DEPARTMENT OF HEALTH AND HUMAN SERVICES

and

CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

EIGHTH MEETING OF THE ADVISORY BOARD ON RADIATION AND WORKER HEALTH

Santa Fe, New Mexico
October 15-16, 2002

RECORD OF THE PROCEEDINGS

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National Institute for Occupational Safety and Health
Advisory Board on Radiation and Worker Health
October 15-16, 2002

Executive Summary of the Eighth Meeting

List of Acronyms:

ABRWH	—	Advisory Board on Radiation and Worker Health
AEC	—	Atomic Energy Commission
AWE	—	atomic weapons employer
CBD	—	chronic beryllium disease
CDC	—	Centers for Disease Control and Prevention
CPWR	—	Center to Protect Workers' Rights
DCF	—	dose conversion factor
DOD	—	Department of Defense
DOE	—	Department of Energy
DOL	—	Department of Labor
DTRA	—	Defense Threat Reduction Agency
EEOICPA	—	Energy Employees Occupational Illness Compensation Act
EML	—	Environmental Measurements Laboratory
FAB	—	Final Adjudication Branch, DOL
FUSRAP	—	Formerly Utilized Sites Remedial Action Program
GAP	—	Government Accountability Project
HERB	—	Health-Related Energy Research Branch, NIOSH
HHS	—	Department of Health and Human Services
IREP	—	Interactive Radio Epidemiological Program
LAHDRAP	—	Los Alamos Historical Document Retrieval and Assessment Project
LANL	—	Los Alamos National Laboratories
LAPOWS	—	Los Alamos Project on Worker Safety
NCEH	—	National Center for Environmental Health
NDAA	—	National Defense Authorization Act
NCI	—	National Cancer Institute
NIOSH	—	National Institute for Occupational Safety and Health
OCAS	—	Office of Compensation Analysis and Support
ORAU	—	Oak Ridge Associated Universities
ORISE	—	Oak Ridge Institute for Science and Education
OWA	—	Office of Worker Advocacy
PACE	—	Paper, Allied-Industrial, Chemical and Energy Workers International Union

PC, PoC, POC	—	probability of causation
RECA	—	Radiation Exposure Compensation Act
RFC	—	request for contract
RFP	—	request for proposals
RSO	—	radiation safety officer
SEC	—	Special Exposure Cohort
SGE	—	Special Government Employee
TLD	—	thermoluminescent dosimeter
TSE	—	time since exposure

HHS and NIOSH convened the eighth ABRWH meeting on October 15-16, 2002 in Santa Fe, New Mexico.

OCAS Status Report:
David Sundin presented data as of September 30, 2002. DOL is currently processing ~13,700 non-SEC cancer cases and transferred 8,032 cases to NIOSH for dose reconstruction. OCAS sent 6,794 data requests to DOE and received 3,590 responses. To date, 164 telephone interviews have been conducted with employees and survivors; 36 dose reconstructions are underway. OCAS sent draft dose reconstruction reports and completed close-out interviews with 11 claimants; 9 final dose reconstructions and complete administrative records were returned to DOL for final adjudication.

OCAS recently completed the Residual Contamination Progress Report. HHS published a Notice of Proposed Rule-Making for Adding Classes to the SEC on June 25, 2002. A revised rule in response to public comments or a second proposed rule may be published in January, 2003. The HHS/DOE Memorandum of Understanding is still being negotiated. Some ABRWH members expressed concern about OCAS's ability to maintain pace, particularly since DOE's backlog of outstanding data requests is increasing and OCAS staff is limited.

Dose Reconstruction Contract Award:
Dr. James Neton reported that the five-year dose reconstruction contract was awarded to a team headed by ORAU on September 11, 2002. The original RFP called for the reconstruction of at least 8,000 doses per year. ORAU will provide support to OCAS in database management; data collection of claims and SEC petitions; dose reconstruction research; claimant interviews; dose estimating and reporting; and technical and program management support. To address conflict of interest concerns, NIOSH required all bidders to include a conflict of interest plan in proposals and established several conflict of interest provisions. ORAU has installed a toll-free telephone number; developed a claims tracking database; designed the dose reconstruction research database; and completed the data security plan.

Other activities are underway, including the recruitment process for computer-assisted telephone interviewers; development of procedures for internal and external dosimetry; and a review of DOE and DOL submissions for completeness of data. ORAU expects to begin dose reconstructions in early November, 2002, on files that currently have sufficient data. Nearly 90 health physicists are now available to conduct dose reconstructions; initial training of six

contract staff was recently completed. ABRWH engaged in an extensive discussion on data security, conflict of interest, transparency issues, and the OCAS staff shortage.

Dose Reconstruction Workgroup Update:
Mark Griffon reported that the Dose Reconstruction Workgroup held a conference call on October 9, 2002 to discuss selection of a contractor to assist ABRWH in reviewing the scientific validity and quality of NIOSH dose estimations and reconstructions. Four primary tasks were considered for the contractor: (1) review a selection of individual dose reconstructions; (2) review a selection of NIOSH site profiles for completeness and adequacy of data; (3) provide technical assistance to ABRWH in reviewing SEC petition determinations; and (4) review methods, procedures and protocols used by NIOSH or ORAU for the dose reconstruction.

The majority of ABRWH's comments focused on task 2. Some members were in favor of reviewing individual cases rather than site profiles to determine completeness of data. ABRWH emphasized the need to maintain credibility during its independent audit of dose reconstructions. ABRWH agreed to continue the deliberations on the following day after the workgroup presented the draft scope of work for the contractor and technical evaluation criteria to review proposals. The workgroup was commended on its diligent efforts to date.

Examples of Completed Dose Reconstructions:
Jim Neton and Grady Calhoun of the NIOSH-OCAS staff described examples of completed dose reconstructions. In these examples, OCAS used individual worker monitoring data; worker data with allowance for a missed or potentially undetected dose; coworker monitoring data; and workplace and environmental data. OCAS has not yet completed a dose reconstruction using source term data. Dose reconstruction reports include an introduction, dose determination, data sources used and a summary. Information OCAS uses to complete a dose reconstruction include annual dose records, verified employment dates, verified cancer reports, diagnosis date, radiological records and data on the history of the dosimetry program. When the data are ambiguous, OCAS makes claimant-favorable assumptions.

To avoid inconsistencies and ensure that contractors use the same methodologies as OCAS, a series of bulletins will be issued. This strategy will also provide contractors and subcontractors with the most recent data. OCAS plans to eventually consolidate the bulletins into technical documents or position papers. ORAU will form dose reconstruction teams at facilities to strengthen expertise for certain issues. AWEs will most likely be areas for which ORAU will develop this specialty. ABRWH and members of the public expressed concerns about OCAS's reliance on coworker data to conduct dose reconstructions. Many survivors have no knowledge of the employee's work activities. OCAS was advised to maintain solid records for these types of cases.

Residual Contamination Study:
Grady Calhoun discussed the residual contamination study in which NIOSH will attempt to determine whether significant contamination remained in any AWE facility or beryllium vendor after the facility discontinued nuclear weapons production. If significant contamination did remain, NIOSH will determine whether it could have caused or substantially contributed to cancer or a covered beryllium illness. NIOSH will review information on web sites for the DOE OWA, Formerly Utilized Site Remedial Action Program and other groups; use a snapshot of these data as a reference point for the study; and conduct onsite visits if necessary.

Each facility has been classified into one of three categories: minimal potential for significant residual contamination outside the listed period; potential for significant residual contamination outside the listed period; or further investigation is warranted. For radioactive contamination, 117 facilities required additional information, 74 showed minimal potential for contamination and 27 showed significant potential. For beryllium contamination, 8 facilities required additional information, 32 showed significant potential for contamination, and 5 showed minimal potential. NIOSH's progress report for the study is in the final HHS clearance process and is expected to be released soon.

Update on Department of Labor Activities:
Shelby Hallmark of DOL presented EEOICPA data as of October 3, 2002. Of 34,737 claims received, 21,400 have been for cancer; 1,365 for beryllium sensitivity; 1,239 for chronic beryllium disease; 396 for silicosis; 4,029 for RECA claims; and 7,184 for other health effects. Additionally, 5,477 claims were approved for final decisions and 3,345 were denied; 6,272 claims were approved for recommended decisions and 7,370 were denied. To date, 8,400 cases were sent to NIOSH for dose reconstruction; 4,898 payments were issued; $354.8 million was paid in compensation; and $3.8 million was paid in medical benefits. In the part B program, the current submission of 250 new claims per week decreased from 500 per week. DOL expects to receive ~15,000-20,000 claims in FY'03.

To improve performance in FY 2003, DOL's goal is to complete 75% of AWE and beryllium claims within 180 days and 75% of DOE and RECA claims within 120 days. DOL expects to meet FY 2003 goals due to a reduced backlog and redistributed workload. The need for additional staff will be re-evaluated when NIOSH begins returning volumes of cases. Of 1,423 cases received in New Mexico, 282 were referred to NIOSH; 247 were recommended decisions; 125 were final decisions; and 10 were paid for a total amount paid of $1.5 million. New Mexico claims include 724 for cancer, 83 for beryllium sensitivity, 32 for chronic beryllium disease, 6 for silicosis and 578 for other health effects. ABRWH reiterated the need for DOL to strengthen outreach efforts. For example, many members of the public are unaware that EEOICPA covers medications and does not require a change in treating physicians.

NIOSH uses several types of data to develop site profiles. External data include dosimetry change-out frequencies, lower limits of detection for these devices and assumed quality factors historically used at sites. Internal data include the type and frequency of monitoring performed, detection limits, radionuclides monitored, and descriptions of techniques used. Diagnostic x-ray

data include the frequency and type of examination, x-ray machine settings, and/or entrance skin dose. Area monitoring includes area TLDs and process descriptions and source terms include the type and quantity of material processed. Annual reports are the most common source of environmental data. NIOSH has received data from 15 of the major DOE sites.

Most data gaps are for environmental and internal monitoring data, while the greatest amount of information has been collected for external data. Medical x-ray data have significantly improved since site profiles were initially developed. NIOSH is exploring mechanisms for ORAU to obtain data directly from sites instead of collecting information from DOE. NIOSH will consider whether incident reports for certain classes of workers should be captured in the occupational exposure matrix. The matrix is a separate but complimentary activity from the site profiles and will be designed to maintain workgroup monitoring data by job, site, year, and building. The occupational exposure matrix is in the very early stages of development, but coworker data in terms of air monitoring, TLD and bioassay results will be the main sources.

Data obtained from AWE facilities are highly variable from site to site with amounts ranging from no information to limited personnel dosimetry. NIOSH has captured data from the Oak Ridge vaults and the DOE OWA. A data capture effort is planned for the Environmental Measurements Laboratory in New York City. ABRWH noted that chemical exposures will inevitably be uncovered during data capture efforts. NIOSH should develop a process to maintain "other exposure" data since these types of exposures also play a role in persons with cancer.

Interaction with the Public by Board Members:
David Naimon of the Office of General Council of HHS presented guidelines for ABRWH members to interact with the public. One, ABRWH members may not speak on behalf of the agency or the Department, and may not speak for the ABRWH unless a majority of members approve the position. Two, ABRWH members should not discuss the merits of individual claims whether the information was learned at an ABRWH meeting or otherwise, with anyone. Three, ABRWH members may discuss public information and refer all requests for information to the OCAS web site or office. Four, to protect personal privacy, ABRWH members should not speculate on the identity of claimants from dose reconstruction reviews. Five, ABRWH members should not speculate about dose reconstruction issues or SEC petitions. Questions should be directed to OCAS.

Six, ABRWH members should not attempt to predict future agency or ABRWH actions. Speculations may give the impression that the agency or ABRWH decided an issue prior to full presentation of the topic and relevant data. Seven, ABRWH members may not assist claimants in filing individual or SEC claims. Claimants should be directed to the proper agency for assistance. Eight, ABRWH members may be fact witnesses when they have personal knowledge. To avoid the appearance of preferential treatment, members may not use their ABRWH affiliation in providing factual information. NIOSH can assist ABRWH members in responding to media and Congressional inquiries.

IREP Update:
Russ Henshaw of OCAS reported on recent concerns on cancer latency models for leukemia and thyroid cancer. The current IREP model assumes that two- and three-year minimum latency periods are necessary for induction of leukemia and thyroid cancer, respectively. NIOSH began to reconsider minimum latency assumptions in IREP for leukemia and thyroid cancer and later determined that at least some non-zero risk should be factored into all cancer models at all TSEs. NCI and SENES developed new alternative latency models for thyroid cancer and leukemia; NCI reportedly proposed that they be incorporated into the NCI-IREP. The proposed latency revisions would adjust leukemia and thyroid cancer models to allow non-zero risk at all TSEs; modify IREP by incorporating S-shaped latency reduction functions; and factor in uncertainty around the midpoints of the S-shaped functions.

