Comments on Proposed Changes to Radiation Protection Regulations

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Q1-1:

The DOE made this change in 2007 and the implementation was basically limited to terminology corrections in procedure and forms. Since other changes were made, the cost of correction and training was insignificant overall. This was the easiest change for the workforce to grasp as far as terminology changes.

Q1-2:

18 months since reaccreditation of dosimetry program may be needed beyond the changes.

Q1-3:

Yes

Q1-4:

Keep it

Q2-1:

Yes

Q2-2:

Due to the severity of other effects, cataracts does not rate. Cataracts are now easily fixed with minor outpatient surgery. The biggest effect could be the legal aspects of lawsuits from induced cataracts due to the clear epidemiology of the effect.

Q2-3:

There are many simple methodologies to reduce eye dose from most beta exposures, such as safety glasses or face shields. The difficulty is in reducing gamma exposure however, portable leaded glass panes on stands are used in medical applications. The difficulty I see is accurately measuring the eye dose if any reduction method is used. Typically, the eye dose is calculated from the primary dosimeter which is typically located outside the face shield or goggles. So while we may reduce the dose, having an accurate measurement of the reduction to use against the limit may prove difficult.

Q2-4:

See question Q2-3 above. Use of the primary dosimeter is accurate enough for most applications unless reduction techniques are used. This has not been an issue with the higher limits. If reduction techniques are used, then multiple dosimetry would be needed to assess the actual dose or a reduction factor generated for type of protection and dose corrected based on time wearing protection.

Q2-5:

See Q2-4. If reduction techniques are used, then multiple dosimetry would be needed to assess the actual dose or a reduction factor generated for type of protection and dose corrected based on time wearing protection.

Q2-6:

Yes there would be significant changes to operations including procedures, training, reduction method use and tracking, etc. However, my experience is that they will use whatever limit you give them. If you leave at 15, then they have no impetus to change. My opinion I s the change is the right thing to do with the clear epidemiology.

Q2-7:

They would follow suit.

Q3-1:

Typically no. I my experience, when a declaration is made, the worker is all about reducing the dose and most employers are also due to legal implications. Most of them are given assignments that minimize dose during the remainder of the pregnancy.

Q3-2:

No, since before declaration I have no basis to control. Only AFTER declaration.

Q3-3:

No real change in record keeping, just a different value.

Q3-4:

Yes, with actinides such as Pu and Am.

Q3-5:

No info

Q4-1:

I see this as using “administrative” limits imposed by the licensee. So, you would have varying levels of dose in which to exceed would require higher levels of approval and ALARA measures stipulated to control workers dose. This requires that the licensee develop levels, develop mechanism to evaluate and document administrative control level increases, and access control system to be able to have varying ACLs inputted. This would cause licensees to have a mechanism to rotate personnel. When working multiple facilities, either a worker will need to produce records, estimate dose for year, or licensee will need to input into REIRS upon termination. REIRS is not up to the standard to allow use in this regard. Form 4s are usually inputted and end of year. REIRS also is not useable from a licensee standpoint. Very cumbersome to get records and records always contain disclaimer that they may not be accurate. So, REIRS would need to be completely revamped and doses would need to be reported at termination instead of annually.

Q4-2:

"Licensees should maintain challenging numerical Administrative Control Levels that are below the regulatory limits in order to administratively control and help reduce individual and collective radiation dose. In general, efforts to reduce individual dose should not be allowed to cause a concurrent increase in collective dose. These control levels are multi-tiered with increasing levels of authority required to approve higher Administrative Control Levels." This allows them to have different levels, determined by licensee class, but holds them to the basis.

Q4-3:

I do not propose any measurement against lifetime. If you give it to them, they will use it. The only way, regardless of class of worker, is to require them to monitor and track dose yearly against an ACL and limit. This will seed the need for ALARA in all operations. If I know I don't have to do anything until I reach a certain level, then generally I won't.

Q4-4:

No, ACLs should be the same across the board. First, it would be difficult to manage multiple ACLs. Second, it give the licensee an overall basis to evaluate work groups for extra attention based on their performance against the ACL.

Q4-5:

This should allow them to sharpen their pencils and see where and why the dose is being spent and help identify problem areas for attention.

Q4-6:

I say do away with the lifetime idea. If I control on a yearly basis, I have no issues except for the unplanned doses.

Q4-7:

We would have to figure out how to do it. It has to fall on the workers! If I want to work two jobs, then I must ensure my dose is accurate at both licensees. It would be nearly impossible for licensees to coordinate this. In order to begin to do this, we would need a national database that all licensees and dosimetry provider report to in as close to real time as possible. Record dosimetry would need to be read on a very frequent basis in order to keep anywhere current.

Or the system would have to allow for the reporting of supplemental readings until the record dosimeter is read.

Q4-8:

No, keep it consistent across the board. Less confusing. Since your dose is a federal legal limit, keep it all the same. This is how we complicate things.

Q5-1:

I say English units first followed by SI units. Cost would be minimal.

Q5-2:

Again, keep consistent. Both units. If you are going to do it one place do it everywhere.

Q5-3:

Keep both. If only one, put in regulation. Simple.

Q6-1:

All should submit. Dose is dose. If I am to track against a limit, then it needs to be reported.

Q6-2:

In order to pull this off, you must have ONE database. Otherwise, you must place responsibility on worker.

Q6-3:

Yes

Q6-4:

Yes, especially if you plan on requiring ALL licensees to report. Some have no infrastructure to even start. But remember this option would extend the overall goal of accurate, timely data input for all.

Q6-5:

Could be a big impact especially to smaller firms that currently don't have to do much. I think the industry would come up with solutions that would make it timely and cost effective to implement.

From:	Kurtz, Jerry E
To:	RulemakingComments Resource
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See attached…..

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