

AF 31-2 -43
PDR

N o t e

via snail mail

to: Michael Weber, NMSS/DWM
Phyllis Sobel, NMSS/DWM
Cynthia Jones, NMSS/IMNS
Donald Cool, NMSS/IMNS
Cheryl Trottier, RES
Chip Cameron, OGC
Dennis Sollenberger, OSP

from: Charleen T. Raddatz

subject: Draft slides for our 2/28 meeting on Constraint

date: March 26, 1996

Here are the slides for our meeting. I have also included a preliminary summary of comments recieved as of last week. There have been a couple more inches since then that I have not yet summarized.

Options

- Go forward with constraint, and address public comments that are opposed
- Withdraw Constraint in response to comments

Go forward with constraint, addressing public comments

- Make clear in SOC that constraint is not needed for adequate protection
- Make clear in SOC that NRC licensees already achieving constraint levels
- Make clear in SOC that constraint is only to allow rescission of Subpart I
- Make effective upon final rescission
- Make a level 1 matter of compatibility

Changes to final Constraint

- Exempt Rn-220, Rn-222 and all daughters
- Do not require name and SSN of exposed member of public in report
- Exempt patient effluents
- Apply to offsite members of the public
- Provide more flexibility in demonstration of compliance

Withdraw Constraint in response to comments

- Acknowledge the weight of the comments that EPA has adequate evidence to support rescission
- Argue that the existing information meets the criteria of the Simpson Amendment
- Encourage EPA to go forward with rescission

Constraint Rule

Pros

- Reduces burden on licensees
- puts regulation of all radioactive effluent in NRC

Cons

- Not scientifically justifiable
- not risk-informed performance-based
- wastes NRC, state and licensee resources for switching over to new regulatory structure

Withdraw Constraint

Pros

- Technically correct
- EPA might rescind anyway (though very unlikely)

Cons

- Dual regulation
- Excessive burden on NRC and State licensees

Licensees	GenCorp AeroJet Kennecott Energy Colorado State University Chem-Nuclear Nuclear Fuel Services University of Missouri NIH USEC Kerr-McGee Sequoyah Fuels TVA UCI USEC NIH DuPont
Licensee Reps	ACNP Wyoming Mining Association National Mining Association NEI ACNP/SNM
States	State of Michigan Texas Natural Resource Conservation Commission NYS Dept. Of Environmental Conservation
Public	Walston Chubb Roger W. Granlund Douglas A. Johnson Mack Richard T.P. Barton, Ph.D. B. Geary Walbridge J. Powell
Environmental Groups	Environmental Coalition on Nuclear Power Committee to Bridge the Gap Nuclear Information and Resource Service

Basis for Rulemaking

Comment	lic	rep	st	pub	env	Action
EPA studies show that constraint is not needed	6	4	1	2		***
Costs cannot be justified	4		1	3		***
ALARA is adequate to protect the public	1			1		***
There is no justification for a single pathway limit	1	1				***
LN-T should not be applied at such low doses				2		***
10 mrem is insignificant relative to background variability	1					***
There is no justification for a 10-fold reduction in the limit for some licensees	2					***
Calling the constraint ALARA damages the ALARA philosophy	2	2	1	1		agree
This is a limit, and a limit is not needed to protect the public	3	1	3	2		disagree.
Very small doses might be beneficial	1					no basis
Should be a limit, and should be 5 mrem/y				1		disagree
10 mrem/y is not measureable				2		not true
Constraint is only guidance and therefore unenforceable.					1	not true
ALARA is only a recommendation and therefore unenforceable.					4	not true
Failure to provide for citizen lawsuits makes this unacceptable					2	no

*** NRC Staff agrees, but this would not be acceptable to EPA

Rule Provisions

Comment	lic	rep	st	pub	env	Action
Corrective actions should ensure ALARA not <10 mrem/y			1			***
Exempt Rn-220 and Rn-222 and daughters	1	1				ok, check w/ EPA
Do not require collection of name and SSN for exposed member of public	1					ok
Make it a level 1 matter of compatibility instead of level 2	1	2				ok
Constraint should not be effective until rescission is final		1				ok
Exempt Rn-222 and daughters	1	1				ok
Exempt patient effluents	1					ok
Do not apply to on site members of the public	2	2				ok, but not sure how
Make constraint apply to licensed and unlicensed sources, including NARM			1			ok
Exempt unlicensed sources	2	1				no
Exempt sealed containers, not just sealed sources	1					no
The rule should apply to all licensees including reactors		1				no
Exceeding 10 mrem/y must result in NOV					4	no
Extend public comment period					1	no
NRC or the State must perform confirmatory measurements					1	no

*** NRC Staff agrees, but this would not be acceptable to EPA

Demonstration of Compliance

Comment	lic	rep	st	pub	env	Action
Do not require any demonstration of compliance unless something changes		1				***
Provide more flexibility in demonstration of compliance add EPA guidance doc add actual measurements at receptor location add CAP88PC and other EPA approved software include list of max possession so that nothing else need be done include a list of average concentrations that require no further demonstration	3	1				ok
Demonstration of compliance is not as protective as EPA. No separate iodine limit Allows Appendix B which is inhalation pathway only.					1	This was also said at the Subpart I hearings. EPA may seek strengthening of our rule to support rescission.

