

the sense of the Board. It is Mr. Elliott's prerogative to use it or not use it, as he sees fit.

The motion that NIOSH develop a program for public and site expert participation in development of site profiles was passed.

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WORKING GROUP ON OPTIONS
FOR EVALUATING CLAIMANT INTERVIEWS

Dr. James Melius
Workgroup Chair

Dr. James Melius reported that the working group had met with NIOSH staff by conference call and requested certain materials. Those items had been provided yesterday when the working group again met briefly.

Dr. Melius described how the working group planned to approach their evaluation of the process. No recommendations were available at this time, but are expected to be provided at the December meeting.

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RESEARCH ISSUES

Mr. Russ Henshaw
NIOSH/OCAS

Mr. Russ Henshaw presented considerations for adopting and implementing modifications to cancer risk models and an update on research topics. He described some differences between the NIOSH-IREP and NIH-IREP models.

Mr. Henshaw explained that the interpretation of research findings is complex. When NIOSH last year observed that the thyroid cancer and leukemia models were the only ones to confer zero risk at short latency periods, they felt science did not support those exceptions. SENES-Oak Ridge, developer of NIOSH-IREP, was asked to create new models conferring some risk at short latency, with the caveat that doing so should not lower the PC for any potential claimant. NCI eventually agreed with the interpretation and modified NIH-IREP so that the two models now match NIOSH-IREP.

Scientific value and applicability of findings range from weak to

substantial. Prudence should be exercised in considering any findings. Scientific evidence may be sufficient for modification a risk model in some cases, not in others, depending on the potential impact on PC. Generally the greater the impact, the more stringent the standard should be for implementing any findings.

Uncertainty is a major contributor to compensability in many claims. As study results that would have an effect on the uncertainty built into the risk are incorporated, there's a domino effect. As uncertainty is reduced, compensation is also likely to be reduced.

Usefulness of research is another issue, including time frame for conducting and completing studies. It would not be in the best interest of the claimants or this program to commission a prospective cohort study slated to last ten years or more.

Updating research topics, **Mr. Henshaw** reported that NIOSH's Health-related Energy Research Branch is conducting a multi-site leukemia case-controlled study and intends to look at the CLL cases in that study. There are a number of issues related to smoking and the lung cancer model that are to be looked at on a high priority basis. Age at exposure is another controversial topic, with age at exposure workshops expected to commence before the end of the current fiscal year.

Comparing NCI-IREP and NIOSH-IREP, **Mr. Henshaw** noted the new NCI lung model is favorable to some claimant profiles, unfavorable to others. The changes made by NCI do not apply to radon exposures. It does take into account age at diagnosis and age at exposure. NIOSH-IREP does not. Other examples of differences were described, with **Mr. Henshaw** noting that NCI believes their change represents the best science available currently.

Mr. Henshaw summarized by stating that some modifications seem relatively non-controversial. Other potential changes are substantially more significant, and policy does play a role. NIOSH intends to use science to its fullest extent within the confines of current policy. Attention must be given to practical issues. Generally the more good quality data accumulated, the less the uncertainty and possibly the lower the probability of causation. Research projects are being planned that it is hoped will prove very relevant to the program.

Discussion Points

Dr. Melius suggested consideration should be given to participation in the age at exposure workshop and that a workshop for the smoking issue might be a good way of handling that, too.

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PUBLIC COMMENT PERIOD

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

Dr. Ziemer again reminded the public that the session design allowed for comment for the record on the program, the policies or concerns. Questions on individual claims should be directed privately to the NIOSH staff.

He also noted that the format is not one of a question and answer period, but a period to make statements.

Ms. Dolores Stuckenschneider
Former Mallinckrodt Employee/Claimant

Ms. Stuckenschneider described her work history with the company and some of the frustrations she had experienced with the program.

Mr. Robert Leach
Former Mallinckrodt Employee

Mr. Leach described some of the working conditions at facilities within the complex. He noted things not taken care of were too numerous to go into, offering an opinion that there was no way an accurate exposure record could be developed because monitoring was done incorrectly.

Ms. Kay Drey
Nuclear Information and Resource Service

Ms. Drey explained that it was in 1974 that she began learning about the hazards of uranium mill tailings. In 1978 she learned St. Louis had uranium tailings from some of the most radioactive ore in the world.

Since that time she has met with many people who have told her about working for Mallinckrodt Chemical Works and the workplace hazards they faced. No one told the nuclear weapons workers, who were not allowed to use the words "uranium" or "radiation" that radiation is harmful. Decision-makers are only now reluctantly beginning to level with them.

Ms. Drey described situation that a worker had recounted to her

After spending an extended period of time just two years ago digging a trench at the downtown site as part of the cleanup, someone told him the gamma readings were not ten to 20 counts per minute, as in nature, but were 1,500,000 per minute.

As a request to the Board, Ms. Drey asked it consider including in its findings the observation that more than 60 years of radioactive waste has been accumulated in the world.

