

NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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May 5, 2000

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NRC DISPATCHES AUGMENTED INSPECTION TEAM TO REVIEW HAND RADIATION EXPOSURES AT MALLINCKRODT, INC.

The Nuclear Regulatory Commission has dispatched an Augmented Inspection Team (AIT) to review the circumstances surrounding possible radiation exposures above NRC limits to several workers at the Mallinckrodt, Inc. facility in Maryland Heights, Missouri.

The team is headed by a senior NRC manager and includes three senior NRC health physicists and one inspector from the State of Missouri's Department of Health. The inspection, which began May 4, will last about a week.

One possible overexposure to a worker's hand was reported to the NRC by the company on April 13. Mallinckrodt is a major supplier of radioactive drugs that are used in research and routine medical diagnosis and therapy.

The inspection team will gather information on radiation exposures to workers' hands that are believed to have occurred over the past several years. The potential overexposures involve both NRC-regulated radioactive material -- molybdenum-99 and technetium-99m -- and state-regulated radioactive material -- indium-111.

NRC inspectors have visited the Maryland Heights site several times following Mallinckrodts' notification of the potential for an employee to have received a high radiation dose to the index finger and thumb of the individual's left hand. Further investigation and a mockup of the original event resulted in an estimate that the maximum dose to the worker's index finger and thumb would be 2,000 rem.

Mallinckrodt has identified two work areas at its facility where workers may have received radiation exposures exceeding NRC limits because of their practices in handling radioactive materials. These radiation exposures received by workers in these areas are being reviewed by the company and by the NRC team.

NRC's annual exposure limit to the hand of an occupational worker is 50 rems. For comparison, the average person in the United States receives about 0.3 rems per year to the whole body from natural background radiation. A rem is a standard unit of measurement for radiation absorbed by the human body.

After the team inspection is completed, the inspectors will meet with company officials to

discuss their findings. This meeting will be open to public observation. The schedule and location of the meeting will be announced later. The NRC team will issue a written report which will be available to the public several weeks after the completion of the inspection.

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