Pt. 20
[45 FR 20493]
3/28/80

DEFENSE NUCLEAR AGENCY
ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE
BETHESDA, MARYLAND 20014

DOCKET NUMBER
PROPOSED RULE PR-20 (1)
(45 FR 20493)

SAF

000330

APR 17 1980

Secretary of the Commission
U.S. Nuclear Regulatory Commission
ATTN: Docketing and Service Branch
Washington, DC 20555

DOCKETED
USNRC
APR 22 1980
Office of the Secretary
Docketing & Service
Branch

Dear Sir:

The Federal Register Notice (45 FR 20453) concerning the Certification of Personnel Dosimetry Processors could have significant impact on the operations of our facilities (NRC licenses 19-08330-02, 19-08330-03, and R-84). The following comments are provided for your consideration.

Of the options suggested the "unspecified laboratory is preferred for the following reasons. It's operation would be free of the cyclic federal government budget and manpower constraints and hence would presumably be more responsive to industry needs, subject of course to normal competitive pressures. A major reason for this Q.A. program is to upgrade the quality of personnel dosimetry programs. Such independent laboratories would be free to pursue new avenues on their own initiative which might be outside the bounds of the basic mission of the organization. And hence not permissible to pursue in a government operation. Such a approach would not prevent NRC from specifically funding a lab, say one of the national labs, as a competitor in this market to ensure the quality of the program.

Regardless of the option selected a major concern is the credibility of the certifying lat Perhaps without justification, but the trial program appeared to suffer in this regard. The advantage to the "free market" approach suggested above is that presumably several organizations would result. This would allow a blind round robin Q. A. program among the certification labs to be run. This program could be managed to some extent by NRC but all results should be made public. A further feature to aid in the credibility would be provision for a processor to send one certifying labs' dosimeter to another for exposure in a "double blind" approach. This would allow processors to evaluate questionable results on their own, to the extent that they would be willing to pay for this service.

8006050 543

4/11/80

SAF
Secretary of the Commission

A significant concern could be that a certifying lab might be a "captive" organization. This can be avoided by requiring any NRC recognized certifying lab to not only participate in the round robin Q.A. program but also to service some minimum number of processors. This is not an unreasonable requirement in that interaction with a number of different users presumably is a necessary ingredient to operating a quality lab.

A separate item of concern is the reference in the notice to the use of dosimetry measurements in epidemiological studies. Although this certainly will continue to be done, it certainly is not a cost justifiable reason for supporting a Q.A. program. Given the past misuse and inappropriate use of personnel dosimetry data in epidemiology studies, which includes many factors other then dosimetry quality, it is not clear that the NRC should take a position which makes it appear that they are endorsing such use of this data.

The only rational on which NRC should mandate this Q.A. program is to ensure that the programs are capable of demonstrating compliance with the regulatory standards and provide an adequate measure of the effectiveness of any ALARA program. The latter point requires consistency, not necessarily accuracy. The former point in essence requires a "one sided" high degree of confidence (i.e., that the exposure is not underestimated). While advancing the state-of-the-art and increasing the effectiveness of the industry's dosimetry programs are admirable goals, these are quality issues that should be left to individuals licensees to decide. Specifically, the internal pressure within licensee's organizations not to overestimate exposures is very strong for many practical reasons. NRC does not need to regulate this. Consequently I see no reason to fail a program for overestimating exposures. The issue here is one of limited resources. Putting more of these resources in some other portion of the radiological safety program (e.g., training, staff, equipment, etc.) might well be a better investment then increasing the accuracy of measuring doses that, in the vast majority of cases, do not need to be measured at all.

SAF
Secretary of the Commission

As indicated in the annual NRC occupational exposure summaries, the vast majority of individual's monitored are done so for reasons other than NRC requirements. A very possible result of this rule is simply that these programs will be abolished, at least to the extent that the extra monitoring is done. I would suggest that the loss of this data is undesirable. A possible solution would be to stratify the requirement to participate in the Q.A. program. Participation stratification could be on the basis of range of doses tested, frequency, lesser stringency, etc.. Qualification for lesser participation could be based upon maximum staff doses, collective staff doses, average staff dose, combinations of this or some other mechanism. This would result in the achievement of better Q.A. for the large processors, the opportunity but not the requirement to participate for the small processors, and the ability to be more selective in the application of this rule on a rational basis.

Sincerely,

LESTER A. SLABACK, Jr.
Head, Radiation Safety Department