It is expected that NCI will send a letter to NIOSH to confirm adoption of the models. NIOSH has not yet made a decision on the proposed revisions because the agency is not comfortable with making changes that would result in a decreased PoC for any TSE. The epidemiological evidence for the minimum latency assumption is based primarily on the Life Span Study of Japanese atomic bomb survivors. These data are somewhat ambiguous. There is no hard evidence for the shape of the proposed S curve. A valid and plausible cutoff point is also an uncertainty. In the proposed thyroid latency adjustment model, the reduction factor is more claimant-friendly at six years TSE, but less at three and four years.

With the correct IREP code and an increased sample size of 2,000, higher PoC results at latency periods equal to, or greater than, 5 years was no longer present in the current model. NIOSH can exercise one of three options with the IREP. One or both new latency functions favored by NCI could be adopted without modification. The NIOSH-IREP could be modified to allow non-zero risk at all TSEs, but differently than NCI. For example, the NIOSH-IREP could be adjusted to ensure that the upper 99% PoC does not decrease compared to the current IREP at any TSE. In the third option, not favored by NIOSH, the current minimum latency assumptions could remain the same; NIOSH-IREP would not be modified.

Board Working Session:
During the ABRWH working session, the minutes of the sixth meeting on August 14-15, 2002 and minutes of the seventh meeting, via conference call on August 22, 2002, were unanimously approved with changes as noted in the record.

ABRWH unanimously approved two motions to address conflict of interest in the conduct of the dose reconstructions by ORAU. First, NIOSH should make available to each claimant information about the contract personnel doing his or her dose reconstruction and the primary reviewer of that dose reconstruction. The information should include a brief summary of educational and professional qualifications of these individuals, previous DOE/contractor employment and expert witness participation. The summary should be accompanied by a letter from NIOSH or the contractor outlining procedures for assigning dose reconstruction personnel and the procedures for claimants to express concerns about the assignment. Second, NIOSH will make available on its web site background information and previous work histories of all

contract personnel involved with dose reconstructions and reviews. ABRWH agreed this information should be posted on the web site only to the extent legally possible.

ABRWH generally agreed to the following process for the Dose Reconstruction Workgroup to proceed with its activities. The Workgroup will continue to finalize the draft scope of work and technical evaluation criteria and also to draft the business plan. ABRWH will hold a conference call to review and approve the revised drafts prior to the next meeting. The revised drafts will be circulated to the members and posted on the OCAS web site for public access prior to the conference call. After ABRWH reaches consensus on the scope of work and technical evaluation criteria, NIOSH will initiate the procurement process if possible. NIOSH will make necessary preparations for ABRWH to convene an executive session at the next meeting for review and approval of the draft business plan and independent government cost estimate.

Public Comment Period:
The ABRWH Chair opened the floor for public comments at the times noted on the published agenda. Statements were made by LANL former workers, survivors of deceased LANL workers, representatives of worker advocacy groups, and Congressional delegates. In addition to the agenda items, the public spoke about the need to provide independent technical assistance to survivors in completing the questionnaire; the unfair burden placed on claimants and survivors to prove illness; ORAU's conflict of interest; the use of former workers and other non-DOE contacts as resources to fill data gaps in the dose reconstruction process; and efforts to uncover data beyond records provided by LANL and other DOE sites.

Other Business:
In a discussion of ABRWH business, OCAS announced that the action items table was restructured to provide more specificity on whether ABRWH or NIOSH will take action on a particular item. Time will be designated on each future agenda for ABRWH to review and provide comments on the action items list. ABRWH approved a motion with a majority vote to establish a workgroup to make recommendations to the Board at its next full meeting regarding (1) issues related to IREP, including how the Board should prioritize and handle IREP and other scientific issues at future meetings; (2) whether a long-term subcommittee or short-term workgroup is needed to accomplish these activities; and (3) coordination of IREP issues with other governmental organizations that are also using the IREP model.

Action items and agenda topics raised during the meeting were noted for the record. The next ABRWH meeting will be held on January 7-8, 2003, in Cincinnati, Ohio; a portion of the proceedings will be closed for review and approval of the business plan. Another ABRWH meeting is tentatively scheduled for February 5-6, 2003, to be held in the Savannah River, Georgia area to discuss the SEC Rule. An ABRWH conference call will be held on December 12, 2002, from 1:00-3:00 p.m. EST to review and approve the draft scope of work and technical evaluation criteria.

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October 15-16, 2002
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Minutes of the Meeting

The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH) convened a meeting of the Advisory Board on Radiation and Worker Health (ABRWH). The proceedings were held on October 15-16, 2002 at the Inn at Loretto in Santa Fe, New Mexico. A court reporter transcribed ABRWH's deliberations; the complete transcript is available on the Internet. The following individuals were present to contribute to the discussion.

October 15, 2002

Attendance:

ABRWH Members:

Dr. Paul Ziemer, Chair
Dr. Henry Anderson
Dr. Antonio Andrade
Dr. Roy DeHart
Mr. Richard Espinosa
Ms. Sally Gadola
Mr. Michael Gibson
Mr. Mark Griffon
Dr. James Melius
Ms. Wanda Munn
Mr. Leon Owens
Mr. Robert Presley
Dr. Genevieve Roessler

Designated Federal Official:

Mr. Larry Elliott, Executive Secretary

Federal Agency Attendees:

Mr. Grady Calhoun (NIOSH/OCAS)
Ms. Tracey Gilbertson (NIOSH/OCAS)

Mr. Phillip Green (NCEH/LAHDRAP)
Mr. Shelby Hallmark (DOL)
Mr. Russ Henshaw (NIOSH/OCAS)
Ms. Cori Homer (NIOSH)
Ms. Elizabeth Homoki-Titus (HHS)
Mr. Ted Katz (NIOSH)
Mr. Jeffrey Kotsch (DOL)
Mr. David Naimon (HHS)
Dr. James Neton (NIOSH/OCAS)
Mr. D. Michael Schaeffer (DOD/DTRA)
Mr. David Sundin (NIOSH/OCAS)
Ms. Rose Toufexis (DOL)

Guests and Members of the Public:

Mr. Floyd Archileta (Espanola, New Mexico Resource Center Chief)
Ms. Joni Arends (Concerned Citizens for Nuclear Safety)
Ms. B. Jo Bear (Los Alamos National Laboratories-Survivor of Former Worker)
Mr. Joe Bermudez (Laborers' Health and Safety Fund)
Ms. Julia DeHart (Nashville, TN)
Ms. Dolores Garcia (Office of Senator Bingaman)
Mr. Jonathan Garcia (Los Alamos National Laboratories-Former Worker)
Mr. James Griffin (MJW Corporation)
Mr. Rob Hager (Attorney)
Mr. Phil Harrison (NURVE)
Ms. Epithenial Hawkins (Los Alamos National Laboratories-Survivor of Former Worker)
Mr. Ritchie Howles (Sheet Metal Workers' International Association, Local 49)
Ms. Michele Jacquez-Ortiz (Office of Congressman Udall)
Mr. Jeffrey Klemm (Science Applications International Corporation)
Mr. Jerry Leyba (Los Alamos National Laboratories-Former Worker)
Mr. Peter Malmgren (Los Alamos Oral History Project)
Mr. Richard Miller (Government Accountability Project)
Mr. Paul Montoya (Los Alamos National Laboratories-Former Worker)
Mr. Ben Ortiz (Los Alamos Project on Worker Safety)
Mr. James Platner (Center to Protect Workers' Rights)
Ms. Louise Presley (Clinton, TN)
Mr. Frances Quintara (Santa Fe, NM)
Mr. Adam Rankin (Albuquerque Journal)
Ms. Betty Jean Shinas (Los Alamos National Laboratories-Survivor of Former Worker)
Mr. Phillip Schofield (Los Alamos Project on Worker Safety)
Mr. Joseph Shonka (SRA)
Mr. Ken Silver (Los Alamos Project on Worker Safety)
Mr. Alex Smith (Los Alamos Project on Worker Safety)
Mr. Robert Tabor (Fernald Atomic Trades and Labor Council)
Dr. Richard Toohey (Oak Ridge Associated Universities)

Ms. Gloria Tribio (Los Alamos National Laboratories-Survivor of Former Worker)
Mr. Robert Vazquez (Office of Congressman Udall)
Mr. Thomas Widner (ENSR Corporation/LAHDRAP)

Opening Session:
Dr. Paul Ziemer, the ABRWH Chair, called the meeting to order at 8:30 a.m. on October 15, 2002. He welcomed the attendees to the proceedings and particularly recognized two new members: Mr. Michael Gibson and Mr. Leon Owens. Mr. Larry Elliott, the ABRWH Executive Secretary and NIOSH Office of Compensation Analysis and Support (OCAS) Director, announced that a report is being prepared for submission to the HHS Office of Committee Management. The Federal Advisory Committee Act requires the report to be developed each fiscal year-end and describe a committee's purpose, activities, accomplishments and process to conduct business. ABRWH's FY 2002 report will be distributed to the members.

Mr. Elliott reminded ABRWH about waivers that were prepared for each member. Since ABRWH's deliberations will focus on more specific issues at future meetings, the process for members to recuse themselves from any discussion that presents a conflict of interest will need to be followed.

Dr. Ziemer deferred action on approving the minutes of the August 14-15, 2002 meeting and the August 22, 2002 conference call until the following day. He noted that many members had not yet reviewed the documents. No members objected to tabling this agenda item.

OCAS Status Report:
Mr. David Sundin, the OCAS Deputy Director, presented data on the program as of September 30, 2002. The Department of Labor (DOL) is currently processing ~13,700 non-Special Exposure Cohort (SEC) cancer cases. Of the 8,032 cases DOL transferred to NIOSH for dose reconstruction, 6,801 (85%) are non-atomic weapons employees (AWE) and 1,231 (15%) are AWE employees. NIOSH is currently receiving ~200 cases per week from four DOL district offices. After receiving referrals from DOL, OCAS immediately sends a letter to each claimant confirming receipt of the claim for dose reconstruction, outlining all steps in the claims process, and providing contact information for OCAS staff. Each case is logged, tracked, and monitored through OCAS's computerized and paper filing systems.

DOL attaches a summary sheet to each claim referred to OCAS. The document lists verified covered sites where employees worked and allows OCAS to direct requests for personal radiation exposure data to appropriate points of contact in the Department of Energy (DOE). Of the 6,794 data requests sent to DOE, OCAS received 3,590 responses. OCAS closely collaborates with the DOE Office of Worker Advocacy (OWA) and on-site points of contact to ensure relevant exposure information is obtained to conduct dose reconstruction in a timely manner. However, OCAS is exploring mechanisms to expedite data requests from DOE. Each DOE point of contact receives periodic reports from OCAS on the status of outstanding data requests and exposure information received.

To date, 164 telephone interviews have been conducted with employees and survivors; 36 dose reconstructions are underway. OCAS sent draft dose reconstruction reports and completed close-out interviews with 11 claimants; 9 final dose reconstructions and complete administrative records were returned to DOL for final adjudication. Communications to OCAS have dramatically increased from the first to fourth quarters, i.e., 189 to 3,572 telephone calls for a total of 6,712, and 43 to 318 e-mail messages for a total of 602. OCAS' goal is to respond to each e-mail message within 24 hours.

OCAS awarded a five-year dose reconstruction contract to Oak Ridge Associated Universities (ORAU) on September 11, 2002 and recently completed its Residual Contamination Progress Report. HHS published a Notice of Proposed Rule-Making for adding classes to the SEC on June 25, 2002. The public comment period closed on August 26, 2002. Public comments submitted by 23 individuals, labor organizations, advocacy groups, and scientific organizations can be viewed on the OCAS web site. Many comments focused on the feasibility and timeliness of dose reconstruction as well as the use of the NIOSH Interactive Radio Epidemiological Program (IREP) to determine health endangerment. NIOSH is currently drafting solutions to substantially improve the proposed rule.

A decision will need to be made on whether the revised rule can be published as final or released as a new proposed rule and reissued for a second public comment period. OCAS believes a revised rule or second proposed rule can be published in January 2003. Responses to public comments will most likely be provided in the preamble of the new proposed rule. OCAS and DOE are continuing discussions on the HHS/DOE Memorandum of Understanding (MOU). OCAS expects to receive comments from DOE on the last draft of the MOU and hopes agreement will soon be reached on the process for HHS and DOE to implement responsibilities and undertake collaborative efforts. However, OCAS is not delaying progress on its activities pending resolution of the MOU.

Some ABRWH members expressed concern about OCAS' ability to maintain pace, particularly since DOE's backlog of outstanding data requests is increasing and OCAS staff is limited. Drs. Melius and Andrade inquired if OCAS projected its workload and developed a time-line to process claims. For example, ~5,000 cases were still being processed by DOL as of September 30, 2002. Referrals of most, or all, of these cases to NIOSH for dose reconstruction may become problematic. Dr. Melius was also interested in steps that have been taken to increase OCAS staff.

