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# NRC NEWS

**U.S. NUCLEAR REGULATORY COMMISSION**

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## **NRC PROPOSES AMENDING SKIN DOSE LIMIT FOR WORKERS AT NUCLEAR FACILITIES**

The Nuclear Regulatory Commission is proposing to amend its standards for protection against radiation. The proposed changes would revise the method for determining the amount of radiation to the skin that workers receive when conducting licensed activities.

The proposed rule, which would revise Part 20 of the Commission's regulations, is based on recent recommendations from the Congressionally chartered National Council on Radiation Protection and Measurements (NCRP Report No. 130 and Statement No. 9) and responds to the need to establish more risk-informed limits for dose from radioactive particles, sometimes known as "hot particles," and doses to very small areas of the skin. This approach is also consistent with the regulations of the Department of Energy.

Under the proposal, the dose to the skin would be averaged over the most highly exposed 10 square centimeters instead of being averaged over one square centimeter. This change is based on scientific studies that demonstrate that risks from doses to small areas of the skin are less than risks to larger areas from the same dose.

Current rules require frequent monitoring of workers to detect hot particles and small area exposures that have insignificant health implications. These conservative efforts to prevent small, insignificant skin doses result in higher whole-body doses with a higher risk than the avoided skin doses.

The health effects from small-area skin doses, such as reddening of the skin, that might occur from a hot particle exposure are considered by the NCRP to be very small as compared to the increased whole-body deep doses from monitoring and work inefficiencies. To avoid exceeding the current dose limit, protective clothing and cumbersome gloves may be used that result in workers being subjected to non-radiological hazards, such as heat stress and other injury consequences. Workers are also hampered by the excessive use of protective equipment and clothing, requiring them to spend more time completing a job in radiation areas. Additionally, small-area overexposures can result in licensee citations and the possibility that a worker might not be permitted to work in a radiation area for the balance of the year.

The rulemaking is designed to establish a uniform, risk-informed skin dose limit for all sources of shallow radiation exposures, including hot particles and small area skin contaminations. The rule would also lessen physical stress and reduce whole-body doses to workers by reducing the frequency of monitoring for hot particles. The net result is a substantial increase in worker safety and a cost-effective reduction in unnecessary regulatory burden with little to no impact on worker safety.

Interested persons are invited to submit comments within 75 days after publication of a Federal Register notice on this subject, expected shortly. Comments may be submitted to the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, ATTN: Rulemakings and Adjudications Staff. They can be delivered to 11555 Rockville Pike, Rockville, Maryland, between 7:30 a.m. and 4:15 p.m. on Federal workdays. Comments may also be submitted via the NRC's interactive rulemaking web site at <http://ruleforum.llnl.gov> .

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