Radioactive Waste Backup Threatens Research

With the closing of the Hanford dump, Columbia, Duke, and Harvard are drowning in biomedical garbage

A garbage crisis hit the biomedical research community on 4 October when Dixy Lee Ray, the governor of Washington, closed the only radioactive dump in the country still willing to accept a form of low-level waste known as absorbed liquids. Ray closed the site at Hanford, Washington, in protest against careless practices in packaging and shipping waste, a problem she and other governors have been complaining about for 6 months.

The chief radiation safety officer of Columbia University, Philip Lorio, said, "It's a catastrophe. We don't know what to do. We don't know what's coming up tomorrow. We get all kinds of instructions that change from day to day and are impossible to follow."

Lorio said that haulers are now refusing to collect radioactive trash from Columbia's laboratories; that he had only 2 to 3 weeks' worth of unfilled storage space remaining; and that, if no solution is found within the next month or so, "I'll have to tell the researchers to stop their research." As the backup begins to make itself felt in the laboratory, researchers may continue to work, Lorio conceded, and they may simply begin pouring low-level wastes down the drain. This is not permitted for liquids that are not miscible with water, such as toluene, a commonly used chemical in radiological experiments and a suspected carcinogen. Other low-level radioactive liquids, if they are miscible with water, may be diluted and poured down the drain legally. "We have 300 labs using radioactive materials," Lorio said. "I can't put somebody in each one, standing by the sink to test every sample that goes down the drain." He thought that there had not been any increase in drain dumping, but if the crisis continues, he said, "We're going to get rid of our stuff that way, too. The government's going to force it on us."

Duke University also finds itself in a crisis. The chairman of its radiation safety committee, Henry Kamin, said that the university has no more than 30 days' worth of storage space remaining. The Memorial Sloan-Kettering Cancer Center, according to its radiation safety officer, Jean St. Germain, could last a couple of months, "depending on which priorities give way." She suggested that some research would have to stop, or that desks and chairs would literally be moved to make room for radioactive waste. An official at the New England Nuclear Corporation, a distributor of medical isotopes, estimated that his company could last several months without stopping work, but said that institutions with less storage space might have to shut down. Harvard University has only 2 weeks left before it must begin telling researchers to stop certain kinds of work. Officials at all these institutions agreed that drain-dumping will increase. John Pekin, president of a waste-hauling company called Radiac, said that although "nobody wants to do it," several of his customers have told him that they will begin flushing radioactive liquids into the sewers.

The consensus among university radiation officers is that the problem is a political one created by the accident at Three Mile Island. Most people do not distinguish between low-level wastes of the kind generated at hospitals and research laboratories, which pose negligible health hazards, and high-level wastes of the kind that must be removed from the crippled reactor in Pennsylvania. The public has become more worried about all forms of radiation this year, and radioactive garbage of whatever sort has become a political liability for any official who allows it to be shipped into his jurisdiction.

When the year began, three dumps in the United States were accepting shipments of low-level waste: in Barnwell, South Carolina; in Beatty, Nevada; and in Hanford, Washington. Most of the low-level waste is generated in the eastern part of the country, and most of the East's shipments were going to Barnwell. The governor of South Carolina was thus the first to raise the issue. In the late spring he declared a limit on the amount of waste that would be accepted each year and then, afterward, announced that South Carolina would accept no more scintillation vials or absorbed liquid wastes. The vials are glass tubes containing a liquid compound

NASA—DOE—DOT—DOD—EPA—NIH—NIA—NIAID—NIAMDD—NCI—NTSB—NIGMS—NBS—USGS—FAA—AAAS—NSF—NAS—NSA—HEW—OMB—WHEW!—OSHA—NHLBI—NHI—NINCDS—NINDS—CAB

Crisis in the Alphabet Soup

In Washington, few things proliferate faster than initials. A particularly cumbersome example is the progression of the National Institute of Neurological Diseases and Stroke (NINDS) to the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS). The heart institute has gotten in its licks, too, as it proceeded, organ by organ, from the National Heart Institute (NHI) to the National Heart, Lung, and Blood Institute (NHLBI).

Now, the approval of the new Department of Education has created a new crisis for those—journalists, for example—to whom initials are dear. The Department of Energy has already cornered the market on "DOE". Should the Education Department become DOE2, or possibly DED, as one wag has suggested?

At the same time the Department of Health, Education, and Welfare, having lost Education, is transmogrifying from an easily recognizable—and pronounceable—HEW to DHHS, for Department of Health and Human Services. At first glance, Department of Health and Welfare would seem to be a much simpler and more manageable designation. But perhaps some astute soul in the department noticed that the most tempting abbreviation for this name would be HAW.—J.L.M.

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