N165. Instructions For Recording And Reporting Occupational Exposure Data

The Nuclear Regulatory Commission (NRC) has developed a set of guides which contain means of compliance with the updated 10CFR20 regulations. Guides which have been published to date include:

- · Air Sampling in the Workplace
- Radiation Protection Programs for Nuclear Power Plants
- Assessing External Radiation Doses from Airborne Radioactive Materials
- · Control of Access to High and Very High Radiation Areas in Nuclear Power Plants
- Instructions for Recording and Reporting Occupational Radiation Exposure Data
- Planned Special Exposures
- · Interpretation of Bioassay Measurements
- Criteria for Summation of Internal and External Doses
- Assessing Radiation Dose to the
- Embryo/Fetus
- · Appendix C to RG 10.8, Medical Applications Licensing Guide

A draft of revision 1 to RG 8.29, "Instructions on Health Risk from Exposure to Ionizing Radiation" is expected to be published in the summer of 1992.

The most significant change from the old 10CFR20 rule is the new occupational dose limits. Under the updated rule, the total effective dose equivalent is 50 mSv (5 rem). In the past, workers could receive up to 120 mSv (12 rem) whole body dose plus an additional 5 mSv (5 rem) in internal exposures. Essentially, the dose limit has dropped from 170 mSv (17 rem) to 50 mSv (5 rem) under the new rule. However, the impact of this revision should be slight since in 1990 no workers received doses in excess of 50 mSv (5 rem) and only 1.2% of workers received more than 20 mSv (2 rem).

NRC Form 5, which contains detailed dose information, is still required for individuals who are required to be monitored. Occupational dose reports must be made to the NRC for the following seven classes of licensees:

- · power reactors
- · radiographers
- fuel fabricators
- · high-level waste repositories
- · independent spent fuel storage installations
- · rad waste disposal facilities
- · manufacturers and distributors possessing specified quantities of radionuclides

The yearly report of occupational exposures, containing information from NRC Form 5, is to be provided to the exposed individual as well as to the NRC. The annual dose summary by work and job function has not been changed and is required annually. However, the annual statistical summary is no longer required.

Taken from "Instructions for Recording and Reporting Occupational Exposure Data," Charleen T. Raddatz, Nuclear Plant Journal, pp. 54 & 97, March-April 1992