Science & Society

Gulf War chemical weapons confirmed

Testifying before Congress on Dec. 10, two U.S. servicemen described detecting airborne chemical weapons during the Persian Gulf War and related activities in Kuwait 5 years ago. Both men had used mass spectrometers specifically designed to identify such poisonous munitions.

Since 1991, thousands of Gulf War veterans have complained of headaches, memory problems, and joint pains (SN: 11/30/96, p. 347). Though most veterans attribute their symptoms to exposure to chemical weapons, Pentagon officials have challenged the link, citing a host of other possible explanations, such as stress.

In his sworn testimony, Army Maj. Michael F. Johnson told the House Subcommittee on Human Resources and Intergovernmental Relations that his chemical weapons detection team identified mustard agent leaking from a metal container outside a Kuwaiti school on Aug. 7, 1991, after the war had ended. Marine Corps Gunnery Sgt. George J. Grass testified that a mobile lab he was operating during the war detected mustard agent at an Iraqi ammunitions depot.

EPA to tighten air pollution limits

Five years ago, an Environmental Protection Agency epidemiologist showed that death rates from disease in major U.S. cities rose and fell with concentrations of particulate, or dustlike, pollutants in the air—and might account for some 60,000 premature deaths annually (SN: 4/6/91, p. 212). Follow-up studies indicated that such pollution aggravates heart and respiratory disease (SN: 7/1/95, p. 5). The agency affirmed the strength of the studies on Nov. 29 by proposing tougher air pollution standards for such highly respirable particles.

Since 1987, EPA has limited concentrations of particulate matter 10 micrometers and smaller (PM-10) to a 24-hour average of no more than 150 micrograms per cubic meter ($\mu g/m^3$) of air. Because even smaller particles appear to pose the biggest risk, the new standard would regulate particles measuring 2.5 μm and less (PM-2.5) and limit their 24-hour average to 50 $\mu g/m^3$. The agency would allow an annual mean PM-2.5 concentration in any urban area of only 15 $\mu g/m^3$.

Also on Nov. 29, EPA proposed new standards for controlling smog ozone. The current limit, 0.12 part per million (ppm) in air averaged over 1 hour, would fall to 0.08 ppm averaged over 8 hours. The change would cut by at least 200,000 the incidence of severe respiratory cases triggered by this lung irritant annually in the United States, EPA estimates.

Many years in the writing, both proposals drew criticism from industry groups, which complained that the health benefits—which they said are not proved—would not justify the costlier pollution controls. Nevertheless, EPA expects to issue a final version of both rules June 28, 1997.

DOE compensates experiment victims

On Nov. 19, the Department of Energy settled 12 legal claims on behalf of persons injected with plutonium or uranium—usually without their knowledge—during federally sponsored radiation experiments 50 years ago. A presidential panel looking into the government's actions and ethics in these studies concluded that subjects deserved both an apology and compensation (SN: 10/29/94, p. 276). One survivor and the families of 11 others will each receive \$400,000 and a personal apology from departing DOE Secretary Hazel R. O'Leary.

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