

## Biological weapons

**US Army's plan blocked***Washington*

A US Army plan to build a \$1.4 million facility for testing "aerosol toxins" has been blocked by a single senator, who noticed the project buried away in a normally routine request by the Army to reallocate a total of \$140 million already appropriated for other projects.

While ostensibly a part of the Army's efforts to develop defences against chemical and biological warfare agents, the aerosol laboratory would, according to Senator Jim Sasser (Democrat, Tennessee), provide a "potential capability to test offensive biological toxins". The testing or possession of biological warfare



agents for other than prophylactic, protective, or other peaceful purposes is prohibited by the 1972 convention outlawing biological warfare.

The United States maintains an active programme of research on biological defence. Most of the work takes place at the US Army Medical Research Institute of Infectious Diseases at Fort Detrick, Maryland, the former biological warfare establishment. Its budget of roughly \$40 million a year is devoted mainly to the development of vaccines and other medical defences. Dugway Proving Ground in Utah, where the aerosol laboratory was to have been built, deals with the development and testing of defensive hardware and protective gear. Fort Detrick is totally open; Dugway's work is classified.

The Army proposal came as part of a "reprogramming" request sent to the House and Senate Appropriations Committees. Under this procedure, funds appropriated for one specific purpose can be transferred to another without full congressional approval. In the Senate, the concurrence of the ranking majority and minority members of the relevant appropriations subcommittee is normally all that is required. Sasser had earlier approved a

\$66 million reprogramming request that contained the aerosol laboratory, but after learning of the project, he withdrew his approval and also blocked a pending \$7 million request for "toxic agent test support facilities" at Dugway.

According to the reprogramming request submitted by the Army, the aerosol laboratory would be used to test biological "protective gear and detection/warning equipment by employing toxic microorganisms and biological toxins requiring a level of containment and safety not now available within the Department of Defense". The request notes that the laboratory will be designed for working with "substantial volumes" of toxic biological aerosols.

Sasser, in a letter to Secretary of Defense Caspar Weinberger, asked that the full proposal be submitted as part of a supplementary budget request, which could be thoroughly examined and debated by the full Congress. **Stephen Budiansky**

**Tale of two cities**

**THE European Synchrotron Radiation Source (ESRS) just will not lie down. The decision (see *Nature* 1 November, p.3) to put the 5-GeV machine on a site at Grenoble in France, next to the high-flux neutron reactor of the Institut Laue-Langevin (ILL), is now being questioned. The site, critics say, is cramped and provides no room for expansion. But the French research minister, Hubert Curien, says that he made sure that Grenoble really did have "a few" possible places for the machine.**

**Meanwhile the city of Strasbourg, which also had plans to host the ESRS (and maybe even a site) is so upset with the decision that the Alsace Regional Council has threatened to boycott a visit next week by the French President, François Mitterrand.**

**The Alsatian feeling, it seems, is that M. Curien had promised ESRS to Strasbourg months ago — and in writing — and that he was forced to back down because of political pressure from above. Alsations say that the socialist party had long held Grenoble city council until they lost it in local elections a year ago, and that to have refused the city the synchrotron source would have been an electoral death-knell.**

**Curien, however, described such interpretations as "your responsibility", while pointing out that ILL technicians will give ESRS instrumentation a quick start, that the existing neutron and synchrotron light user community prefers Grenoble and that Britain (which has not yet offered cash) also preferred Grenoble. Grenoble, he claimed, was simply the better site.**

**Robert Walgate**

## US air pollution

**Tall stacks out***Washington*

ACTING under a court order, the Environmental Protection Agency (EPA) has issued new rules that would significantly restrict sulphur dioxide emissions from power plants. Although formally the rules address only an arcane debate over what values to use for stack height in computer models of power plant emissions, their effect will be to reduce SO<sub>2</sub> emissions by 800,000 tons to 2.8 million tons per year throughout the United States. The total annual industrial production of SO<sub>2</sub> in the United States is put at 24 million tons.

Because most of the 600 power plants affected by the rule are in the Ohio Valley, the rules may also make a dent in acid deposition in the northeastern United States and Canada, which is believed to originate largely in SO<sub>2</sub> emissions in the midwest. The Reagan administration has repeatedly argued that more studies of acid deposition are needed before regulations can be justified. EPA officials acknowledge that the stack-height rules are not the most cost-efficient way to reduce acid deposition; they may in fact be the most expensive pollution control rules issued by the Reagan administration. EPA estimates put the cost at \$900 to \$4,600 million in capital investment and \$300 to \$1,400 million in annual operating expenses.

A plan last year by EPA administrator William Ruckelshaus to attack the acid deposition problem by cutting back SO<sub>2</sub> emissions by some 4 million tons per year was turned down by the administration.

The dispute over stack height goes back to the early 1970s, when EPA decided that pollution controls on power plants would be determined case by case. Rather than imposing fixed emissions standards, EPA set ambient air standards; computer models are thus required to relate plant emissions to ambient air quality.

Many utilities found that the cheapest way to avoid exceeding ambient air standards around their power plants was to disperse pollutants through tall stacks. Some built stacks as tall as 1,200 feet. In 1977, Congress acted to close this loophole by requiring that, for the purposes of the computer models, stack height should be considered to be no more than that required for "good engineering practice". In effect, utilities were not to be given credit for the extra dispersion of pollutants that the tall stacks provided.

Since then, the dispute has raged over the definition of "good engineering practice". The new rules offer a much more restrictive definition than that originally proposed by EPA, which allowed credit for stacks tall enough to send smoke plumes over nearby mountains. Thus affected plants must switch to low-sulphur coal or install scrubbers to remove SO<sub>2</sub> from the stack.

**Stephen Budiansky**