Mr. Sundin noted that ABRWH's questions on OCAS capacity, scope of work, and future backlog would be better answered during the dose reconstruction contract presentation. However, he reported that DOE submitted corporate contact information for many AWE sites. ORAU may undertake this task under the new contract. He confirmed that OCAS has no knowledge of the number of referrals to expect from DOL in the future. DOL must verify employment and disease condition. Any number of the 5,000 cases can fail on either of these two conditions and, thus, not be referred to OCAS. DOL's case load is also continuing to increase with new applications. With respect to staff, OCAS support will be expanded with its

prime contractor, clerical staff and other onsite contract personnel. However, OCAS has reached its current allocation for federal employees.

Dose Reconstruction Contract Award:
Dr. James Neton, the OCAS Health Science Administrator, reiterated that the five-year incrementally funded contract was awarded to a team headed by ORAU on September 11, 2002. Dade Moeller & Associates in Richland, Washington, and MJW Corporation in Buffalo, New York, will serve as the two primary dose reconstruction partners under the contract. The original Request for Contract (RFC) called for the reconstruction of at least 8,000 doses per year and provisions to expand or decrease this amount to meet fluctuating demand. It is likely that more than 100 contract personnel will be committed to the project.

The contract will provide support to OCAS in six areas: database management; data collection related to claims and SEC petitions, including the establishment of site profiles; dose reconstruction research related to job descriptions, work areas, exposure profiles, etc.; claimant interviews; dose estimating and reporting, and; technical and program management support. NIOSH will own, operate, and control the database, but ORAU will maintain parallel databases to track claims, develop profiles, and conduct other activities.

Since many dose reconstruction personnel have a relationship with DOE or DOE contractors, conflict of interest has been of key interest to NIOSH and stakeholders in awarding the contract. To address these concerns, all bidders were asked to include a conflict of interest plan in their proposals. The conflict of interest provisions of the ORAU plan are summarized below, and the complete set of provisions are posted on the OCAS web site.

- First, no contractor, subcontractor or employee will supervise, perform or review dose reconstructions for claimants from a given DOE-AWE site if they previously performed work that affected or established policies on radiation dosimetry assessments, dosimetry programs or records at that site or if they were involved with dose assessments or reconstructions for workers from that site.

- Second, no contractor element will participate in or review dose reconstructions for DOE sites or activities where it is the prime contractor, team member to a prime contractor, program manager, or subcontractor managing dosimetry programs or intends to be one within 12 months.

- Third, individuals will not perform, supervise or review radiation dose reconstructions if they acted as an expert witness or non-testifying expert on behalf of DOE or a DOE contractor in defense of radiation dose claims or suits.

- Fourth, individuals will not perform, supervise or review radiation dose reconstructions for coworkers, DOE facilities at which they were formerly employed, or for contractors by whom they have been employed.

- Fifth, no contractor or subcontractor element will be permitted to perform or bid for collateral work on radiation dosimetry program support for those sites where it is conducting dose reconstruction.

- Sixth, "key personnel" of the ORAU team will not have a conflict of interest with respect to managing this project or carrying out or marketing radiation protection and health physics services elsewhere in DOE.

- Seventh, each supervisor, dosimetrist, and reviewer will be required to complete and sign a form agreeing to abide by the above requirements. The forms will be maintained as audit-able records of this project. If NIOSH concurs, these forms will also be scanned and posted on a web page ORAU will maintain for this project. Links to the ORAU page will be provided for the NIOSH/OCAS and DOL web pages for this project.

- Eighth, a form identifying the dosimetrist who performed the dose reconstruction and the supervisor who reviewed and approved it will be attached to each dose reconstruction and provided to the claimant, along with short biographical sketches. The form will include a detailed employment history of the dosimetrist.

ORAU is on track to meet the deadlines for early deliverables outlined in the RFC. The toll-free telephone number was installed, and the claims tracking and dose reconstruction research databases have been designed and delivered to NIOSH. The latter database includes the data dictionary, data elements, and plans for secure links with the NIOSH database. ORAU also completed a data security plan to address privacy issues when claimant information is transmitted over a national web-based system. All of these deliverables are currently under review by NIOSH. The recruitment process for the computer-assisted telephone interviews is underway. Procedures for internal and external dosimetry are currently being developed with NIOSH input. Initial dose reconstruction training of six contract staff was recently completed.

DOE and DOL submissions are being reviewed to ensure each record is complete and suitable to conduct dose reconstructions. OCAS will submit follow-up requests to DOE for all claims identified with insufficient data. For records that are found to be complete, ORAU expects to begin dose reconstructions in early November, 2002. Claims managers with health physics backgrounds have been identified and will be assigned to DOL regions that are parallel to the NIOSH structure. ORAU currently occupies temporary office space in Cincinnati, but expects to occupy their permanent facility in November, 2002; 30-40 ORAU team partners will be housed in the Cincinnati location.

ABRWH's deliberations on the dose reconstruction contract focused on data security, conflict of interest, transparency issues, and the OCAS staff shortage. Dr. Ziemer asked whether computer security experts evaluated ORAU's data security plan to determine adequacy. He also asked about ORAU's time-line to completely manage the project.

Dr. Melius noted that the second conflict of interest provision only applies to contractor elements with current and future participation in dose reconstructions; past involvement is excluded. The type of information NIOSH distributes will be critical in terms of public perception and credibility. Data will be posted on the web site, but all claimants will not have access to the Internet. Supervision of the contract, oversight of conflict of interest provisions, and quality control of the overall project will be virtually impossible with limited OCAS staff. Dr. Neton and Mr. Elliot replied that OCAS will soon be submitting a proposal to NIOSH for additional staffing. Additional staff are needed particularly to review dose reconstructions, receive and process claims, and communicate with claimants. Dr. Melius suggested that ABRWH go on record to formally support the need for more OCAS staff and address the HHS/DOE MOU.

Dr. DeHart questioned whether OCAS will incorporate guidelines from the Health Information Privacy and Portability Act (HIPPA) to verbally and electronically transfer data. Mr. Sundin replied that NIOSH has reviewed HIPPA, but the language primarily applies to health care providers. Nonetheless, OCAS subscribes to its principles regarding privacy and confidentiality.

Mr. Griffon was concerned that data reviews may be conducted before site profiles are developed, which could lead to premature determinations.

Mr. Elliott, Dr. Neton, and Mr. Sundin responded to ABRWH's questions and concerns regarding data security and confidentiality. Dr. Richard Toohey, the ORAU Project Director, provided input as well. NIOSH and all other CDC centers, institutes and offices are required to submit security plans on database management systems. These plans are rigorously reviewed, evaluated, modified, investigated, and approved by highly qualified staff in the CDC Information Resource Management Office. Potential security breaches of database management systems are taken very seriously by CDC, since the agency maintains data on AIDS and other personal, confidential, or sensitive matters.

In terms of the second conflict of interest provision, the language can be revised to be retroactive. "Intent" to review or participate in dose reconstructions will be determined if a contractor submitted proposals for these activities. In six to nine months, NIOSH plans to commission an independent review of conflict of interest. The evaluation will determine the process by which conflict of interest is addressed, managed, and controlled within OCAS, ABRWH, and contractors. NIOSH welcomes input from ABRWH on the independent review. NIOSH realizes that transparency issues are still unresolved. ORAU has instructed all team members to collect information on subcontractors and submit completed and signed forms for these personnel.

NIOSH is currently revising its routine use authority under the Privacy Act to address disclosure issues when responding to Congressional inquiries and requesting dose information on claimants from DOE. ABRWH will be notified by e-mail when the revision is published in the Federal Register and posted on the OCAS web site.

With respect to priorities, site profile development is underway and will contain the four necessary components of environmental data, medical x-rays, internal exposure, and external

exposure. A data capture effort was recently undertaken at Oak Ridge; another is planned for early November 2002 at the New York City Environmental Measurements Laboratory (EML). OCAS and ORAU staff will visit the Los Alamos site on October 16, 2002 to review records and develop a data retrieval plan.

ORAU and its partners anticipate hiring ~24 personnel. Nearly 90 health physicists have agreements with ORAU to conduct dose reconstructions, but these staff members must first be trained in the Privacy Act, conflict of interest provisions, and other procedures outlined in the contract. ORAU expects to begin dose reconstructions within the next two weeks. ORAU and NIOSH are currently developing performance measures and a plan to address the backlog of claims. NIOSH will be informed if ORAU's progress is impaired by delays in receiving data from DOE sites.

Dose Reconstruction Workgroup Update:
Mr. Mark Griffon, the Workgroup Chair, introduced the members: Dr. DeHart, Mr. Espinosa, Mr. Presley and Dr. Roessler. Dr. Neton serves as the NIOSH liaison. He announced that the members held a conference call on October 9, 2002. In general, the workgroup discussed ABRWH's role in selecting contractors to assist in reviewing the scientific validity and quality of NIOSH dose estimations and reconstructions. In particular, the deliberations focused on the procurement process; the workgroup's role in developing the request for proposal (RFP) and evaluation plan; conflict of interest, personnel and other technical requirements of the contractor; and ABRWH representation on the NIOSH review panel to evaluate bids.

The Workgroup acknowledges that conflict of interest issues will be a major component of the evaluation plan. While drafting the RFP, the workgroup considered four primary tasks for the contractor:

- Task 1 would be to review a selection of individual dose reconstructions. In year 1, the contractor would review ~200 cases using a "basic," "advanced" or "blind" protocol. Only data used by NIOSH or ORAU in dose reconstructions would be examined in the basic review, while the entire administrative record would be examined in the advanced review. Dose reconstructions would be produced from raw data in the blind review. The contractor would not be provided with input files or dose data generated by NIOSH or ORAU.

- Task 2 would be to review a selection of NIOSH site profiles for completeness and adequacy of data. The Workgroup will continue to be challenged by defining the scope of this task until negotiations on the HHS/DOE MOU have been resolved. The contractor will encounter difficulties in accessing DOE and onsite experts, but interviews with former workers, health physicists, supervisors, line managers, and other experts identified by ORAU may be an option to overcome this barrier.

- Task 3 would be to provide technical assistance to ABRWH in reviewing SEC petition determinations. The scope of this task is undetermined at this time.

- Task 4 would be to review methods, procedures and protocols used by NIOSH and ORAU for dose reconstructions.

For the next steps in the process, the Workgroup plans to present the draft RFP to ABRWH; complete the draft evaluation plan for proposals; and further discuss the potential notification list, budget issues and ABRWH's representation on the bid review panel. The selection of cases can be delayed until after these more urgent tasks are completed.

******Dr. Ziemer explained that ABRWH can only discuss budget issues of the RFP during an executive session. Since no announcement was made in the Federal Register, the ABRWH meeting would be closed at the end of the proceedings on the following day if an executive session would be necessary. The majority of ABRWH's comments focused on Task 2 in which site profiles would be reviewed to determine completeness of data. Dr. Melius opined that, at a minimum, a subset of individual cases should be used in this effort, while Dr. Ziemer noted that site profiles might be sufficient for some claims. Ms. Munn was mindful of the balance between ABRWH's level of involvement in reviewing dose reconstructions and fulfilling its charge. ABRWH should assist both NIOSH and claimants without making the process more difficult for either group.

Mr. Owens emphasized the need for ABRWH to maintain credibility due to public skepticism of previous government activities. In addition to data issues, Mr. Gibson noted that claimants will also express concerns about individuals conducting the dose reconstruction. Dr. Anderson commented that a modification of Task 1 might resolve this dilemma. Instead of randomly selecting cases, the contractor could flag cases where individuals raised exposure concerns. An evaluation could then be made on whether NIOSH or ORAU appropriately addressed the issue, investigated the problem, or responded to the individual. Ms. Munn expressed concern with the degree of detail that ABRWH is trying to involve itself in, that ABRWH may be exceeding its charge. She commented that ABRWH's role is to assist both the claimant and NIOSH in their activities, not to make things more difficult for either of them.

Dr. Melius pointed out that this audit process would exclude survivors or claimants with limited knowledge of the site or exposures. He reiterated the need to resolve Task 2 issues in terms of determining completeness of data. This discussion could be continued on the following day after the workgroup presented the draft scope of work for the RFP. He also proposed that the agenda be revised to accommodate ABRWH's discussion and formulation of recommendations on conflict of interest and transparency issues. Several ABRWH members commended the Workgroup on its diligent efforts to date.

Mr. Elliott clarified several issues with the procurement process. Only ABRWH members, together with Dr. Neton and Mr. Elliott, can be present during budget discussions of the RFP. An executive session cannot be recorded or transcribed. (Note: It was later determined by General Council that executive sessions do have to be transcribed.) NIOSH is pleased that resolution has been reached for an ABRWH member to serve on the technical review panel to evaluate bids, but all reviewers must first be trained in procurement procedures. The Workgroup's evaluation plan will be used as criteria to assess each proposal. For claimants who

raise concerns about dose reconstructionists, DOL can remand these cases to NIOSH for further evaluation if new information is uncovered.

