DEPARTMENT OF VETERANS AFFAIRS
Clement J. Zablocki Medical Center
Milwaukee WI 53295–1000

December 3, 2001

In Reply Refer To: 695/00S

• Christopher Martin
U.S. Nuclear Regulatory Commission
Region III
801 Warrenville Rd.
Lisle, Illinois 60532-4351

RE: Additional Information Requested During NRC Inspection on November 16, 2001

It had been determined that the technologist in question most likely did not wear their extremity dosimeter at the location of maximum exposure, therefore the recorded doses were not recorded as required by 10 CFR 20.1201(c). The shallow dose equivalent (SDE,ME) for this employee has been calculated as allowed by 10 CFR 20.1201(c). The calculations that were performed are enclosed. The employee's annual exposure records have been updated to reflect the results of the calculations.

These calculations show that no occupational dose limits were exceeded.

If you have any questions regarding this information, please contact me at (414) 384-2000 extension 42631.

Daniel J. Miron
Radiation Safety Officer

Enclosure

Cc: VA National Health Physics Program, Little Rock, AR

Determination of Employee Radiation Exposure

Introduction

It has been determined through interviews and written statements that the SDE, ME for the employee in question was not from the location of maximum exposure as required by 10 CFR 20.1201(c). The following calculations were completed to determine the maximum SDE, ME for this employee.

Method

To calculate the maximum SDE, ME for the employee, we completed the following:

1. Developed a questionnaire to determine when, or if, the employee wore their extremity dosimeter at the location of maximum exposure.
2. Interviewed the employee to clarify some of the answers to the questionnaire.
3. Determined the time frame(s) that the employee wore their extremity dosimeter at the location of maximum exposure.
4. Determined the average ratio of SDE, ME/DDE in the time frame(s) noted.
5. Determined which months since August 1995 that the recorded SDE, ME < 0.8 x SDE,ME/DDE ratio.
6. Calculated the SDE, ME for each month noted above so that SDE, ME = DDE x ratio.

Results

The following annual results were obtained from the above procedure:

Average ratio of SDE,ME/DDE: 4.6

Months used in ratio: August, September, and October 1998

Year	Old SDE,ME (rem)	Current SDE,ME (rem)
2001	0.384	2.782
2000	0.344	2.963
1999	0.414	4.260
1998	1.330	2.055

Conclusion

The above results have been included in the employee's exposure records and a copy of the changes has been given to the employee.

Daniel J. Miron

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Radiation Safety Officer