# The Subcommittee for Dose Reconstruction Review of the

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

### Summary Minutes of the Inaugural Meeting December 11, 2006

The Inaugural Meeting of the Subcommittee for Dose Reconstruction Review (the subcommittee) of the Advisory Board on Radiation and Worker Health (ABRWH or the Board) was held at the Holiday Inn Select in Naperville, Illinois on December 11, 2006. The meeting was called to order by **Dr. Lewis Wade**, the Designated Federal Official, Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health (NIOSH). These summary minutes, as well as a verbatim transcript certified by a court reporter, are available on the internet on the web site of the NIOSH/Office of Compensation Analysis and Support (OCAS) located at www.cdc.gov/niosh/ocas. Those

Subcommittee Members: Mr. Mark Griffon, Chair; Mr. Brad Clawson (Alternate), Mr. Michael Gibson, Ms. Wanda Munn, and Mr. Robert Presley (Alternate).

Designated Federal Official: Dr. Lewis Wade, Executive Secretary

#### Federal Agency Attendees:

present included the following:

Department of Health and Human Services: Mr. Stuart Hinnefeld, Ms. Liz Homoki-Titus (via telephone).

### Contractors:

Sanford Cohen & Associates: Dr. Hans Behling and Ms. Kathy Behling (via telephone), Dr. John Mauro.

Public Attendees: See Registration

### Opening Remarks

Dr. Lewis Wade, NIOSH

Dr. Wade called the meeting to order by announcing the first meeting of the Subcommittee For Dose Reconstruction, the group formed to replace the Subcommittee for Dose Reconstruction and Site Profile Review. He introduced Mr. Mark Griffon as its Chair, with membership including Dr. John Poston (who was unable to attend today's meeting), Mr. Michael Gibson, and Ms. Wanda Munn. Mr. Brad Clawson was present as alternate for Dr. Poston, as well as Mr. Robert Presley, also an alternate.

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# Selection of Cases for the Seventh Set of Dose Reconstruction Reviews

Mr. Mark Griffon, Chair

Mr. Griffon announced the task of selection of cases for the seventh set of reviews will be made from two lists provided by NIOSH for that purpose. The first list includes roughly 235 cases in which a full internal and external dose calculation was done. The second set of 200 cases were simply selected at random. He noted the final column on the lists shows the date the draft DR for each case was approved.

Explaining that there are factors to be considered in the selection of cases in order to obtain a representative distribution, Mr. Griffon went on to note they may not all be apparent. A variety of Technical Information Bulletins are in use and it is important to see how they were applied. Some are site-specific, and their use should be examined. Mr. Griffon expressed a belief the goal is to select diverse cases to avoid covering the same ground, and suggested a discussion of case parameters before beginning the selection process.

At **Dr. Wade**'s request for information on when SC&A will require the lists for the seventh, eighth and ninth sets, **Dr. John Mauro** indicated they were in the midst of the sixth set and would be ready for the seventh in about six weeks.

With no rush to make the selection, **Mr. Griffon** suggested the subcommittee discuss case parameters that would enhance the audit, and then discuss their criteria with the full Board.

Ms. Munn questioned the practicality of establishing parameters and

then asking NIOSH for a set of cases to fit those parameters. She suggested narrowing that search by selecting a limited number of cases and coordinating with NIOSH to ensure they fit the pattern of diversity sought by the subcommittee. In discussing a procedure for selecting cases to fit whatever parameters chosen, **Ms. Munn** and **Mr. Griffon** agreed it would be impractical to ask NIOSH to review, for example, 230 cases on a list to provide an adequately diverse set.