As a proactive measure, Dr. Neton reported that NIOSH has discussed the possibility of providing the claimant with a biographical sketch or work history of the dose reconstructionist at the time the case is assigned. Before opening the floor to the next presenter, Dr. Ziemer announced that ABRWH will not convene an executive session on the following day. Pursuant to legal requirements of the Sunshine Act, closure of public meetings must be announced in the Federal Register prior to the proceedings.

Examples of Completed Dose Reconstructions:
Dr. Neton and Mr. Grady Calhoun of OCAS described four dose reconstructions NIOSH completed. Four of the five types of information used in dose reconstructions are illustrated in the examples; NIOSH has not yet completed a dose reconstruction using source term data.

Case A. The dose reconstruction for claimant A used individual worker monitoring data; the case represents an underestimate of the actual dose received. The claimant worked at a DOE experimental reactor facility as a health and safety worker from 1959-1986; handled radioactive waste; and was involved in cleanup after a reactor accident and several experiments.

According to DOE reports, the claimant had a photon deep dose of 22.6 rem, a whole-body dose as reported by DOE. In addition, he received a shallow dose of photon plus beta of 28.1 rem. Based on the DOL verified cancer report, the claimant was diagnosed at 40 years of age with chronic granulocytic leukemia. Dose was determined using only the photon deep dose. All photons were assumed to be >250 keV; this energy range was chosen to produce a deliberate underestimate of probability of causation (PoC). The lowest dose conversion factor (DCF) was used to convert deep dose to dose to red bone marrow; this figure was also chosen as an underestimate. Data sources included a reported deep dose of record from DOE, verified employment dates from DOL, verified cancer reports from DOL and a diagnosis date from DOL. Based on external dose alone, the PoC was ~72%. Bioassay data indicated some internal exposure to cesium, but the dose did not need to be calculated since the PoC from external dose was already >50%. Case A required 16 hours of work to reach a conclusion, but as the learning curve improves, this type of dose reconstruction could be completed in two hours or less.

Case B. The dose reconstruction for claimant B used worker data with allowance for a missed or potentially undetected dose. The claimant is deceased and was diagnosed with prostate cancer in 1997, lymphoma in 1998, and basal cell carcinoma in 1999. The claimant worked in DOE fuel and reactor operations as a patrolman from 1948-1952 and an instrument technician from 1952-1988.

The claimant had a relatively high gamma recorded dose of 37.1 rem. The majority of the dose was from the reactor area and was assumed to be from high-energy gamma exposure of >250 keV. The recorded neutron dose as reported by DOE was 80 mrem, but the detection threshold was 50 mrem. The average neutron energy level was below the dosimeter threshold. Since DOE did not provide individual monitoring records for badges, the claimant's records were

supplemented with available data from the NIOSH Health-Related Energy Research Branch (HERB). To estimate the neutron dose, OCAS reviewed the 1996 Fix et al. study.

In this investigation, old neutron films were evaluated using five different methods. The estimated neutron dose was under-reported by approximately 10%. The relative biological effectiveness (RBE) used in the Fix study was 10, but OCAS can assign an RBE as high as 20. Also in the Fix study, neutron to gamma ratios ranged from 0.13-0.73 for reactor area workers. The ratio was dependent on the magnitude of dose. OCAS adopted a dose-weighted average of 0.26 that assumed a triangular distribution. Several claimant-friendly assumptions for neutron exposure were made in the analysis of Case B. Dosimeter and missed doses were added to determine whole body gamma dose. The neutron gamma ratio was based on the total reconstructed dose rather than the dose of record from DOE.

The gross track count used no background subtraction. Continuous neutron exposure was assumed from 1953-1980. During outages, however, only high gamma exposure occurred; neutron exposure was virtually non-existent. The neutron ratio was also applied through 1980. For a patrolman, DCFs were estimated at 25% from front to back, 50% around the body and 25% from all directions. For an instrument technician, DCFs were assumed at 75% from front to back and 25% around the body. In the IREP input files for claimant B, 68 inputs were used for prostate cancer and lymphoma each; 106 inputs were used for skin cancer.

For skin dose determination, the badge was capable of differentiating between beta and photon exposure with an open/closed window. The claimant's file showed a skin contamination incident, but this factor was excluded from the analysis because sufficient dose information already existed to determine PoC. To expedite the claim, some occupational doses were not reconstructed since the PoC was >50%. In addition to skin contamination, a large fission product release occurred from 1945-1961. The claimant also had 44 individual x-rays during the length of employment and had a positive urinalysis for plutonium and uranium.

Data sources included annual dose records provided by DOE; radiological records microfilmed and duplicated for HERB; and information provided by the site on the history of the dosimetry program. Using the formula in the Probability of Causation Rule, the claimant's overall PoC for prostate cancer, lymphoma and skin cancer was estimated to be ~74%. Case B required several weeks to reach a conclusion.

Case C. The dose reconstruction for claimant C used coworker monitoring data. The claimant died of esophageal cancer in 1986 and, according to an affidavit, worked from 1940-1980 at an AWE uranium facility. Survivors were unaware of the claimant's specific work activities. The DOE OWA supplied OCAS with contracts and amendments, technical progress reports, a post-decontamination survey, and documentation from the Formerly Utilized Site Remedial Action Program (FUSRAP).

The interview generated very little information since the survivor could not describe any of the employee's work activities and believed all coworkers were deceased. However, the survivor was aware that the claimant did not have an office job; the employee reportedly came home from

work dirty. The data search was also difficult because the AWE no longer exists. Moreover, the company that is managing retirement accounts could not describe the outcome of the AWE. OCAS searched the DOE web site, reviewed progress reports, examined contracts and contacted the only AWE extrusion plant still in existence. Efforts were made to reconstruct dose using typical exposures at the existing AWE; a records search was also conducted at this facility.

The data search resulted in external dosimetry records from 1959-1960 for the claimant's AWE. Additional documentation indicated that the DOE EML had taken bioassay samples; ~200 pages of bioassay records were obtained from the EML. OCAS located and interviewed the radiation safety officer (RSO) who received the 1959-1960 film badge records. During the RSO interview, OCAS learned that an Atomic Energy Commission (AEC) project at the AWE employed ~12 technicians and administrative personnel. The facility was used as a metallurgy laboratory only. All technicians were monitored and wore coveralls and laboratory coats. Workers typically did not get dirty while performing their job duties in the metallurgy lab, but those working elsewhere on other projects at this AWE could have gotten dirty. All extrusion was conducted at a different facility, the World War II Air Force aluminum extrusion facility. After the AWE was sold in 1961, operations were transferred to other cities.

To calculate external dose, OCAS determined annual doses at the facility and accounted for missed doses to each individual each year. The highest annual dose was used as the employee's annual dose for 11 years. With this approach, 550 mrem per year were assigned to the claimant. For internal dose, no records were located that showed the employee was sampled at the facility. The first few years were found to be fairly consistent, which indicates a chronic low-level exposure. Incidents in 1960 and 1961 were evident for several individuals.

Based on the highest exposures in three individuals from each scenario, OCAS models were of one chronic and two acute exposures. The maximum annual esophageal dose to the claimant was calculated at 16 mrem. The exposure period was assumed to begin on the first day of the AEC contract and end on the date of the post-decontamination survey. PoC values represented an upper bound limit and were input as constant. The resulting PoC was ~15%. Based on coworker data, OCAS is fairly confident the claimant did not receive an exposure from the AWE that could result in a PoC anywhere close to 50%. In fact, this claimant's PoC would be <50% even if the true exposure was five times the dose estimate.

Case D. The dose reconstruction for claimant D used workplace and environmental data; the case represents an overestimate of the actual dose received. The claimant was an accounting specialist from 1992-1997 with administrative job duties that included bookkeeping, banking, billing, and preparing financial statements. Since dosimetry was not required at this work location, no dose was reported by DOE. The DOL verified cancer report showed a diagnosis of chronic myelogenous leukemia at 53 years of age prior to the end of employment. To determine dose, OCAS used environmental report data for the site.

All of the following assumptions were made based on an attempt to overestimate the dose. NIOSH used the highest annual environmental dose from thermoluminescent dosimeters (TLDs), taken from the TLD station located between the claimant's work station and the radiation source.

All photons were assumed to be in an energy interval of 30-250 keV, which results in a higher PoC than using >250 keV. A DCF was not used to convert deep dose to dose to red bone marrow because this factor would have reduced the dose. The highest annual environmental perimeter air data were assumed to be represented. All gross alpha activities were assumed to be due to plutonium 238; all gross beta activities were assumed to be due to strontium 90. Data sources included site environmental reports and DOL reports that verified employment dates, cancer and diagnosis date. Based on this information, the annual environmental dose was normalized to 2,080 hours per work year. The total dose estimated was 135 mrem over the entire employment period.

In calculating internal dose, OCAS assumed that the highest gross alpha and gross beta concentrations were inhaled throughout employment to the diagnosis date. The total dose estimated was 36 mrem. Despite all of these claimant-friendly overestimations, the resulting PoC was only ~4%.

General Considerations. To avoid inconsistencies and ensure that contractors use the same methodologies as OCAS, a series of bulletins will be issued. This strategy will also provide contractors and subcontractors with the most recent data. OCAS plans to eventually consolidate the bulletins into technical documents or position papers.

Several members of the public expressed concerns about the approach used for claimant C. Dr. Melius also pointed out that OCAS conducted the dose reconstruction by relying on information from a survivor with limited knowledge of the employee's work activities. Moreover, the AWE is no longer in existence and the interview was conducted with an RSO who was not employed at the facility. Since facts and information can easily be lost or misinterpreted, reliance on coworker monitoring data will present the most significant challenge of the five scenarios. Dr. Melius advised that OCAS ensure the maintenance of solid records for these types of cases. Dr. Neton confirmed that ORAU will form dose reconstruction teams at facilities to strengthen expertise for certain issues. AWEs will most likely be areas for which ORAU will develop this specialty. He emphasized that the assumptions OCAS made for claimant C were more lenient than the uncertainty analysis approach.

Residual Contamination Study Progress Report:
Mr. Calhoun explained that the FY 2002 National Defense Authorization Act (NDAA) tasked NIOSH to undertake a study to evaluate the potential for residual radioactive and beryllium contamination at AWEs, and beryllium facilities that processed these materials in support of nuclear weapons production. To fulfill this charge, NIOSH would determine whether significant contamination remained in any of these facilities after activities related to the production of nuclear weapons was discontinued. If significant contamination did remain, NIOSH would determine whether it could have caused or substantially contributed to cancer or a covered beryllium illness.

NIOSH implemented a three-part study design. First, information on the DOE OWA web site would be reviewed. Second, a snapshot of these data would be used as a reference point for the

study. Third, information maintained on the OWA, FUSRAP, and other web sites would be reviewed.

To make its determination, NIOSH classified each facility into one of three categories:

(1) The documentation reviewed indicates minimal potential for significant residual contamination outside the listed period.
(2) The documentation reviewed indicates potential for significant residual contamination outside the listed period.
(3) The site warrants further investigation.

NIOSH concluded that most facilities could be classified as category 3. For purposes of the study, NIOSH defined "significant" radioactivity using current DOE and National Radiation Council contamination standards.

For radioactive contamination, 117 facilities required additional information, 74 showed minimal potential for contamination, and 27 showed significant potential. For beryllium contamination, 8 facilities required additional information, 32 showed significant potential for contamination, and 5 showed minimal potential. To advance the study, NIOSH will re-review the OWA web site to identify changes in the current and previous snapshot dates. For facilities that require additional information, NIOSH will collect more data from site representatives, undertake more document searches and conduct on-site visits if necessary. NIOSH believes the study will strengthen the site profiles of many facilities. The activity is designed to determine whether the listed dates are too restrictive and if more time will be needed for individuals to file claims.

The floor was opened for members of the public and ABRWH members to weigh in on the NIOSH residual contamination study. Mr. Richard Miller, of the Government Accountability Project (GAP), explained that he felt NIOSH's task was incorporated into the NDAA because several AWEs were not decontaminated or were poorly decontaminated after operations were terminated. This activity is not being conducted in a vacuum; Congress will provide a follow-up response after NIOSH has gathered scientific data. However, the public is now demanding answers since NIOSH was scheduled to submit the progress report to Congress on June 28, 2002.

In response to Mr. Michael Schaeffer of the Department of Defense, Mr. Calhoun planned to review the records to determine whether the Iowa Army Ammunition Plant is included in the study. In the interim, Mr. Calhoun noted that the study includes only AWEs and beryllium facilities. To address public concern, Mr. Elliott announced that the progress report is in the final HHS clearance process. The document will soon be released to the six subcommittees identified in the NDAA. ABRWH will be notified after the progress report is posted on the NIOSH web site.

Ms. Gadola pointed out that the occupational health literature and anecdotal data include some accidental spills related to beryllium and radioactive contamination. She questioned whether NIOSH has included these scenarios in its investigation. Mr. Calhoun replied that individual cases are excluded from the study, but instances in which facilities handled beryllium would be

covered unless decontamination was documented. Based on the minimal number of beryllium facilities with documented decontamination, the possibility of accidental spills after decontamination is highly unlikely.

