FEDERAL RETIREMENT THRIFT INVESTMENT BOARD

Sunshine Act Meeting

TIME AND DATE: 9:30 a.m. (CDT), October 20, 2003.

PLACE: National Finance Center, Building 350, Conference Room 6, 13800 Old Gentilly Road, New Orleans, Louisiana.

STATUS: Parts will be open to the public and parts closed to the public.

MATTERS TO BE CONSIDERED:

Parts Open to the Public

9:30 a.m. (CDT) Convene meeting.
1. Approval of minutes of the September 15, 2003, Board meeting.
2. Thrift Savings Plan report by the Executive Director.

Parts Closed to the Public

3. Discussion of draft selection criteria for call center services.

FOR FURTHER INFORMATION CONTACT:
Thomas J. Trabucco, Director, Office of External Affairs, (202) 942–1640.


Elizabeth S. Woodruff,
Secretary to the Board, Federal Retirement Thrift Investment Board.

BILLING CODE 6760–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Advisory Board on Radiation and Worker Health, National Institute for Occupational Safety and Health

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), the Centers for Disease Control and Prevention (CDC) announces the following committee meeting:

Name: Advisory Board on Radiation and Worker Health (ABRWH), National Institute for Occupational Safety and Health (NIOSH).

Times and Dates: 8:30 a.m.–5 p.m., October 28, 2003. 8:30 a.m.–4:30 p.m., October 29, 2003.

Place: Adams Mark St. Louis, 315 Chestnut Street (at 4th Street), St. Louis, Missouri 63102, telephone (314) 241–7400, fax (314) 241–0889.

Status: Open to the public, limited only by the space available. The meeting room accommodates approximately 120 people.

Background: The Advisory Board on Radiation and Worker Health (“the Board”) was established under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) of 2000 to advise the President, through the Secretary of Health and Human Services (HHS), on a variety of policy and technical functions required to implement and effectively manage the new compensation program. Key functions of the Board include providing advice on the development of probability of causation guidelines which have been promulgated by HHS as a final rule, advice on methods of dose reconstruction which have also been promulgated by HHS as a final rule, evaluation of the scientific validity and quality of dose reconstruction conducted by the National Institute for Occupational Safety and Health (NIOSH) for qualified cancer claimants, and advice on the addition of classes of workers to the Special Exposure Cohort.

In December 2000, the President delegated responsibility for funding, staffing, and operating the Board to HHS, which subsequently delegated this authority to the CDC. NIOSH implements this responsibility for CDC. The charter was renewed on August 3, 2003 and the President has completed the appointment of members to the Board to ensure a balanced representation on the Board.

Purpose: This board is charged with (a) providing advice to the Secretary, HHS on the development of guidelines under Executive Order 13179; (b) providing advice to the Secretary, HHS on the scientific validity and quality of dose reconstruction efforts performed for this Program; and (c) upon request by the Secretary, HHS, advise the Secretary on whether there is a class of employees at any Department of Energy facility who were exposed to radiation but for whom it is not feasible to estimate their radiation dose, and on whether there is reasonable likelihood that such radiation doses may have endangered the health of members of this class.

Matters to be Discussed: Agenda for this meeting will focus on Program Status Reports from NIOSH, Department of Labor, and Department of Energy; Research Issues; Dose Reconstruction Workgroup Report; Scientific Issues Workgroup Report; and a closed session to discuss Independent Government Cost Estimates.

Agenda items are subject to change as priorities dictate.

For Further Information Contact: Larry Elliott, Executive Secretary, ABRWH, NIOSH, CDC, 4676 Columbia Parkway, Cincinnati, Ohio 45226, telephone (513) 533–6825, fax (513) 533–6826.

The Director, Management Analysis and Services Office, has been delegated the authority to sign Federal Register notices pertaining to announcements of meetings and other committee management activities for both CDC, the Agency for Toxic Substances and Disease Registry.


Alvin Hall
Director, Management Analysis and Services Office, Centers for Disease Control and Prevention.

SUPPLEMENTARY INFORMATION: On January 8, 2002, DHHS, CDC published
proposed “Airborne Exposure Limits for Chemical Warfare Agents GA (tabun), GB (sarin) and VX” in the Federal Register (Vol. 67, No. 5, Pages 894–901, Tuesday, January 8, 2002), seeking public comment. This notice discusses major comments received, describes decisions regarding the public comments, and states the final recommendations. CDC received comments from the U.S. Army, the Agency for Toxic Substances and Disease Registry (ATSDR), the CDC’s National Institute for Occupational Safety and Health (NIOSH), state of Utah, U.S. Army contractors, and two individuals. The comments fell into the following general categories: assumptions used in the risk assessment, selection of uncertainty factors, determination of the relative potency factor for the VX exposure limits, and technical feasibility of air monitoring at the lower exposure limits. The key comments potentially impacting CDC’s recommendations are discussed below. The U.S. Army recommended that adjustment in the risk assessment algorithm for breathing rate be eliminated because the critical endpoint in deriving the exposure limits is miosis, a clinical sign that is recognized as a local effect on the muscles of the iris of the eye. This biologic endpoint is widely considered to be a direct effect of the nerve agent vapor on the surface of the eye (not related to breathing rate). Scientists from CDC/NIOSH, however, indicated that the data do not completely rule out the potential contribution of inhaled agent to the miosis effect. The weight of the scientific data appears to support the Army’s recommendation on this matter, and CDC has decided to eliminate the breathing rate adjustment. Eliminating the breathing rate adjustment increases the worker population limit (WPL) by a factor of slightly more than two. No significant change in the general population limit (GPL) would occur by eliminating the breathing rate adjustment.

