

Genetic manipulation

Relaxed rules provoke anger

Washington

THE Recombinant DNA Advisory Committee (RAC) of the US National Institutes of Health last week voted to relax environmental release reviews for some recombinant organisms. The new guidelines exempt organisms with deletions and certain rearrangements in genetic material from RAC evaluation before field testing. In practice the change will affect few investigations, but its principle might have greater, and more unpredictable, ramifications.

RAC stopped reviewing laboratory research with such engineered microbes years ago, and now claims there is no scientific basis for discriminating against the deliberate release of recombinant organisms whose minor genetic alterations could arise through natural processes. The committee determined that deletions and rearrangements of non-chromosomal or viral DNA would not pose a risk any greater than that introduced by recombination in nature. Investigators wanting to release such organisms into the environment need no longer notify RAC of their intentions. But most experiments will still require the scrutiny of other regulatory agencies.

But some critics are calling this stance "a cop-out". Two RAC members voted against the proposal on the grounds that even deletions and rearrangements harbour unknown risks and could, theoretically, have unforeseen and undesirable consequences. One of the dissenters, ecologist Fran Sharples of the Oak Ridge National Laboratory, says the committee's mandate is to judge recombinant processes rather than on the nature of the products. She fears that "there is now a group of field-release experiments that won't be reviewed by anybody".

The National Cancer Institute biologist who proposed the amendment disagrees. "In and of itself, it won't affect that many people", says Susan Gottesman. "It's more a statement of principle than anything else". Gottesman is dismayed at the rocky road the recombinant ice-minus bacteria and pseudorabies vaccine have had to travel to obtain permission for release. She hopes RAC's motion will persuade other agencies to ease their reviews.

Fred Rapp, an RAC member from the Pennsylvania State University, warns that loss of public confidence may be one of the most serious problems the exemptions will engender, because subtle but important restrictions to the exemptions may not be brought before the public eye.

Indeed, Gottesman's strategy could backfire if regulatory agencies try to stiffen their requirements to take up the slack, though sparse, left by the RAC decision. The committee has already ruffled

some feathers at the Environmental Protection Agency, which asked RAC to hold the vote on the proposal until its own biotechnology committee was established sometime this fall. RAC did not.

Congress may likewise take a knee-jerk dislike to RAC's action. A report due this week from the House of Representatives science and technology subcommittee will probably call for greater control, based on four hearings on biotechnology regulation held between December 1985 and last

Netherlands research

EMBL membership reviewed

Waalre, the Netherlands

CONTINUATION of Dutch membership in the European Molecular Biological Laboratory (EMBL) in Heidelberg seems to be in doubt. Science Minister Willem Deetman has asked the Royal Academy of Sciences and the Advisory Council for Science Policy for a "solid evaluation" of Dutch membership and a review committee has been set up, composed of members of both scientific bodies. It will be seeking to answer a number of questions concerning the way that EMBL works at present, how it might be made to work better and



Willem Deetman — re-thinking Dutch membership.

what the Netherlands gets out of it compared with what it might get from spending the money at home. Another question is whether EMBL needs an international review committee. The minister expects an answer before 15 May 1987.

The Advisory Council for Science Policy emphasized in its yearly advice to the government in June that continued financial participation in EMBL "should be

July. A staff spokesperson says Congress does not doubt RAC's scientific expertise. But "RAC doesn't do things for scientific reasons, it does things for political reasons. And this time it made a mistake".

RAC's resolution still needs the signature of the institutes' director James Wynngaarden to be finalized. Meanwhile, RAC members are also debating a redefinition of "recombinant" organisms in general that would exclude most cases in which foreign DNA was not introduced into the host genome. So while RAC seems bent on loosening its regulatory reins, it is not clear that other agencies will follow suit.

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seen with some reservation". The council was also critical about the European Communities' Joint Centre for Research (in Petten, the Netherlands), saying that its work should be evaluated. The council acknowledges the international character of science, but also notes the disadvantages inherent in bureaucratic institutions. The Netherlands gives 5 per cent of its research and development budget to international organizations. The European Space Agency and CERN get most of the annual DFL 200 million. The council warns that the Dutch research and development effort is lagging behind that of other industrialized countries; funding is 2 per cent of gross national product as against 2.5 per cent, or more elsewhere.

That warning is echoed by the findings of a report from examiners from the Organisation for Economic Cooperation and Development which also advised the government that it should increase its commitment to the country's research base (*Nature* 320, 673; 1986). "The industrial structure of the country and the very big expenditure of five large firms do not suggest any grounds for believing that the Netherlands economy can afford to rest on a plateau". However, on 6 September, the government, with a cabinet composed of the same political parties as in May (before the elections), proposed a budget for 1987 that allows only an extra DFL 55 million on the research and development budget (currently DFL 4,100 million). With the DFL 4,600 million from industry, the Netherlands will be spending a total of 2.2 per cent of its gross national product on research and development in 1987.

Deetman promises that he will promote the use of research facilities in other countries by Dutch scientists and encourage cooperation between European institutes. If international cooperation is to be fostered, there may yet be a chance that the Dutch will not lose heart over EMBL.

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