Update on DOL Activities:
Mr. Shelby Hallmark is the Director of the Energy Employees Occupational Illness Compensation Program for DOL. He presented data on this activity as of October 3, 2002. EEOICPA was enacted on October 30, 2000 and became effective on July 31, 2001; amendments were enacted on December 28, 2001. The DOL Secretary presented the first compensation payment on August 9, 2001. DOL is undertaking several activities to expedite the claims process. Data for subcontractors are being obtained and electronically tracked. DOL is working with the Center to Protect Workers' Rights to obtain employment information on construction workers. The Oak Ridge Institute for Science and Education (ORISE) database has been accessed online to bypass DOE record centers. This allows direct access to the data on >400,000 employees. DOL is working with the National Cancer Institute (NCI) to define specific cancers, especially as these determinations pertain to the SEC-specified cancers.

The DOL final rule to implement EEOICPA is expected to be published soon. EEOICPA is administered by four DOL district offices with 146 federal staff and 25 contract staff; their national office with 29 federal staff and 10 contract staff; and their Final Adjudication Branch (FAB) with 36 federal staff and 7 contract staff. In order to balance their workload, DOL is working with Congressional representatives to transfer Iowa and Missouri cases from the Denver office to the Seattle jurisdiction. The transfer is expected to be completed within the next two weeks; all changes will be communicated to claimants. Of the 34,737 claims received, 21,400 have been for cancer; 1,365 for beryllium sensitivity; 1,239 for CBD (chronic beryllium disease); 396 for silicosis; 4,029 for Radiation Exposure Compensation Act (RECA) claims; and 7,184 for other health effects. DOL expects to receive ~15,000-20,000 claims in FY'03.

DOL uses a two-stage decision process, consisting of a recommended decision in the district offices, and then a final decision from their Final Adjudication Branch (FAB.) Of the nearly 9,000 claims that have gone through to final decision, 5,477 claims were approved and 3,345 were denied. Of the >13,000 claims that have reached a recommended decision, 6,272 were approved and 7,370 were denied. To date, 8,400 cases were sent to NIOSH for dose reconstruction; 4,898 payments were issued; $354.8 million was paid in compensation; and $3.8 million was paid in medical benefits. DOL realizes that the low figure in medical benefits is due to lack of public knowledge and reluctance among physicians to file claims with DOL. Claimants and survivors are filing medical bills with private insurance carriers or Medicare, despite the fact that eligible expenses are covered by EEOICPA.

Of the 1,423 cases received in New Mexico to date, 282 were referred to NIOSH; 247 were recommended decisions; 125 were final decisions; and ten were paid for a total of $1.5 million. New Mexico claims include 724 for cancer, 83 for beryllium sensitivity, 32 for CBD, 6 for silicosis and 578 for other health effects. EEOICPA statistics are updated weekly and can be accessed on the DOL web site.

Increased outreach efforts are needed to fully explain EEOICPA to the public. DOL is still receiving a large number of claims for non-covered medical conditions, but individuals are provided with information on where to properly file part B claims. For the fourth quarter in FY 2002, the average initial processing time was 216 days for AWE and beryllium vendor claims and 171 days for DOE and RECA claims. To improve performance, DOL has set initial claims processing goals for FY 2003: 75% of AWE and beryllium claims will be completed within 180 days and 75% of DOE and RECA claims will be completed within 120 days. DOL expects to meet FY 2003 goals due to a reduced backlog and redistributed workload.

In terms of resources, DOL's current hires will increase staff by ~10%. This level will be sufficient since the workload will be current within the next two to three months. In the part B program, the current submission of ~250 new claims per week represents a gradual decline from the ~500 per week DOL average earlier in the program. DOL will re-evaluate the need for additional staff when NIOSH begins returning volumes of cases.

Drs. Melius and DeHart commented on the need for DOL to strengthen outreach efforts. Dr. DeHart pointed out that many patients are unaware EEOICPA covers medications and does not require a change in treating physicians. Mr. Hallmark acknowledged that this information has not been well publicized. DOL attempts to register existing providers of claimants whose cases have been approved. Mr. Ken Silver, of the Los Alamos Project on Worker Safety (LAPOWS), made several comments about DOL's activities. Some New Mexico workers diagnosed with beryllium sensitivity reportedly were referred to general practitioners or lung specialists in the greater Santa Fe area and received no treatment.

Due to expertise in Denver and its close proximity to New Mexico, many workers are interested in receiving long-term medical monitoring from this facility. Mr. Silver questioned whether rejection letters sent to claimants with non-covered conditions explain subtitle D. Mr. Hallmark explained that DOL is attempting to develop a logical process to treat New Mexico workers diagnosed with beryllium sensitivity. The National Jewish Center may still be the closest and most appropriate facility. DOL disseminated rejection letters with no reference to subtitle D early in the process, but a policy was established six or eight months ago to incorporate language directing claimants to the DOE program.

Public Comment Period:
Mr. Jonathan Garcia buried radioactive material during his employment at Los Alamos National Laboratory (LANL) as a heavy equipment operator. He was diagnosed with leukemia and received a bone marrow transplant. Several comments made during the telephone interview were not captured in the written document. He inquired whether claimant interviews are recorded. NIOSH is exploring the possibility of recording claimant interviews for quality purposes, but this has not been done to date. Mr. Elliott noted that claimants are given the opportunity to edit the written record of their interview and return the corrected version to NIOSH.

Mr. Ben Ortiz of LAPOWS was a LANL worker from 1969-1989 and became ill after his occupational exposures to toxic substances. Although LANL physicians told him that his

symptoms were "imaginary," he reported that he has repeatedly suffered from severe sinus infections, bronchial asthma, dizziness, nausea, chronic insomnia, and flu-like symptoms. He added that his private physicians never asked for an occupational history. Finally, Mr. Ortiz said that he was placed on medical leave in 1988 and was diagnosed with solvent encephalopathy (neurological disease associated with exposure to solvents), restricted airways and "industrial intoxication."

Mr. Ortiz reported that it took seven months of medical leave for his system to become detoxified, but that his liver, kidneys, and eyes are still damaged. Similar to SEC cases, he emphasized the need for persons injured by exposure to toxic substances to be recognized as well. During his 20-year employment, no safety meetings on hazards or chemicals were held and no protective clothing was provided. Mr. Ortiz also requested assistance in filing claims for medical expenses. Mr. Hallmark provided Mr. Ortiz with contact information for the DOE Workers' Compensation Program.

Mr. Ken Silver of LAPOWS made several observations about the agenda items:

- First, many LANL workers have encountered difficulties with the New Mexico Workers' Compensation Program. If appropriations were increased, he asked if DOL would be amenable to managing a single payer system for other toxic chemical claims. In response, Mr. Hallmark noted that the question pertains to pending legislation, and that DOL is not in a position to comment.

- Second, during data reviews and claimant interviews on radiation exposures, a bibliography of toxic chemical exposures at LANL and other sites should also be developed and maintained. The data set should be attached to the site profile for public access. The bibliography could then be expanded by others as Subtitle D of the legislation is improved.

- Third, many LANL workers were first exposed to radiation at the Nevada Test Site, the Pacific Test Program and other areas, but the legislation does not support combining these doses with doses covered under EEOICPA. This restriction precludes many LANL workers from obtaining justice.

- Fourth, LAPOWS is quite concerned that ORAU is a major DOE contractor and has admitted having major conflicts of interest.

- Fifth, former LANL workers represent a wealth of knowledge, but expertise from these sources is excluded from formal models used by health physicists. LAPOWS plans to closely monitor the dose reconstruction process to ensure workers are respected.

- Sixth, to ensure credibility with the public, Dr. John Till of Risk Assessment Corporation, and other radiation experts whose integrity is well known should be included in the auditing process.

- Seventh, the ability to document exposures and work processes has presented a significant barrier to claimants and survivors. The collection of occurrence reports at LANL is one of the largest and most informative data sets, but has never been available to the public. LAPOWS recently filed a Freedom of Information Act (FOIA) request to obtain the entire collection of occurrence reports for eventual placement in the public domain. Members of the public will be encouraged to add individual recollections to the data set.

Mr. Richard Miller of GAP addressed several internal issues. He opined that if ABRWH is not able to assist NIOSH in obtaining more full time employees for the dose reconstruction process, Congressional delegates could perhaps influence CDC to provide 25 additional staff members. With only four health physicists on the NIOSH staff, the need for additional personnel is quite obvious. He inquired about NIOSH's process to implement conflict of interest provisions. The dose reconstruction contract requires ORAU to make public disclosures only at the direction of NIOSH. ABRWH should develop a simple, transparent, and thorough system because a claimant's right to know outweighs the privacy rights of individuals who are conducting public activities.

Mr. Miller asked about NIOSH's procedure for persons with concerns about conflicts of interest to seek recourse, such as allowing claimants to select dose reconstructionists for their individual cases. He also questioned whether ORAU's proposal in response to the RFP will be made available to the public. NIOSH plans to contact DOE sources and corporate groups to complete the Section 3152 Report for the residual contamination study. Mr. Miller conveyed that workers, Congressional delegates, state regulatory agencies, and ABRWH members who were employed at DOE facilities can also serve as valuable sources to fill data gaps. No community outreach has been conducted, to date, to publicize this activity.

Mr. Elliott responded to Mr. Miller's questions and comments. OCAS will need additional staff as soon as ORAU is completing a large number of dose reconstructions per week. A NIOSH public health advisor and an ORAU point of contact will be assigned to each case file to respond to questions and concerns raised by claimants regarding conflict of interest issues and progress on the claim. NIOSH and ORAU will closely collaborate to develop and implement policies and procedures to address claimant concerns. The selection of dose reconstructionists by claimants is not an option, but NIOSH will make a reassignment if concerns are valid. NIOSH plans to release ORAU's proposal to the public, but the document is now being reviewed to delete proprietary information. Mr. Elliott confirmed that NIOSH will solicit input from other data sources while conducting the residual contamination study.

Mr. Jerry Leyba is a former LANL radiological control technician who handled several different radionuclides during his employment, and currently is a representative of the University Professional Technical Employees (UPTE.) UPTE is conducting an organizing drive at LANL. Mr. Leyba questioned the rationale for applying radio-epidemiological data gathered in Japan to the IREP model. This methodology, he stated, is inappropriate for U.S. nuclear workers; data from the 12 nuclear facilities in the DOE complex should be used instead. Secondly, he

expressed concerns about conflicts of interest admitted by ORAU; claimants have a right to know all aspects of the dose reconstruction from the time their cases are assigned.

Mr. Leyba also inquired about the petition process and guidelines that will be established if LANL becomes a part of the SEC. He urged NIOSH to assist workers who died or are currently suffering from cancer while serving their country. He noted several problems with the current system. He stated that many workers have not filed an EEOICPA claim due to intimidation by management and fear of job loss. He added that because of budget constraints DOE will only pay for a medical review or a medical examination, but not both. Although EEOICPA was established for the people, the burden of proving disease is unfairly placed on the claimant.

Ms. Epithenial Hawkins, Ms. Betty Jean Shinus and Ms. Gloria Tribio are sisters whose father was employed by LANL for 35 years as a sheet metal worker. Their father died of throat cancer; they commented on the claims process from a survivor's perspective. The sisters stated that the questionnaire is virtually impossible to complete since survivors are unable to answer for a deceased worker. The questionnaire is also unnecessary because exposure is a given, particularly since their father worked in "hot spots" at the facility. Moreover, NIOSH should be able to determine exposure from dosimetry records.

They added that LANL implemented no safety measures, provided no protective equipment, and did not regularly monitor workers. Overall, the questionnaire complicates the dose reconstruction process. Instead of placing the burden of proof on survivors, the government should prove that workers were not exposed. The sisters posed several questions about the dose reconstruction process related to extreme delays in completing claims; cumulative effects from nuclear exposure; types of cancer and affected organs; and workers who can assist survivors in completing the questionnaire. The sisters noted that many workers will not become involved in the dose reconstruction process due to fear of job loss.

Mr. Elliott, Dr. Neton and Dr. Ziemer responded to the sisters' questions and comments. The questionnaire is technical and scientific in nature, but is designed to assist NIOSH in determining exposure. There is a separate questionnaire written specifically for survivors, however, and this questionnaire is designed to collect information about coworkers or other persons with knowledge about the employee's work activities. The burden is not placed on survivors to contact coworkers of the deceased claimant. If survivors provide NIOSH with names of coworkers, the agency will make the contacts and conduct the interviews.

In addition to dosimetry records and other technical information, survivors are encouraged to provide photographs, recount stories the worker shared with family members, or submit a written description of work activities. Survivors should provide all information, even if non-technical and/or anecdotal, that may be relevant to the claim. Anecdotal data are beneficial to the process and will be included in the claimant's file for consideration during the dose reconstruction.

NIOSH welcomes input on mechanisms to simplify the questionnaire and also encourages feedback on difficulties in completing the document. With respect to delays in claims processing, NIOSH awarded the dose reconstruction contract to ORAU on September 11, 2002.

