

Price Increase in Molybdenum-99 to Ensure Reliable Supply

Executives at AECL/Nordion International, Inc., the sole supplier of molybdenum-99 in North America, recently announced a plan that they hope will ensure the reliable production of the radionuclide well into the next century. The \$140 million Nordion project includes building a backup reactor, Maple 2, that would be identical to the 10 megawatt reactor, Maple 1 which will be the main supplier of moly. Nordion currently produces moly in its NRU reactor, which is approaching its allowable 30 year lifespan and is scheduled to be shut down and decommissioned in the year 2000.

As of press time, Nordion was planning to implement a price increase of "40% or less" by this January, according to Iain Trevena, PhD, the vice president of isotope products at Nordion in Kanata, Ontario, Canada. The increase, however, is contingent upon Nordion receiving final approval for the reactor

facility from the Canadian government. Nordion's customers, Dupont Merck, Mallinckrodt and Amersham, will most likely be forced to pass on the price increase by raising the price of their $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ generators sold to medical users in the U.S. The amount that the three radiopharmaceutical companies will charge will be determined after they negotiate contracts with Nordion.

Industry analysts are speculating that the increase in the cost of generators shipped with ^{99}Mo could be in the 20% to 25% range for large generators and 8% to 10% range for smaller ones. They estimate that the cost of technetium—which is made from ^{99}Mo as part of a unit dose kit—might rise by 6% to 7%. For busy hospital nuclear medicine departments, this might mean a 3% increase in their pharmaceutical budgets. Up to a 7% increase in the pharmaceutical budget might be expected for smaller departments.

"The general reaction from our customers has been very supportive," said Trevena. William Ehmgig, vice president of professional affairs at Amersham which sells $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ generators, concurs that

Amersham is willing to accept the increase because the company favors Nordion's plans to build a new reactor facility. "Nordion is taking a big risk considering that its shareholders won't break even on their investment for at least 15 years," Ehmgig said. Although Nordion controls 80% of the worldwide market for ^{99}Mo , the product generates only \$50 million per year in sales.

Nordion officials had been anticipating a price increase for the past two years after they determined that the costs of the processing facility, waste disposal plant and decommissioning plants were higher than originally expected. Part of the increase also stems from Nordion's recent decision to build the Maple 2 back-up reactor. Trevena stresses, however, that building a back-up reactor concurrently with the rest of the reactor facility is less expensive than building it several years later. Moreover, the back-up reactor will ensure a reliable supply of ^{99}Mo in the event that Maple 1 is shut down during an emergency. Note: Newsline will run an in-depth update on the status of ^{99}Mo supply next month. ■

OVERHEAR

▲ Low level waste... "The NAS panel identified a key lesson...i.e., the process of developing information on a potential site of a low-level waste disposal facility should be accompanied, preferably from its initiation, by an independent, ongoing peer review."

—Paul W. Pomeroy, chairman of the NRC's advisory committee on Nuclear Waste, on the Ward Valley Report from the National Academy of Sciences

▲ And high level waste...The Environmental Protection Agency (EPA) health standard for the proposed high-level radioactive waste site at Yucca Mountain, NV, should be based on limiting risks to those who live and work near the site—not on "dose limits" meaning the amount of radiation a person might be exposed to from a site, says a new report. The stricter standard should be designed to protect the public from leaks, which might occur hundreds of thousands of years in the future.

—National Research Council Committee

▲ Using terahertz (T) waves—radiation that exists between the infrared and radio wave regions of the spec-

trum—scientists have begun to image structural and chemical compositions of ordinary objects such as the contents inside a sealed envelope and the fat distribution in a slice of meat.

—Science News

▲ The Senate Environment and Public Works Committee recently approved the nomination of Greta Dicus to be a commissioner for the NRC. If confirmed by the entire Senate, Dicus, who is the radiation control director at the Arkansas Department of Health, would fill one of three vacancies, restoring the number of members needed by the NRC for a quorum.

—Nuclear Energy Insight

▲ PET scans used for circulatory studies in patients with cardiovascular disease provided detail that was comparable to, or in some respects, better than that provided by invasive angiograms, according to a recent study. PET is also more cost effective at \$2200 per study compared to \$8000 to \$10,000 for coronary arteriography.

—Journal of the American Medical Association