

## CBW: Army Chemical Stock Destruction May Cost \$1 Billion

The U.S. Army has been having a rough time determining whether and how to destroy its stocks of nerve gas and other chemical weapons ever since 1969, when the National Academy of Sciences (NAS) effectively quashed a comprehensive plan for dumping them in the ocean. In the interim, the Army has held on to its huge stockpiles—estimated to be capable of killing the world's population several times over—which are located at military installations in eight states, on Johnston Island in the Pacific, and in West Germany. Now, however, official Army Chemical Corps projections show that it will take until 1985 to destroy the whole stockpile, and it will cost a whopping \$1 billion—or several times what the weapons cost to manufacture. The Army attributes the need for this elaborate disposal plan, and its cost, to the 1969 NAS report:

The \$1 billion figure, which has appeared in published reports and has been confirmed by Army spokesmen, is said to be only an estimate. Nonetheless, one non-Army expert said that

it is probably a "conservative" underestimate in terms of Army planning.

According to Army sources, three quarters of the \$1 billion would go to development, construction, and operation of a movable chemical destruction factory called CAMDS (Army lingo for Chemical Agent Munition Disposal System). CAMDS is principally a response to the NAS recommendation in 1969 that, instead of hazardous transport, shipping, and ocean sinking of the chemicals, the Army should dispose of most of its surplus chemical weapons at their storage locations. CAMDS, therefore, brings the mountain to Mohammed. Instead of transporting chemicals to a single plant for destruction, CAMDS will be operated at one military installation, and then be detoxified, disassembled, loaded on rail flatcars, and shipped to another base for reuse. Army spokesmen say that the 12-year lead time to complete the program is necessary because the chemicals must be processed slowly in order to minimize environmental and safety hazards. Completion of CAMDS is

roughly 5 years down the line, they say.

The remaining \$250 million apparently includes the completed destruction of biological weapons stocks, the ongoing destruction of stocks at the Rocky Mountain Arsenal, and, according to a spokesman, "other" operations not covered by CAMDS.

George B. Kistiakowsky, vice president of NAS, who headed the 1969 committee on chemical weapons disposal, reacted to news of the Army's billion-dollar estimate by saying it sounded far too high. The NAS group, he said, only studied disposal of surplus chemical weapons; it nonetheless concluded "qualitatively" that destruction of any chemical weapons would cost much less than making them.

Whether this billion dollars—or some smaller or larger sum—will be spent destroying the national stockpile naturally depends on a final decision to go ahead with destruction. While this decision has not yet been made, the military's investment in CAMDS is widely interpreted—even by the Army—as a sign that a green light for operations will be given as soon as CAMDS is shown to work.

However, the Army's involvement in chemical weapons stockpiling will not end there. Recent military budgets have awarded increases to the Army Chemical Corps to develop binary weapons—munitions equipped with separate chambers of two "nonlethal" gases

## Briefing

---

### Auto Catalyst to Stay for 1975

---

The Administrator of the Environmental Protection Agency (EPA), Russell E. Train, has decided to keep the agency's catalytic emission control program on track, despite a threat to the plan which nearly derailed it last month. In testimony before the Senate subcommittee on air and water pollution of the committee on public works on 6 November, Train announced that EPA would continue to insist that auto-makers install catalytic converters on all 1975 model cars to be sold in California, or, roughly one-tenth of all new 1975 cars. Train termed the catalyst "critical" to the nation's environ-

mental program, despite the recent evidence that the catalyst converts sulfur in gasoline into sulfuric acid mist in quantities that could pose a serious health hazard (*Science*, 26 October).

However, Train conceded that the sulfuric acid mist problem appeared highly serious. He said that, along with the 1975 plan, EPA would accelerate analysis of the acid mist problem and, in the next several weeks, it would solicit the views of "all interested parties." The decision leaves open two related questions: whether EPA will force auto-makers to install converters on most of the 1976 model cars, and whether it will require oil companies to eliminate virtually all sulfur from gasoline.

Apart from the EPA decision, the hearings uncovered an odd set of bed-

fellows. General Motors, which has invested a lot of money in pollution control and says it will install catalysts on "many, if not all," of its 1975 automobiles, testified in favor of keeping the catalyst on. But in taking this line, GM parted ways from its historic allies, in the pollution control fight, Ford Motor Co. and Chrysler Corp. Both Ford and Chrysler sought to delay the catalyst. In so doing, GM this time found itself on the same side as one Ralph Nader, whose spokesman on auto pollution matters, Clarence M. Ditlow, testified in favor of keeping to the catalyst program. Ditlow pointed out that some sulfuric acid mist is emitted by non-catalyst-equipped cars as well, and therefore concluded: "Only removal of sulfur from gasoline will eliminate the problem."—D.S.