Provisions of the contract require the completion of at least 8,000 dose reconstructions per year. ORAU's capacity to adhere to this time-line depends on obtaining complete records from DOE. However, claims that currently have sufficient information will be identified and processed more quickly by ORAU. A decision by a claimant or survivor to decline the telephone interview will not delay processing of the claim.

In terms of the dose reconstruction process, 5 rem is the current annual regulatory limit for DOE workers. Instead of relying on this estimate, however, NIOSH calculates each individual dose from a variety of sources, including input from the claimant and occupational exposure records. IREP is used to calculate the probability that a worker's cancer was caused by occupational exposure to radiation. Cancer in any particular organ is calculated using cancer-specific risk models. In identifying missing doses and filling data gaps to conduct dose reconstructions, NIOSH takes a "worker-friendly" approach. Mr. Espinosa confirmed that several workers who were employed at LANL during the same time as the sisters' father currently live in Espanola or Santa Fe, New Mexico. These workers can provide assistance in completing the questionnaire.

Mr. Robert Tabor is a member of the Fernald Atomic Trades and Labor Council and worked for 22 years at the site. He questioned whether credibility can be maintained if the contractor selected to support ABRWH has working relationships with DOE and NIOSH. To avoid public suspicion of the contractor's integrity, a knowledgeable, credible, and well-recognized group must be selected. The contractor's business should be related only to the audit.

Ms. Joni Arends is a Waste Programs Director for Concerned Citizens for Nuclear Safety (CCNS) in Sante Fe, New Mexico. In May 2002, CCNS commissioned Steve Wing and David Richardson to develop a report on occupational health studies at LANL. Ms. Arends distributed copies of this document.

Mr. Floyd Archileta manages the Resource Center in Espanola, New Mexico. The center provides claims assistance to LANL, Pantex, Sandia National Laboratories and several small facilities in New Mexico. Case workers are available for initial claims intake and follow-up activities after claims are filed, such as translating NIOSH telephone interviews from English to Spanish. The Center's office at LANL is open two days per week.

Mr. Rob Hager is an attorney who litigated the Karen Silkwood case and the Harding case in Paducah. He noted that Steve Wing's study at Oak Ridge was introduced as evidence during the Harding case, and he urged NIOSH and ABRWH to take a close look at Steve Wing's work.

Follow-up remarks were made by the agencies in response to the public comments.
Mr. Hallmark emphasized that any individual with a covered condition should feel free to file a claim without fear of reprisal or other negative impact. He responded to Mr. Leyba's comment that only ten of 1,172 claims filed in Espanola have been compensated to date. Virtually all LANL claims that are eligible for the DOL program have been referred to the NIOSH dose reconstruction program. DOL cannot complete the outstanding LANL claims until the NIOSH process has been fully developed.

Mr. Elliott addressed concerns raised by the public about conflict of interest and the dose reconstruction contract. An "apparent" or "obvious" conflict of interest is one in which a person serves in a position and commits an act out of self-motivation that adversely affects an outcome. NIOSH's goal is to have no conflicts of interest of this nature. A "perceived" conflict of interest is one in which an individual's former affiliation creates a perception among the general public that such an act could be committed. NIOSH is closely collaborating with ORAU to address both types of conflict of interest, and goals have been established to resolve these issues.

There being no further discussion, Dr. Ziemer recessed the ABRWH meeting at 5:17 p.m. on October 15, 2002.

October 16, 2002

Dr. Ziemer reconvened the ABRWH meeting at 8:35 a.m. on October 16, 2002 and yielded the floor to the first speaker, Dr. Neton.

Site Profile Development Status Report:
Site profile data typically refers to data not linked to an individual. For the purposes of this program, any sample that was not taken directly on the person is considered to be site profile data. These data include internal and external dosimetry profile data, environmental monitoring data, diagnostic x-ray information, area monitoring data, and process descriptions and source terms.

External data include dosimetry change-out frequency, the lower limits of detection for those devices, and assumed quality factors that were historically used at sites. Internal data include the type and frequency of monitoring performed, detection limits, radionuclides monitored, and descriptions of techniques used. For environmental data, annual reports are the most common source, but environmental TLDs and air samples are of primary interest as well. Environmental data must be used in all cases with a likely PoC of <50% after considering all other dose sources.

Diagnostic x-ray data include the frequency and type of examination, x-ray machine settings and/or entrance skin dose. However, NIOSH will request actual x-rays if this information is needed. Examinations must have been conducted as a condition of employment to be considered. For example, x-rays received during annual physicals are considered, but those taken for illness or injury are not. As is the case with environmental data, diagnostic x-rays must be used in all cases with <50% PoC to give the claimant the benefit of the doubt for all possible dose sources.

Examples of area monitoring, process descriptions and source terms include area TLDs and type and quantity of material processed. These data sources are typically used only when personnel or coworker data are unavailable. With the exception of process descriptions, only a minimal amount of this type of information has been captured to date. However, ORAU is expected to collect more area monitoring and source term data within the next two months. NIOSH has received data from 15 of the major DOE sites, but none of the sites has submitted everything NIOSH needs. A shared directory has been established for all dose reconstructionists to access

data; a 10-Gb electronic archive of digitized reports is being developed as well. NIOSH is collaborating with ORAU to create a web-based interface.

The majority of data gaps are for environmental and internal monitoring data, while the greatest amount of information has been collected for external data. Medical x-ray data have significantly improved since site profiles were initially developed. Two full-time NIOSH employees are entering information into the database and verifying records, but ORAU will soon undertake this task. NIOSH is exploring mechanisms for ORAU to obtain data directly from sites instead of collecting information from DOE. At this time, however, NIOSH is still required to obtain personnel monitoring data from DOE operations offices. Data obtained from AWE facilities are highly variable from site to site with amounts ranging from no information to limited personnel dosimetry. Area monitoring, process descriptions, and source terms are sometimes available. To date, NIOSH has captured data from the Oak Ridge vaults and the DOE OWA. A data capture effort is planned for the EML in New York City.

ABRWH weighed in on NIOSH's efforts in developing site profiles. Dr. Ziemer inquired whether upwind and downwind air samples are captured in environmental data to determine contribution by a particular site. He also asked if incident reports are captured in the site profiles. Drs. Melius and Ziemer noted that chemical exposures will inevitably be uncovered during data capture efforts. NIOSH should develop a process to maintain "other exposure" data since these types of exposures also play a role in persons with cancer. Mr. Gibson inquired whether NIOSH has adequate personnel with Q clearances to gather classified data on isotopes. Mr. Griffon advised NIOSH to integrate site profiles and the occupational exposure matrix. This strategy could ensure that data from building processes, jobs and source terms are consistent with the worker profile database.

Dr. Neton answered ABRWH's questions as follows. NIOSH is obtaining air samples from sites, but these data have not been reviewed in terms of upwind or downwind direction. More emphasis is placed on an individual's location in relation to where an air sample was taken. In maintaining its claimant-friendly approach, NIOSH then assumes that the highest measured location represents the air sample environment for the individual. Incident reports are included in personnel monitoring data, but are excluded from site profiles. However, NIOSH will consider whether incident reports for certain classes of workers should be captured in the occupational exposure matrix.

The matrix is a separate but complimentary activity from the site profiles and will be designed to maintain workgroup monitoring data by job, site, year, and building. The occupational exposure matrix is in the very early stages of development, but coworker data in terms of air monitoring, TLD, and bioassay results will be the main sources. NIOSH presently has no plans to capture chemical exposures in either the site profile or occupational exposure matrix. Both NIOSH and ORAU have staff with Q clearances.

Special Government Employees' Interactions With the Public:
Mr. David Naimon, of the HHS Office of General Counsel (OGC), explained that a special government employee (SGE) is "an officer or employee in the executive branch of the federal

government who is appointed to perform temporary duties, with or without compensation, for a period not to exceed 130 days during any period of 365 consecutive days." All ABRWH members are SGEs. Employees, including SGEs, are barred from acting as an agent or attorney for a specific party before any government agency in any particular matter in which the United States is a party or has a direct and substantial interest. This language applies whether or not the employee solicits or accepts compensation for such services.

The Office of Government Ethics has established standards of ethical conduct for employees of the executive branch. "Employees shall act impartially and not give preferential treatment to any private organization or individual." "An employee shall not use his public office for his own private gain ... or for the private gain of friends, relatives or persons with whom the employee is affiliated in non-governmental capacity." "An employee shall not ... allow the improper use of non-public information to further his own private interests or that of another, whether through advice or recommendation, or by knowing, unauthorized disclosure."

The Privacy Act is a withholding statute that prohibits disclosure to any third party without the written consent of the individual to whom the record pertains unless one of the statutory exceptions applies. An individual's name, social security number, date of birth, and medical history are examples of information protected by the Privacy Act. Under the Privacy Act, persons can sue to access records and seek compensation if they are harmed by disclosures. A civil penalty for improper disclosure could result in monetary damages plus attorney fees if the plaintiff substantially prevails. A criminal penalty for improper disclosure is a willful violation by an agency employee (including SGEs) and is a misdemeanor punishable by a fine of not more than $5,000. To assist ABRWH members in appropriately interacting with the public, HHS/OGC offered guidelines for several scenarios.

Scenario 1: ABRWH members may not speak on behalf of the Agency, or the Department. They also cannot speak on behalf of the ABRWH, unless a majority of ABRWH members approved the position. Potential question: "What is the agency's position on the SEC?" Possible responses:

- We believe everyone should be in the SEC. [Inappropriate answer]
- No one will get into the SEC. [Inappropriate answer]
- I cannot speak for ABRWH or the agency, but ABRWH sent a letter on this topic that OCAS would be glad to send you. [Appropriate answer, but avoid providing details of the letter, lest the details be incorrectly stated]
- I am sorry I cannot speak on behalf of the agency or the department; you should contact OCAS. [Safest answer]

Scenario 2: ABRWH members should not speak about the merits of individual claims with anyone, including the individual claimant, whether the information was learned at an ABRWH meeting or otherwise. Potential question: "I heard you reviewed a dose reconstruction similar to mine at an ABRWH meeting that was paid. Why was I not paid?" Possible responses:

- Your dose was too low. [Inappropriate answer]

- OCAS could not do your dose reconstruction. [Inappropriate answer]
- I am sorry, but as an ABRWH member, I must remain impartial. Therefore, I cannot discuss individual claims with anyone. OCAS will contact you to discuss your dose reconstruction report and what it means. [Safest answer]

Scenario 3: ABRWH members may discuss public information and refer all requests for information to the OCAS web site or office. Potential question: "Can you tell me what I have to do to qualify for compensation?" Possible responses:

- You need to have a minimum of 300 mrem of dose per year. [Inappropriate answer]
- You have to gather all of your records and send them to OCAS. [Inappropriate answer]
- The law states you can get compensation if it is shown that it was as likely as not that your cancer was caused by your work-related radiation exposure. Contact OCAS for more details. [Appropriate answer, provided that the law is accurately cited]
- Each case is different. You should contact OCAS or DOL to discuss the merits of your claim. [Safest answer]

Scenario 4: To protect personal privacy, ABRWH members should avoid speculating on the identity of claimants from dose reconstruction reviews. Potential question: "The last dose reconstruction was from location X. Do you think it was John Doe's?" Possible responses:

- Yes, I am sure I remember him being in that job during that event. [Inappropriate answer]
- No, it was Jane Public's. I remember her describing that event to me over lunch the day after it happened. [Inappropriate answer]
- I am sorry, but as a member of ABRWH, I am not allowed to discuss the identity of any claimant. [Safest answer]

Scenario 5: ABRWH members should not speculate about dose reconstruction issues or SEC petitions, but should stick to the facts and direct questions to OCAS. Potential question: "Why is OCAS taking so long to do my dose reconstruction?" Possible responses:

- DOE is taking too long to get OCAS records. [Inappropriate answer]
- NIOSH has recently hired a contractor to assist with dose reconstructions, which should greatly speed up the process. [Appropriate answer, but caution should be exercised in relaying any information that might be possessed by virtue of being on the Board; in addition, speculation by a Board member will be treated differently by the listener]
- I cannot speak for the agency. You should contact OCAS to discuss your concern and get the most up-to-date information. [Safest answer]

Scenario 6: ABRWH members should not attempt to predict future agency or ABRWH actions. Speculations may give the impression that the agency or ABRWH decided an issue prior to full presentation of the topic and relevant data. Views sometimes change and making public comments before a decision is made could be premature or misleading. Potential question:

"When will HHS issue the SEC Final Rule and when will ABRWH take action on my SEC petition?" Possible responses:

- We expect the regulation to be issued in December and we will take up your petition in January. [Inappropriate answer]
- Your petition looks great. I am sure there will be no problem once the rule takes effect and we get your petition on the agenda. [Inappropriate answer]
- I am sorry, but it would be inappropriate for me as an ABRWH member to try to predict future actions by the agency or ABRWH. [Safest answer]

Scenario 7: ABRWH members may not assist claimants in filing individual or SEC claims. Claimants should instead be directed to the proper agency for assistance. Potential question: "Can you help me fill out my claim form? Question 6 is confusing to me." Possible responses:

- Sure, let me have it and I will bring it in tomorrow with the answer filled in. [Inappropriate answer]
- Let's have lunch and fill in the missing information. [Inappropriate answer]
- I am sorry, but as an ABRWH member, I must remain impartial and cannot assist you with your individual claim. You should contact DOL, DOE or OCAS for assistance. [Safest answer]

Scenario 8: ABRWH members may be fact witnesses when they have personal knowledge. To avoid the appearance of preferential treatment, members may not use their ABRWH affiliation in providing factual information. Potential question: "Can you tell DOL that my deceased spouse worked at location B from 1955-1967? You were there and I do not have any records." Possible responses:

- I am an ABRWH member and will be happy to call DOL and tell them. [Inappropriate answer]
- Yes, I may sign an affidavit to that effect as a fact witness. [Appropriate answer in those rare situations where it would be a disservice to the claimant not to sign the affidavit, but it could also create the perception of favoritism]
- I am sorry, but as an ABRWH member, I should not get involved in individual claims. It would be better if you could get someone else to do this. [Safest answer]

Except as a fact witness, ABRWH members should not specifically assist persons with their claims, use their position to advance any claim, or share any confidential information. ABRWH members should explain that any information they are sharing is publicly available, may be incomplete, and is not official. The information is from their personal memory and more complete or official data can be obtained from OCAS. ABRWH members who make public statements should clarify they are speaking as an individual and not for the agency or ABRWH. These guidelines also apply to media or Congressional inquiries. Media inquiries may be referred to Mr. Fred Blosser, NIOSH Public Affairs Officer, and Congressional inquiries may be referred to Mr. Elliott. If ABRWH members choose to respond directly to the media or to Congress, they may first consult with Mr. Blosser or Mr. Elliott.

