all the wastes can be stored for a number of years on site," Arnold says.

But on-site storage could become hotly controversial because the wastes could amount to the equivalent of 600 to 1600 truck loads, which would remain on the island indefinitely. "We don't want Three Mile Island to become a waste disposal site," says Thomas M. Gerusky, Pennsylvania's top radiation protection official. "Who wants all that radioactive material to be sitting, for a considerable time, on an island in the middle of the Susquehanna?" he asks.

Bernard J. Snyder, the NRC official who is overseeing the cleanup, shares this concern. In his view, temporary storage of wastes on the island is acceptable. But, he says, referring specifically to the first-stage zeolites, "We want commitments made for their removal." Without some assurance that the hot zeolites will be removed from the island, Snyder believes that GPU's plans to operate the demineralizer unit that would generate them should not be approved. Arnold, too, wants to see commitments made, but he observes: "Progress on the cleanup should not be held hostage in the regulatory process."

If plans for disposal of all the wastes from the cleanup are to fall into place, two things appear to be needed:

- An early commitment by Pennsylvania and other northeastern states to establish a burial ground for low level waste generated within the region. Congress could encourage this by passing legislation already pending which would allow states of a particular region to establish a burial ground open only to wastes generated in those states alone.
- A speedy commitment by NRC, DOE, and Congress to a plan for disposal of the first-stage zeolites, even if this means that DOE must prepare the waste for disposal or accept custody of the waste itself.

Prospects for prompt action are dim. Last year's flap over the closing of commercial burial grounds even to medical wastes lent currency to the concept that the states of each region should establish their own disposal sites. Governor Dick Thornburgh of Pennsylvania and other members of a radwaste task force helped persuade the National Governors Association to urge the states to assume this responsibility.

Last year, Pennsylvania's Department of Environmental Resources quietly began looking for suitable areas for a burial site for medical wastes. But the state geologist, Arthur A. Socolow, says no plans are afoot to establish a burial

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African to Head International Council

Platitudes about expanding the leadership role of scientists from developing countries, heard at many an international meeting, are giving way to action, at least in one case. The International Council of Scientific Unions (ICSU) recently elected its first president from the Third World. Daniel A. Bekoe, 52, a chemist and vice-chancellor at the University of Ghana, will hold office for 4 years.

ICSU is a 60-year-old club that currently has 18 scientific unions as members and historically has a strong track record for encouraging international projects, such as the Global Atmospheric Research Program. For the past several years, ICSU has increasingly encouraged the application of science and technology to developing countries. With the ascendancy of Bekoe, this trend is expected to expand.

Case of the Missing Milk Bottles

A dearth of half-pint milk bottles has slowed the march of science, but the captains of U.S. industry are indifferent. Outlines of the problem were seen decades ago, but it is only now, with the situation in crisis proportions, that constructive moves are under way. And, as is too often the case, Yankee ingenuity has produced no answers and the worried parties are looking overseas for a solution.

In the early decades of the 20th century, geneticists hit upon an ideal subject for the study of the laws of Mendelian genetics—the lowly fruit fly, *Drosophila melanogaster*. Using the materials at hand, they housed their bugs in the ubiquitous half-pint milk bottle. The choice was ideal. The bottles were cheap, convenient, clear enough so researchers could see how the flies were doing, and strong enough to take a beating when being cleaned and handled.

The study of fruit flies boomed, but supplies of the bottles did not. With the advent of waxed and then plasticized milk cartons, geneticists started buying up stocks of the old milk bottles, a particularly rich source proving to be abandoned dairies. Those supplies, however, are now almost exhausted, and the search is on for a new source.

"I've called ten major glass companies and with some of them I couldn't even get past the secretary," says David J. Remondini, executive secretary of the genetics study section at the National Institutes of Health. "They like to talk in terms of millions, but it's not that kind of number."

Of late Remondini has heard much from worried geneticists about the bottle crunch and has decided to do something about it. Not a milk-bottle entrepreneur, he is a middleman, trying to find a supply of the bottles and then alerting the U.S. genetics community through a newsletter he puts out, the *Drosophila Information Service*. It turns out, however, that U.S. manufacturers do not want to make the expensive molds for the old bottles, and Remondini is now looking overseas. "I estimate that we're looking for 50,000 to 100,000 of these things," he says. "I think I've unearthed a manufacturer who still makes them. But there's a possibility they're going to switch to these paper cartons, so they're rather interested in knowing the potential market for these old bottles."

Remondini is currently surveying the U.S. genetics community to gauge the extent of the demand.

Why not another type of bottle? Many of the special-order laboratory bottles are too expensive and too thin, says Remondini. Few are the right size to hold the sterilized media on which the flies feed. (The media mimics rotting apples and peaches.) The cheap plastic bottles manufactured by scientific supply houses are not clear enough so that the health of the flies can be easily determined. "We do use vials for certain types of experiments," says Remondini, "but the production of progeny per female is less than it is in the bottles. Apparently there's a certain amount of space or microecology that is better in a bottle." A factor, he says, may be evolution. Some of the strains of fruit flies are 60 and 70 years old, and selection pressures during this period have killed off those flies that could not adapt to the bottles.

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