THE CENTER TO PROTECT WORKERS' RIGHTS

CPWR

November 28, 2005

Dr. Steven Ahrenholz
NIOSH-HERB
Mail Stop R-44
4676 Columbia Parkway
Cincinnati, OH 45226

mailto:SAhrenholz@cdc.gov

Re: NIOSH Occupational Energy Research Program (OERP)

Dear Dr. Ahrenholz;

I appreciate the opportunity to participate in the October 27, 2005 NIOSH-OERP stakeholder meeting. I would like to submit the following additional comments on radiation exposure epidemiology of DOE site workers. It is vital that the NIOSH-OERP surveillance of this group of workers continues, and that this evaluation continue to be independent and institutionally isolated from a history of DOE deception and secrecy with regards to exposures to ionizing radiation and occupational risks.

1. Implement consistent exposure and incident data format and reporting requirements across all DOE sites including contractors and subcontractors. An evaluation should be made of the adequacy and appropriateness of using existing free downloadable REMIT reporting software https://www.reirs.com/remit.html designed to meet occupational radiation exposure reporting requirements of the Revised 10 CFR Part 20. This on-line reporting system is used by the Nuclear Regulatory Commission (NRC). NRC also provides partner software which assists in evaluation of completeness and quality prior to electronic submission https://www.reirs.com/reirview.html. Since DOE site contractors currently have control of the specific data collection procedures and format, this may present administrative challenges, but a consensus data format would greatly facilitate future research across multiple sites. NIOSH evaluation of DOE-contractor collected exposure data without standardized format has severe limitations.

2. Develop applied intervention research or "R2P" initiatives in line with intervention research priorities throughout NIOSH. Intervention research involves developing appropriate baseline data, implementing an exposure reduction or injury or disease

prevention intervention in the workplace and evaluating the effectiveness of that intervention. An example might be prospective evaluation of specific management systems, subcontracting procedures, or changes in work practices using exposure databases to provide outcome metrics. CPWR would be interested in facilitating construction union and contractor involvement in such intervention research. Another possible intervention might consider the NRC's current safety culture initiatives http://www.nrc.gov/what-we-do/regulatory/enforcement/safety-culture.html#initiatives .

3. We strongly support proposed NIOSH initiatives to expand its evaluation of cancer incidence or morbidity, rather than just cancer deaths. As survivability increases with improved medical treatment (e.g., melanoma or prostate cancers), cancer deaths from death certificates provide an increasingly skewed view of cancer incidence.

4. More representative exposure data should be developed. The existing HEDS database maintained by NIOSH contains approximately 300,000 individuals; which is about half of the workers who have worked on DOE sites. NIOSH researchers recognize that this is over-representative of production workers and full time workers, and under representative of transient and construction workers. At a minimum, prospective data collection should consider all workers on DOE sites in order to develop appropriate denominator data, that includes the fraction of workers with and without exposure monitoring performing various types of work on DOE sites, and information on the hierarchy of subcontracting. Appropriate denominator data, such as work hours and work sampling to provide information on the duration and frequency of high exposure tasks, is critical for directing future interventions. NIOSH should develop or improve and standardize denominator data collection in order to increase the value of prospective data for evaluating the effectiveness of future exposure prevention interventions.

5. Where feasible, NIOSH should provide DOE, workers/unions, and contractors with feedback on their exposure control/reduction performance relative to other contractors/workers.

6. Particularly in relation to waste remediation efforts, which is an increasingly large fraction of workers on DOE sites, NIOSH should be considering mechanisms for task-based exposure assessments. While annual or lifetime cumulative dose may predict health outcomes, implementing exposure controls in construction or waste remediation requires information on specific high exposure tasks, many of which may be of short duration and be performed intermittently. Where NIOSH-OERP develops evidence of task-specific exposures and effective control options for remediation activities, NIEHS funded annual hazardous waste operator training, including training conducted by CPWR for construction workers on DOE sites, should be considered by NIOSH as part of the R2P process.

7. NIOSH should evaluate the quality and completeness of random samples of DOE exposure data, and exposure monitoring programs. This should include data characterizing the total DOE site workforce (i.e., workers with and without any exposure

monitoring for ionizing radiation or radioisotopes) as a denominator, and should explore possible under-monitoring or under-reporting.

8. NIOSH should consider supporting qualitative research such as in depth interviews or ethnographies of older workers on DOE sites, or of workers involved in incidents, in order to better characterize lessons learned. The DOE site workforces are retiring at an increasing rate, which threatens the institutional memory and continuity of practices. In addition, the nature of DOE contracting practices has resulted in repeated losses of institutional memory as contractors have changed. Qualitative data combined with quantitative data would provide a richer research resource.

9. This DOE cohort provides NIOSH with a unique group, many with higher lifetime cumulative does than are likely to be found in the future, to allow the investigation of non-cancer health outcomes of exposures to ionizing radiation. Japanese A-bomb survivor data suggests an increase in cardiovascular disease. NIOSH should consider whether this DOE cohort may provide an opportunity for such an evaluation.

10. NIOSH should explore possible linkages between the NIOSH HEDS database and other DOE data sets, in order to create a richer data resource. This might include the DOE CAIHRS injury and compensation claims database, certified payrolls or other person-hour denominator data, contract and production process data, incident and spill data, environmental monitoring data, etc. Such linkages could create a range of future research opportunities to expand our knowledge of occupational safety and health. A strategy should be developed to allow a future linked dataset, with personal identifiers removed, to be made available to the public for research purposes.

11. NIOSH should provide comments and a recommended REL to OSHA in the ongoing review of the OSHA ionizing radiation standard, which is based on dated acute exposure information, rather than more recent data which is based on lower level long term exposures which is more typical of occupational exposures.

Thank you for the opportunity to comment.

Sincerely,

James W. Platner, PhD, CIH

cc: P. Stafford, J. Gittleman, CPWR