IREP Update:
Mr. Russ Henshaw of OCAS provided a status report on cancer latency models for leukemia and thyroid cancer. For purposes of IREP (Interactive Radio Epidemiological Program), "latency" is defined as the interval between exposure and diagnosis. The current IREP model assumes that two- and three-year minimum latency periods are necessary for induction of leukemia and thyroid cancer, respectively. These have been more or less traditional assumptions in cancer risk modeling, based on the notion that induction of cancer within those time periods is biologically implausible. Thus, the PoC is 0% for all four leukemia models for any time since exposure (TSE) that is less than two years and 0% for the thyroid cancer model for any TSE that is less than three years. For other IREP cancer models, non-zero PoC values are produced at all TSEs.

In mid-July 2002, NIOSH began to reconsider minimum latency assumptions in IREP for leukemia and thyroid cancer. This review was prompted by a dose reconstruction on a leukemia claim. In late July 2002, NIOSH determined that at least some non-zero risk should be factored into all cancer models at all TSEs. This conclusion led to discussions with SENES Oak Ridge, Inc., the group that created IREP. In collaboration with Dr. Charles Land of NCI, SENES developed new alternative latency models for thyroid cancer and leukemia in August, 2002. After NIOSH and NCI reviewed the alternative models in September 2002, NCI reportedly proposed that these new models be incorporated into their version of IREP, known as NCI-IREP.

The proposed latency revisions would adjust leukemia and thyroid cancer models to allow non-zero risk at all TSEs; modify IREP by incorporating S-shaped latency reduction functions; and factor in uncertainty around the midpoints of the S-shaped functions. "Midpoints" would be set at three years for leukemia and five years for thyroid cancer. IREP programming for the proposed revisions is "ready to go," but has not yet been implemented. It is expected that NCI will send a letter to NIOSH to confirm adoption of the new models. NIOSH has not yet made a decision on the proposed revisions because the agency is not comfortable with making changes that would result in a decreased PoC (compared to the current model) for any TSE. Although the proposed leukemia latency adjustment model would result in less of a reduction at four years TSE (i.e., more claimant-friendly), it would produce a greater reduction (less claimant-friendly) at two years TSE.

The epidemiological evidence for the "minimum latency" assumption is based primarily on data from the Life Span Study, a joint U.S.-Japan long term study of Japanese atomic-bomb survivors. The data on minimum latency, however, are somewhat ambiguous. There is no hard evidence, for example, for the shape of the proposed S-curve; the model is based on expert judgment by Dr. Land and SENES. A valid and plausible minimum latency cutoff point is also an uncertainty. The proposed leukemia model has no graduated reduction between years. No risk is factored in below the two-year point in the current model. In the proposed thyroid latency adjustment model, the reduction factor is more claimant-friendly at six years TSE but less at three and four years. NIOSH is also uncomfortable with this proposed adjustment, again because PoC would be lower at some TSEs. Uncertainty in the proposed thyroid model is at the five-year point with the S-curve shifting at the midpoint by +40%.

To illustrate the effect on PoC for leukemia, NIOSH compared the current IREP and proposed models using the following data inputs: male born in 1930, diagnosis in 1980, acute exposure of 50 rem and constant dose of photons >250KeV. The current model resulted in a slightly higher PoC at year 2 of time since exposure, but the proposed model showed a slightly higher PoC at years 3 and 4 of time since exposure. With the correct IREP code and an increased sample size of 2,000, higher PoC at latency periods >=5 years was no longer present in the current model. These adjustments also showed a slightly larger PoC of <0.1% at all points in the proposed model.

Mr. Henshaw also noted that NIOSH will direct SENES to increase the default sample size from 1,000 to 2,000 in the online version of NIOSH-IREP. This will be consistent with the sample size used by DOL to adjudicate claims. It had been set at 1,000 during the trial and public comment period for reasons of processing time, but SENES has since then greatly improved the processing speed.

At this time, NIOSH is faced with three options for IREP. First, one or both new latency functions reportedly favored by NCI could be adopted by NIOSH without modification. Second, NIOSH-IREP could be modified to allow non-zero risk at all TSEs, but differently than NCI-IREP; for example, NIOSH-IREP could be adjusted to ensure that the upper 99% PoC does not decrease compared to the current version at any TSE. A third option is that the current minimum latency assumptions could remain the same; in that case, NIOSH-IREP would not be modified. Mr. Henshaw noted, however, that NIOSH is not seriously considering option three.

Dr. Ziemer commented that the members previously agreed to accept NCI's model as the basis for IREP, but the Rule suggests that significant changes in the model should be presented to ABRWH for input. After NCI provides NIOSH with its formal IREP recommendations, ABRWH may be asked to provide feedback.

Dr. Ziemer opened the floor for the members to react to the proposed latency adjustment models. Ms. Munn inquired about NIOSH's confidence that its estimate would be better than NCI's; major policy changes should not be based on the claim that prompted the NIOSH/SENES discussions since the claimant does not represent a significant portion of workers. Of the three options, Ms. Munn supported option two. Dr. Roessler asked if the proposed change would have any effect on the current exclusion of chronic lymphocytic leukemia. Dr. Anderson expressed concerns about the contributions of cumulative exposures relative to when the malignancy first occurred. Dr. DeHart asked if NIOSH could estimate what impact the model change would have on the total claimant population. Ms. Gadola noted that including an absolute two- or three-year latency period in the models is inappropriate due to differences when individuals present to physicians. She was pleased that NIOSH is reviewing this factor in the NCI-IREP. Dr. Melius suggested that a workgroup be formed to prioritize IREP issues and assist ABRWH in formulating recommendations on the proposed models.

Mr. Henshaw responded to questions posed by Ms. Munn and by Drs. Anderson, Roessler, and DeHart. IREP provides no opportunity to factor in the time between disease onset and diagnosis.

Only the actual date of diagnosis documented in the claimant's record is considered. The Rule assumes that the PoC for chronic lymphocytic leukemia is zero. This cancer is the only one excluded from compensation; this will not be changed by the proposed leukemia latency model. Mr. Elliott and Mr. Henshaw provided additional clarification in response to ABRWH's deliberations. If NIOSH selects option two and thereby deviates from NCI's reported position, the decision to do so would be based on policy rather than science. This approach would be consistent with NIOSH's intent to use sound science to the fullest extent possible, but to err on the side of claimant-friendliness when scientific evidence is inadequate. For example, in the claim that initiated the NIOSH/SENES latency discussion, the worker's cumulative exposures after the two-year latency period resulted in a PoC of ~35%. Revising NIOSH-IREP by including additional exposures in the cumulative total could change the claim from non-compensable to compensable.

NIOSH has not yet received written confirmation that NCI will adopt the revised latency adjustment models. The Department of Veteran's Affairs (VA) reviewed technical documents that are the basis of support for NCI-IREP and recently submitted comments to HHS. The final version of NCI-IREP as well as NIOSH's recommendations will be announced at the first scheduled ABRWH meeting after such information is available.

ABRWH Working Session

Review of Minutes:
Dr. Ziemer entertained a motion to approve the minutes of the sixth meeting on August 14-15, 2002.

- Page 4: Add "Dr. Anderson" and "Dr. Ziemer" to "the SEC Workgroup (Dr. Andrade, Ms. Munn and Ms. Gadola)."
- Page 5/7, Executive Summary: Change "will proceed from the IREP data" to "will proceed with raw case file data."
- Page 15: Change the sentence to "Mr. Lawson now works with the medical screening program ..."

A motion was properly made and seconded by voting members. There being no objections, abstentions or further discussion, the Minutes of the Sixth ABRWH Meeting were unanimously approved with the changes as noted in the record and the caveat that members can submit additional minor grammatical revisions.

Dr. Ziemer entertained a motion to approve the minutes of the seventh meeting, which had been conducted via conference call on August 22, 2002.

- Page 2: Change the sentence to "Mr. Mike Gibson and Mr. Leon Owens, new ABRWH members approved by the White House ..."
- Page 2: Move "Mr. Frank Morales" to "Members of the public or others attending the call were." Add "(GAP)" as Mr. Morales's affiliation.
- Attachments: Add "draft" to Attachments 1, 2 and 3.

A motion was properly made and seconded by voting members. There being no objections, abstentions or further discussion, the Minutes of the Seventh ABRWH Meeting were unanimously approved with the changes as noted in the record and the caveat that members can submit additional minor grammatical revisions.

Dose Reconstruction Contract:
To facilitate the discussion, ORAU's written policy on conflict of interest for dose reconstruction under EEOICPA was distributed to the members. Dr. Melius proposed that ABRWH make recommendations in three areas: conflict of interest procedures for the ORAU contract; mechanisms to inform claimants about dose reconstructionists; and information to distribute to claimants or post on the OCAS web site. He suggested that the following information be provided to each claimant at the time a dose reconstructionist is assigned to a case: ORAU's Individual Disclosure and Agreement Form; the contractor's work history and education; and directions for claimants to express conflict of interest concerns. ABRWH members weighed in on Dr. Melius's comments as follows:

- Design biographical sketches to be concise and limit text to one page or less. Simply include the dose reconstructionist's name, abbreviated curriculum vitae, specific projects and NIOSH contact information. Exclude signatures, social security numbers, home addresses, family information, and other personal data.
- Inform claimants in writing that conflict of interest was reviewed, but that no conflicts were identified. Include a disclaimer that only NIOSH can assign dose reconstructionists. Send a more detailed work history only at the request of the claimant.
- Disseminate information up front to claimants to establish trust. Include information about the primary supervisor/reviewer of the dose reconstruction and also the NIOSH staff person assigned to oversee the case. Use this approach to address public concerns about ORAU's working relationship with DOE.
- Add "plaintiff or claimant" after "expert witnesses" on page 3 of the ORAU conflict of interest policy. Mr. Miller explained the legislative purpose for omitting this language. Alternatively, delete "on behalf of DOE or a DOE contractor."
  Mr. Toohey clarified that removing this text will eliminate Dade Moeller & Associates and many other contractors currently in the dose reconstruction pool. After these clarifications, ABRWH generally agreed not to change this section.

Mr. Elliott and Dr. Neton made follow-up comments in response to ABRWH's deliberations on the dose reconstruction contract. Distributing detailed biographical sketches may prompt claimants to "shop around" for dose reconstructionists. The work history should be limited to information that is relevant to potential conflicts of interest. NIOSH has not yet developed a process to identify the reviewer, supervisor and NIOSH public health advisor at the time the dose reconstruction is assigned, but a brief summary of the conflict of interest plan could be included in letters to claimants.

ORAU will assign primary reviewers to claims, but NIOSH will oversee the process and reserve the right to make reassignments and listen to concerns raised by claimants. Issues related to the

Privacy Act and provisions of the ORAU contract must be addressed before information about primary reviewers can be posted on the OCAS or ORAU web site. Dr. Toohey provided additional comments on conflict of interest issues. The ORISE contract is a collection of scientific, educational and emergency management programs for DOE. He stated for the record that ORISE is not an M&O contractor.

