group at Y-12 they called the retiree corps which included hourly people on the floor to health physicists. He noted that the plant manager for many years at Y-12 had started as a chemical operator and advanced to vice president of the corporation.

Dr. Roy DeHart observed that the issue was not whether the source was union or management, it was the contribution to be made.

Dr. Ziemer noted Mr. Elliott had acknowledged the expressions of concern and interest, and appropriate action could be taken.

With no further business posed, the meeting was officially adjourned at 4:30 p.m.

End of Summary Minutes

♦ ♦ ♦ ♦ ♦

I hereby confirm that these Summary Minutes are accurate to the best of my knowledge.

Paul L. Ziemer, Ph.D., Chair

11/15/03
Date