In an effort to reach consensus on what might better inform the case selections, the following issues were raised and suggestions made:

- ■A statistical review of prior case selections to understand the types of cancers, years and job categories already studied.
- ■Work area locations and both internal and external methodology would be helpful.
- ■Variations in calculation procedures occur even in best estimate cases at various sites.
- Rather than accepting overestimating or underestimating techniques as a means of selecting a case, perhaps use of specific TIBs or methodology might be part of the selection criteria.
- ■Caution must be taken that as information on work locations, years worked, sites, et cetera becomes more specific, the cases do not become so identifiable they ultimately require closed sessions.
- ■Neutron dosimetry and the means by which it is handled is a recurring issue and perhaps should be one of the parameters for case selection.
- ■A cross section of work areas is important to a proper audit.
- ■While that can be done, it will require a lot of work by NIOSH and having a manageable number of cases to look at will be important.
- Perhaps job descriptions of people with a high probability of exposure would be helpful, but that would entail subjective judgment about who would be more exposed.
- Determination of dose reconstruction methodology is available in every case, but determination of work area would require opening each case file.
- Dissemination of the information will also have to be in compliance with the Privacy Act, so NIOSH would have to send the resulting list to OGC before it could be made publicly available.

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Mr. Griffon suggested the seventh set of cases be selected with the discussed parameters in mind, and that the full Board be informed of the subcommittee's action. NIOSH could screen the cases following

those criteria.

Dr. Hans Behling suggested that when selecting for neutron exposures, it would be helpful to select cases prior to 1972, when the NTA film and neutron problems came into play.

After discussion it was determined **Dr. Mauro**'s suggestion of doing 30 cases per set, with fewer sets per year, would put a greater burden on NIOSH. It was agreed the new screening process would be considered a trial and the sets should remain at 20 cases. Recognizing the need for NIOSH to review perhaps 30 or so cases to arrive at 20 which meet the new criteria, **Mr. Hinnefeld** was unable to assure the subcommittee that such could be accomplished by the next meeting.

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The following cases were selected for proposal to the Board:

From the full internal and external list:

- No. 302, Respiratory, Huntington Pilot Plant
- No. 306, Lung, Mound
- No. 314, Thyroid, Hanford
- No. 322, Stomach, Kansas City Plant
- No. 327, Non-melanoma skin Basal cell, Downey facility
- No. 335, Urinary organs, Mound
- No. 337, Lung, Lawrence Livermore National Laboratory
- No. 351, Oral cavity and pharynx, Bridgeport Brass, Havens Lab
- No. 354, Lung, Aliquippa Forge
- No. 375, Non-melanoma skin Basal cell, Squamous cell, Pinellas
- No. 445, Other respiratory, Bethlehem Steel
- No. 455, Other respiratory, Savannah River Site
- No. 480, All male genitalia, Birdsboro Steel & Foundry
- No. 490, Lymphoma and multiple myeloma, American Bearing Corp.
- No. 509, Oral cavity and pharynx, Argonne West, Idaho Nat'l. Lab

From the random selections list:

- No. 013, Pancreas, Brookhaven National Laboratory
- No. 017, Lung, Pacific Northwest National Laboratory
- No. 028, All male genitalia, Oak Ridge National Laboratory (X-10)
- No. 054, Bone, Bridgeport Brass, Adrian
- No. 056, All male genitalia, Los Alamos National Laboratory
- No. 063, Liver, Oak Ridge National Laboratory (X-10)
- No. 076, Lung, Esophagus, Pinellas
- No. 079, Nervous system, Los Alamos National Laboratory

No. 081, Bladder, non-melanoma skin - squamous cell, Idaho

No. 099, All male genitalia, Project Gnome Nuclear explosion site

No. 102, Breast, Oak Ridge National Laboratory (X-10)

No. 104, Connective Tissue, Nevada Test Site

No. 126, Pancreas, Oak Ridge National Laboratory (X-10)

No. 132, Lymphoma and multiple melanoma, Idaho National Laboratory

No. 141, All male genitalia, Portsmouth Gaseous Diffusion Plant

No. 154, Pancreas, Lawrence Livermore National Laboratory

No. 166, Eye, Oak Ridge Gaseous Diffusion Plant (K-25)

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With 32 cases selected to present to the Board, it was agreed NIOSH would open those case files. Their goal will be to identify 20 cases meeting the suggested parameters for Board review as the seventh set of individual dose reconstructions to be audited.

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With no further business to come before the Subcommittee, the meeting was adjourned at 12:25 p.m.

End of Summary Minutes



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

Mark	Griffon,	Chair		
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Date				