Drs. Andrade and Melius made formal recommendations, but Dr. Andrade deferred to Dr. Melius's version as the official motion. "ABRWH recommends that NIOSH make available to each claimant information about the contract personnel doing his or her dose reconstruction and the primary reviewer of that dose reconstruction. The information should include a brief summary of educational and professional qualifications of these individuals, previous DOE/contractor employment and expert witness participation. The summary should be accompanied by a letter from NIOSH or the contractor outlining procedures for assigning dose reconstruction personnel and the procedures for claimants to express concerns about the assignment." The motion was properly seconded by a voting member and unanimously carried.

Dr. Melius made a motion for "NIOSH to make available on its web site background information and previous work histories of all contract personnel involved with dose reconstructions and reviews." The motion was properly seconded by a voting member and unanimously carried. ABRWH agreed that this information should be posted on the web site only to the extent legally possible.

RFP for the ABRWH Contractor:
Mr. Griffon pointed out that two drafts were distributed to the members describing the contractor's scope of work and technical evaluation criteria to review proposals. The workgroup did not reach agreement on whether to incorporate language in the RFP to eliminate two types of bidders: those who ever participated in the litigation of DOE worker's compensation or radiation-related claims and those who worked with DOE, ORAU, an AWE facility or DOE contractor in the last five years. The workgroup realizes that these restrictions will significantly decrease the pool of current dose reconstruction contractors. ABRWH weighed in on the drafts, the procurement mechanism for the contractor to complete each task, and the process to finalize the documents.

- Add "the contractor will assist ABRWH" in each task where "the contractor" is referenced.
- Consider conducting tasks E.1 - E-3 in parallel: review dose reconstruction methods and procedures; review individual dose reconstructions; and review site profiles.
- The terms "audit" and "review" seem to be used interchangeably, but they have different meanings; these terms need to be clarified so as to delineate ABRWH's charge.
- Require bidders to submit a conflict of interest plan with proposals.
- Consider broadening the RFP to allow Canadian health physicists to submit bids.
- Use technical evaluation criteria rather than the RFP to evaluate bidders on conflict of interest.

Mr. Elliott and Dr. Neton made follow-up remarks in response to ABRWH's deliberations. The contract will be more effectively performed as a task order since this mechanism establishes a need for technical consultation. For example, ABRWH would express an interest in procuring a senior dosimetrist or junior health physicist. Bids would then be submitted in response to a statement of qualifications for these labor categories. Bidders would be evaluated on pricing for each labor category and technical qualifications of personnel proposed for the task order. After the contract has been developed, tasks could be issued collectively or separately to the awarded contractor.

An estimate of required resources, and number of hours needed to perform a specific task, would be submitted by the contractor. In addition to deliverables, a requirement for a conflict of interest of plan can be specified in the task order. Bidders can also be assessed on conflict of interest in the technical evaluation plan. According to the Federal Acquisition Regulations, government agencies are required to procure products and services from U.S. contractors as much as possible to obtain the best value. Contracting with Canadian professionals would present more difficulties, but it probably could be done.

The draft scope of work is too incomplete for NIOSH to present to the Procurement and Grants Office (PGO) at this time. The workgroup, Dr. Neton, and a PGO representative should discuss the procurement process and options in more detail. The draft scope of work and technical evaluation criteria presented by the workgroup are preliminary, pre-decisional, and should be viewed as discussion documents only. Proposals should not be prepared at this time. ABRWH has not yet discussed the budget and independent government cost estimate that must be developed. A minimum of 60 days will be required to convene an executive session for ABRWH to deliberate on these issues. An executive session must be held in a face-to-face meeting to ensure only ABRWH members are present during the discussion.

Another time-line ABRWH should consider is the minimum of 30 days needed by the procurement office to transform the workgroup's scope of work into a full RFP before being released. An additional 45 days, at a minimum, will be required for bidders to submit proposals. However, due to the urgency of the scope of work, processing will be expedited. NIOSH could develop the business plan, but this process would undoubtedly raise perception and conflict of interest issues in the public. ABRWH must be fully involved in the procurement process to have as much ownership as possible in the RFP and final award.

ABRWH generally agreed to the following process with no objections. The Workgroup will continue to finalize the draft scope of work and technical evaluation criteria and also to draft the business plan. ABRWH will hold a conference call to review and approve the revised drafts prior to the next meeting. The revised drafts will be circulated to the members and posted on the OCAS web site for public access prior to the conference call. After ABRWH reaches consensus on the scope of work and technical evaluation criteria, NIOSH will initiate the procurement process if possible.

NIOSH will make necessary preparations for ABRWH to convene an executive session at the next meeting for review and approval of the draft business plan. Although the executive session

will be closed to the public, deliberations on the business plan in this forum is preferable to the document being finalized in workgroup meetings or conference calls. Discussion topics and attendees of executive sessions are announced in the Federal Register; an official record is maintained as well. Since Workgroup activities are closed to the public and do not require notice, this forum may prompt public concerns.

Public Comment Period:
Mr. Phillip Schofield is a LAPOWS member who expressed concerns about the IREP model. Life span studies of Japanese atomic bomb survivors continue to serve as the primary epidemiological basis to determine low-level radiation hazards. However, evidence from worker studies suggests that excess radiation-related cancer deaths occurred at doses below current occupational limits. The majority of Japanese survivors had high short-term exposures, while U.S. nuclear workers had chronic long-term exposures. Moreover, the use of site profiles in conducting dose reconstructions will be problematic since differences in exposures exist among coworkers at the same site.

Background papers DOE issued to the Institute for Energy Environmental Research in 1997 revealed that radiation doses from radioactive materials inhaled or ingested by workers were not calculated or included in worker dose records. DOE admitted three major problems. First, external exposure data are often incomplete or unreliable. Second, raw dose data and electronic versions often used by researchers are not always consistent. Third, some worker dose records state that doses were zero regardless of the actual dosimeter readings.

Mr. Michael Schaeffer recommended that a mechanism be developed to evaluate customer satisfaction and fairness in conducting dose reconstructions. He noted that the VA Advisory Committee (VAAC) is similar to ABRWH in that it is charged with overseeing the application of IREP tables for atomic veterans' claims. He recommended that ABRWH and VAAC engage in a dialogue regarding the implementation of the revised IREP models. This activity can be accomplished by assigning an ABRWH and VAAC member to serve as an observer on the other committee. Mr. Schaeffer committed to providing ABRWH with VAAC's meeting schedule.

Mr. Alex Smith was employed by LANL from 1947-1982. He was concerned that dose reconstruction research begins with the year 1952, but he was contaminated with mercury, asbestos and possibly radiation as early as 1947. Dr. Neton confirmed that NIOSH is currently attempting to capture LANL data from 1947-1952.

Mr. Robert Tabor noted that U.S. nuclear workers were not in Hiroshima and Nagasaki when atomic bombs were released and are not the largest segment in the general population. As a result, the NCI studies are not the most representative of, or applicable to, U.S. nuclear workers. Worker epidemiologic data would be more appropriate; basing IREP on the Japanese cohort is like comparing apples and oranges. Finally, he urged ABRWH to examine root causes and develop concrete solutions to address conflict of interest and transparency issues.

Mr. Paul Montoya was employed at LANL from 1962-1993. He handled several different radionuclides during this time and has been diagnosed with beryllium sensitivity. This condition

is not sufficient to receive compensation on a claim according to DOE, but a recent amendment to Congressman Bingaman's compensation bill would cover beryllium sensitivity. The compensation bill was established to assist injured workers, but the process is unsuccessful due to involvement by bureaucrats. For example, DOL approves or denies claims, but this same agency is responsible for deciding appeals. An independent accounting firm should be adjudicating claims rather than DOL.

Ms. B. Jo Bear's husband was employed at LANL as a nuclear physicist for ~20 years. He died of lung cancer in 1991 and had never smoked a cigarette in his life. She reported her difficulty in obtaining worker records to conduct a credible dose reconstruction. She said that the Denver DOL office informed her that she would need to file a FOIA request to receive her husband's records. Mr. Elliott and Dr. Neton clarified that NIOSH is responsible for obtaining worker records from DOE; this burden is not placed on claimants or survivors. Nor are FOIA requests necessary for claimants or survivors to receive worker records that will be used in dose reconstructions. This information is also included in the administrative record that accompanies NIOSH's determination of the dose reconstruction. The entire file is then returned to DOL for a final decision. Claimants and survivors have a right to obtain these data as well. Dr. Neton offered to discuss her case in greater detail after the meeting and to assist her in obtaining her husband's records.

Mr. Ken Silver agreed that ORISE is not an M&O contractor, but stated that the company is commonly understood to be a major DOE contractor. ORISE has played a central role in health studies at DOE facilities for many years. Although ORISE represents a wealth of expertise, public concerns about conflict of interest must be addressed as well. Former workers, union representatives and other stakeholders can provide innovative strategies to build public confidence in the dose reconstruction process. Sole reliance should not be placed on LANL records to document exposure to workers. Accessing LANL historical records continues to be a significant problem.

For example, a former worker described mercury poisoning that occurred in the late 1940s, but LANL denied the incident. However, a records search at DOE revealed that the contamination occurred. Moreover, portions of documents describing a spike in thyroid cancer in Los Alamos County in the late 1980s and early 1990s have been "blacked out." Monitoring records from July 1969 for Room 401 in DP-West contain a notation that "these figures should not be recorded in annual reports." Mr. Silver also pointed out that survivors are frustrated in attempts to interpret LANL records. He urged the government to provide independent technical assistance to survivors in this effort.

Mr. Robert Vasquez read a statement prepared by Congressman Tom Udall's office. Congressman Udall represents northern New Mexico and many constituents who were employed by LANL. He has been closely monitoring the legislation and implementation of EEOICPA. He is co-sponsoring the Strickland bill to address flaws in EEOICPA, and will be investigating ways to add LANL to the SEC.

ABRWH Business:

Ms. Cori Homer, the OCAS Committee Management Specialist, reported that the action items table has been restructured to provide more specificity on whether ABRWH or NIOSH will take action on a particular item. The table is now categorized by meeting date and status of each item. Completed items will be moved to an archived list; only pending or on-going items will be listed on the table provided to ABRWH. The table will contain items to which ABRWH has generally agreed, rather than suggestions by individual members. NIOSH will maintain and update the list and attach the document to the minutes prior to each meeting.

In the future, time will be designated on each agenda for ABRWH to review and provide comments on the action items list. No members objected to Dr. Melius's suggestion to remove on-going items from the list that were adopted as ABRWH policy, such as "e-mail members of web site documents postings." Dr. Ziemer proposed that the action items table also be sorted by topic, if necessary.

Dr. Melius made the following motion: "The Board should establish a working group to make recommendations to the Board at its next full meeting regarding (1) issues related to IREP, including how the Board should prioritize and handle IREP and other scientific issues at future meetings, (2) whether a long-term subcommittee or short-term workgroup is needed to accomplish these activities, and (3) coordination of IREP issues with other governmental organizations that are also using the IREP model." The workgroup will present its findings at a future ABRWH meeting.

The motion was seconded by Mr. Espinosa, but Dr. Andrade questioned the need for this process. He pointed out that NIOSH provides ABRWH and the public with timely updates on IREP. ABRWH also has the ability to request additional presentations on IREP as the need arises. Ms. Munn was also comfortable with the level of information NIOSH has been providing on IREP to ABRWH. The motion carried with ten votes, one opposition and one abstention. For the new IREP Workgroup, Dr. Melius will serve as chair; Dr. Anderson and Mr. Owens will serve as members; and Mr. Elliott will serve as the NIOSH liaison.

Over the course of the meeting, the following action items and agenda topics were noted for the record:

- NIOSH should brief ABRWH members, perhaps at the next meeting, on the process to describe their employment histories and potential conflicts of interest. This instruction will be necessary as ABRWH begins to review individual dose reconstructions and SEC petitions, and members may need to recuse themselves from involvement in certain claims.
- NIOSH should provide an update of AWE sites and how NIOSH is handling them, given the large number of incoming claims.
- NIOSH will collaborate with the Dose Reconstruction Workgroup to identify groups and individuals who should receive the RFP.
- NIOSH will apprize ABRWH of NCI's final version of IREP, of how NCI has handled the leukemia/thyroid latency issue, and of what NIOSH's recommendation is regarding this issue.

The next ABRWH meeting will be held on January 7-8, 2003 in Cincinnati, Ohio; a portion of the proceedings will be closed for review and approval of the business plan. Another ABRWH meeting is tentatively scheduled for February 5-6, 2003, to be held in the Savannah River, Georgia area to discuss the SEC Rule. An ABRWH conference call will be held on December 12, 2002, from 1:00-3:00 p.m. EST to review and approve the draft scope of work and technical evaluation criteria. The conference call will be announced in the Federal Register and will be open to the public.

Closing Session:
There being no further discussion, Dr. Ziemer recessed the ABRWH meeting at 5:12 p.m. on October 16, 2002.

✦ ✦ ✦

I hereby certify that, to the best of my knowledge, the foregoing minutes of the proceedings are accurate and complete.

Paul L. Ziemer, Ph.D.
ABRWH Chair

1/16/03
Date