In the derivation of the VX exposure limits by using relative potency, the Army questioned the use of a relative potency of 12 with the application of a modification factor of three for the incomplete VX data set. The application of a relative potency of 12 with a modifying factor of three effectively resulted in a relative potency of 36 between the calculated exposure limits for GB and VX. As discussed in the January 8, 2002, Federal Register proposal, the relative potency factor of 12 was based on a 1971 British study that measured the ability of VX to cause 90 percent pupil constriction in rabbits. Because the critical effect in the study used to derive the GB exposure limit was miosis, CDC believes that miosis was appropriate to use as the health effect in determining the relative potency of VX. CDC/NIOSH experts and the state of Utah supported the proposed relative potency of 12 with a modifying factor of three. Therefore, CDC is retaining its relative potency assumptions for deriving the VX exposure limits.

The comments fell into the following general categories: assumptions used in the risk assessment, selection of uncertainty factors, determination of the relative potency factor for the VX exposure limits, and technical feasibility of air monitoring at the lower exposure limits. The key comments potentially impacting CDC’s recommendations are discussed below.

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As discussed in the January 8, 2002, Federal Register proposal, CDC adjusted the VX GPL because available air-monitoring methods do not reliably detect VX at the calculated value of $3 \times 10^{-4}$ mg/m$^3$. In the adjustment, CDC assumed that potential exposure would be identified and corrected within three days, precluding chronic exposure. Several people who provided comments pointed out that a similar adjustment also could have been made for the GB GPL. CDC recognizes that the assumptions used to derive the GPLs for GB and VX differ. Indeed, this adjustment could be applied to the GB exposure limits; however, the air-monitoring technology is currently functioning near the recommended level. CDC recommends no upward adjustment of the GB exposure limits; this recommendation is consistent with the accepted industrial hygiene practice of keeping exposure to the minimum practicable level.

The derivation of the VX exposure limits may be biased low because of the inadequate VX toxicity database. CDC believes that reliable air monitoring is a crucial aspect for implementing the exposure limits. Although CDC would have preferred a better toxicity database for VX, as well as improved air-monitoring methods for VX, these items are not currently available. Consequently, CDC is not further adjusting the final recommendation to the GPL for VX. However, CDC will reevaluate the VX exposure limits in the future if significant new VX toxicity data are available for setting exposure limits, new risk assessment evaluation methods are demonstrated superior to methods used herein, or substantive technological advances in air monitoring methods are made.

Army contractors and CDC/NIOSH experts expressed concerns about the technical feasibility of meeting the new exposure limits. On the basis of these comments, CDC has adjusted the VX short-term exposure limit (STEL) to $1 \times 10^{-3}$ mg/m$^3$ but added the provision that excursions to this special VX STEL should not occur more than once per day (in the typical STEL, four excursions per day are allowed). A lower STEL value would have required a longer response time for near-real-time instruments; the recommended STEL is a result of balancing the detection capabilities and response time. A shorter instrument response time associated with the recommended STEL will minimize exposures. This adjustment to the VX STEL should not affect worker health.

To account for other technical feasibility concerns, CDC recommends that the GB and VX STEL be evaluated with near-real-time instrumentation, whereas the GB and VX WPLs and GPLs may be evaluated with longer-term historical air monitoring methods. CDC further recommends that, in implementing the WPLs, STELs and GPLs, specific reduction factors for statistical assurance of action at the exposure limits are not needed because of safety factors already built into the derivation of the exposure limit. This recommendation assumes that the sampling and analytical methods are measuring within ±25% of the true concentration 95% of the time. If this criterion is not met, an alarm level or action level below the exposure limit may be required.

The Army recently indicated to CDC that the exposure limits as listed and implemented in this announcement are technically feasible to detect with the instrumentation and methods currently in use. However, whether the agent destruction sites can monitor at these exposure limits and still meet current quality control standards has not been determined. To allow the Army to implement program changes, regulatory adjustments, and to evaluate quality control issues, the final recommended exposure limits will become effective January 1, 2005.