Mr. James Mitulski

United Nuclear Weapons Workers

Mr. Mitulski agreed with an earlier comment that there was no reason to assume company supervisors were not people of integrity. He noted there was also no reason to assume they were people of truth. He gave examples of conflicting information disseminated to workers. He commented that people sometimes say things to keep their jobs, so input from the people who were in the plants is needed. He described several incidents from his father's work experience, indicating that many people were told to drink beer on their way home and it would rinse everything out.

Mr. Mitulski suggested the only way to check out the validity of what the company says is to bounce it off what the laborers are saying, and then try to arrive at the truth.

Mr. Mark Bruening

United Nuclear Weapons Workers

Mr. Bruening spoke as a 17-year worker at both Mallinckrodt downtown and Weldon Spring who was diagnosed with colon cancer two years ago. He noted that Senator Bond had managed to appropriate \$1.5 million for a city to build a street, but the workers wait months and years for compensation.

Mr. Don Camstrader

United Nuclear Weapons Workers

Mr. Camstrader recounted some of his experiences at the Weldon Spring site from '57 to '66, noting things were pretty primitive. As an example of how inaccurate monitoring records are, **Mr. Camstrader** described working with another employee on a particular job for several days. One day that employee told **Mr. Camstrader** he couldn't go back on the job because he'd come up "hot" the day before. Because they'd been together the whole time, **Mr. Camstrader** went to check his levels and was told he was fine.

Mr. Norbert Hier
United Nuclear Weapons Workers

Mr. Hier, who had worked with **Mr. Camstrader**, described scooping out uranium wearing a respirator he later found was barely approved for cutting grass. **Mr. Hier** expressed concerns that it wasn't just radiation exposures they had to deal with. He described using asbestos and was particularly distressed that people who surely knew better never warned the workers.

Mr. Tom Horgan
Office of Senator Christopher Bond

Mr. Horgan indicated he felt the scientific guidance and advice from the Board is very important as they try to work out some of the kinks in the legislation and implementation of the program. He asked for individual feedback from every Board member on the Mallinckrodt TBD, particularly those with scientific and medical knowledge.

Mr. Horgan expressed concern about the lack of records prior to 1948 and encouraged NIOSH to do what it could to finalize the SEC rule in the near future.

Ms. Donna Erlmann
United Nuclear Weapons Workers

Ms. Erlmann appeared on behalf of her father, who was too ill to attend. He had worked at both Destrehan Street and Weldon Spring a number of years. She read a statement her father had written.

In his statement, he described in great detail working conditions and specific events at a variety of locations within the complex. He commented that DOE has spent \$900 million covering up mistakes at Weldon Spring and it's time to take care of the workers.

Ms. Denise Brock
United Nuclear Weapons Workers

Ms. Brock explained the United Nuclear Weapons Workers is an established worker advocacy group. She noted it seemed it would be efficient to utilize the group when NIOSH meets with the public to review the Mallinckrodt TBD. She offered to share any information they had, as well as her access to the UAW and retirees.

She questioned how it could be stated that Mallinckrodt wouldn't be

considered for Special Exposure Cohort in view of missing records prior to '48, particularly when the SEC rule isn't final. **Ms. Brock** expressed her belief that Mallinckrodt claimants deserve the same consideration and benefit of the doubt as the four Special Exposure Cohorts. She asked a variety of questions specific to the TBD, indicating a response by e-mail would be fine.

Mr. James Werner

Missouri Department of Natural Resources

Mr. Werner announced his main message was to offer the technical resources of his Department. Staff have been at various sites for decades reviewing technical documents and have built a lot of expertise over the years. With that background, **Mr. Werner** observed the Mallinckrodt TBD was probably the most comprehensive document he'd ever seen on the site.

No longer speaking on behalf of DNR, **Mr. Werner** asked that due consideration be given to establishing a Special Exposure Cohort for Mallinckrodt, given the uncertainties connected with the site.

Mr. Richard Miller

Government Accountability Project

Mr. Miller asked if anyone could explain why the Blockson Chemical site profile was posted on the web when it excluded any discussion of radon exposures. He wanted to know if it was available for use in dose reconstruction without addressing the radon issue. **Mr. Elliott** confirmed that it was available for use.

Mr. Miller indicated he lacked the imagination to understand how NIOSH could go forward with that significant exclusion. **Dr. Neton** advised **Mr. Miller** that the radon issue was not excluded, but rather reserved. It has not been addressed yet. The TBD is solid for all exposures at Blockson, excluding radon. To the extent claims not involving radon can be moved forward, they will do so.

Mr. Miller offered that the Board should be aware that incomplete documents were being posted as site profiles. He noted he'd not had answers to e-mails he'd sent and now the site profile is posted and he still didn't have an answer. He wished the incompleteness of the document had been advertised to the Board.

Mr. Miller read a number of lengthy memos into the record which he felt should have been included in the references. He elaborated

further on what he perceived as weaknesses in the TBD.

With all further business to come before the Board requiring action in Executive Session, the public portion of the meeting was adjourned.

End of Summary Minutes

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



Paul L. Ziemer, Ph.D., Chair

Date