Final Recommendations: CDC presents final recommendations for airborne exposure limits (AELs) for the chemical warfare agents GA (tabun or ethyl N,N-dimethylphosphoramidocyanidate, CAS 77–81–6); GB (sarin or O-isopropyl-
methylphosphonofluoridate, CAS 107–44–8; and VX (O-ethyl-S-(2-diisopropylaminoethyl)methylphosphonothiolate, CAS 50782–69–9). CDC based its recommendations on comments by scientific experts at a public meeting convened by CDC on August 23–24, 2000, in Atlanta, Georgia; the latest available technical reviews; and the risk assessment approach frequently used by regulatory agencies and other organizations. Additionally, CDC reviewed the substantial background information provided in the recent U.S. Army evaluations of the airborne exposure criteria for chemical warfare agents. AELs for chemical warfare agents GA, GB, and VX were reevaluated by using the conventional reference concentration risk assessment methodology for developing AELs described by the U.S. Environmental Protection Agency. This methodology is considered conservative; however, the calculated exposure limits are neither numerically precise values that differentiate between nonharmful and dangerous conditions, nor are they precise thresholds of potential human toxicity. The recommended changes to the AELs do not reflect change in, nor a refined understanding of, demonstrated human toxicity of these substances but rather the changes resulted from updated and minimally modified risk assessment assumptions. Overt adverse health effects have not been noted in association with the previously recommended exposure limits. This may be due to rigorous exposure prevention efforts in recent years as well as the conservative implementation of the existing limits (i.e., 8-hour time-weighted average exposure limits have been implemented as short-duration ceiling values).

Recommended AELs for GB: CDC recommends a WPL value of 3 × 10⁻⁵ mg/m³, expressed as an 8-hour time-weighted average (TWA). Additionally, CDC recommends a STEL of 1 × 10⁻⁴ mg/m³ to be used in conjunction with the WPL. Exposures at the STEL should not be longer than 15 minutes and should not occur more than four times per day, and at least 60 minutes should elapse between successive exposures in this range. The STEL should not be exceeded during the work day, even if the cumulative exposure over the 8-hour TWA is not exceeded. CDC recommends a decrease in the GPL to 1 × 10⁻⁶ mg/m³. The WPLs and GPLs values are approximately threefold lower than levels previously recommended by CDC in 1988. An immediately-dangerous-to-life-or-health (IDLH) value of 0.1 mg/m³ is recommended for GB.

Recommended AELs for GA: Although not as well-studied as GB, GA is believed to be approximately equal in potency to GB. Therefore, CDC recommends the same exposure limits for GA as for GB.

Recommended AELs for VX: CDC recommends that the VX WPL, expressed as an 8-hour TWA, be decreased to 1 × 10⁻⁶ mg/m³. Additionally, CDC recommends a VX STEL of 1 × 10⁻⁵ mg/m³. An excursion to the STEL should not occur more than one time per day (compared to four times per day for a typical STEL). The recommended WPL is a factor of 10 lower than the CDC’s 1988 recommendation. CDC recommends that the GPL for VX be decreased to 6 × 10⁻⁷ mg/m³ (a factor of five lower than CDC’s 1988 recommendation). An IDLH value of 0.003 mg/m³ is recommended for VX. CDC’s final recommendations are summarized in Table 1 below.
Table 1 - Final Recommended Airborne Exposure Limits (AELs) for GA, GB, and VX

<table>
<thead>
<tr>
<th>AEL (mg/m³)</th>
<th>General Population Limit (GPL)*</th>
<th>Worker Population Limit (WPL)*</th>
<th>Short-Term Exposure Limit (STEL)*</th>
<th>Immediately Dangerous to Life or Health (IDLH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA, GB</td>
<td>$1 \times 10^{-6}$</td>
<td>$3 \times 10^{-5}$</td>
<td>$1 \times 10^{-4}$</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td><strong>GA, GB - Previous</strong> (1988)</td>
<td>$3 \times 10^{-4}$</td>
<td>--</td>
<td>0.2 (Army)</td>
</tr>
<tr>
<td>VX</td>
<td>$6 \times 10^{-7}$</td>
<td>$1 \times 10^{-6}$</td>
<td>$1 \times 10^{-7}$**</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td><strong>VX - Previous</strong> (1988)</td>
<td>$3 \times 10^{-6}$</td>
<td>--</td>
<td>0.02 (Army)</td>
</tr>
<tr>
<td>Averaging Time</td>
<td>24 hours</td>
<td>8 hours</td>
<td>15 minutes</td>
<td>≤30 minutes</td>
</tr>
</tbody>
</table>

Monitoring Method for Recommended Exposure Criteria

- Historical monitor***
- Historical monitor
- Near-real-time monitor
- Near-real-time monitor

* An additional reduction factor for statistical assurance of action at the exposure limit is not needed because of safety factors already built into the derivation of the exposure limit.

** VX STEL has been adjusted from $4 \times 10^{-6}$ mg/m³ (up to four times per day) as proposed in the Federal Register announcement to $1 \times 10^{-5}$ mg/m³ (not more than one time per day) based on technical capabilities of existing air-monitoring technologies.

*** Historical monitoring typically refers to long-term sampling and analytical methods. Air-monitoring results from historical methods are not known until laboratory analyses are complete.