*** NRC Staff agrees, but this would not be acceptable to EPA

SUMMARY OF COMMENTS ON PR-20
CONSTRAINT LEVEL FOR AIR EMISSIONS OF RADIONUCLIDES

#	Commenter	Comment	Resolution
1	GenCorp AeroJet	Change "these" to "the licensee's air" in §20.1101(d)	ok
		Change "established under §20.1101(c)" to "established under §20.1101(d)" in §20.2203(a)(2)(vi).	ok
		Will Comply and NCRP Commentary # 3 be acceptable	yes
2	Kennebec Energy	Supports rule and rescission if Rn-222 + daughters are exempted from rule	ok
		Provide flexibility in demonstration of compliance requirements	done
		Exclude unlicensed sources such as wind blown tailings near an operating U-mill	
3	Wyoming Mining Association	Supports rule and rescission if Rn-222 + daughters are exempted from rule	ok
		Provide flexibility in demonstration of compliance requirements	done
		Exclude unlicensed sources such as wind blown tailings near an operating U-mill	
4	John Stevens, Colorado State University	10 mrem/yr=1μR/hr and cannot be measured Costs will not be justifiable since populations living in regions with background doses several times higher show no adverse health effects	

#	Commenter	Comment	Resolution
5	State of Michigan, Dept. Of Public Health	No objection to our rule. Objects to rescission because it leaves a regulatory hole for NARM.	We said we covered licensed and unlicensed sources. That is why EPA went along with the rule.
6	Walston Chubb	LN-t makes no sense The first amendment prohibits government spreading lies to scare the public This is alarmist, unreasonable, impractical and prejudiced.	
7	Roger W. Granlund	Rescission is good Supplementary information given proves that rule is necessary. Proposed rule essentially revokes ALARA. Once a constraint is exceeded one time, it becomes a limit for that facility as exccedence is then a violation. Current ALARA provisions adequate to protect public. Proposed rule should be killed	
8	Douglas A. Johnson	10 has no technical merit. This is unreasonable and irrational.	

#	Commenter	Comment	Resolution
9	Chem-Nuclear	Rescission is good. But it has no positive effect if the same stupid requirement is imposed by NRC. There is no reduction in burden.	
10	ACNP (CA Cnpt)	<p>Simpson Amendment required EPA to make a finding re. NRC program. EPA did studies to support finding. Studies grossly overestimated dose and yet showed NRC program adequate. There is no basis to require NRC to impose an unneeded standard.</p> <p>NRC's rule is far worse than EPA's</p> <p>Limits to members of the public should be OFFSITE as stated in the CAA.</p> <p>If there is a constraint rule it should apply to all NRC licensees equally.</p> <p>The rule should not be a level 2 item of compatibility. Identical rule is bad enough. More stringent is unreasonable.</p>	

#	Commenter	Comment	Resolution
11	NFS	<p>Existing standards are adequate to protect the public even in the absence of Subpart I.</p> <p>There is no data to support the thesis that this rule is needed to control excessive effluent emissions.</p> <p>The constraint is a standard, not ALARA.</p> <p>For most licensees, airborne emissions dominate public doses offsite. This rule reduces the public dose limit for those licensees by a factor of 10.</p> <p>Dose from airborne emissions is not more hazardous than dose from other pathways. There is no reasonable justification for limiting this single pathway.</p>	
12	Mack Richard	<p>The current regulatory structure has been proven adequate to protect the public. This is burden with no benefit.</p> <p>There is no basis for applying LNT to doses as small as 10 mrem in a year per NCRP.</p> <p>Air concentrations that would result in these doses are unmeasurable by any reasonable means. Modeling programs including COMPLY grossly overestimate doses further lowering effective limits.</p> <p>The constraint is so a limit.</p> <p>The elimination of dual regulation is laudable, but just imposing some other stupid limit is no help.</p>	
13	T. P. Barton, Ph.D.	There is no health and safety reason for this change. Every competent HP knows that.	

#	Commenter	Comment	Resolution
14	U of Missouri, Columbia	<p>There is no rational or scientific reason for the imposition of these proposed requirements.</p> <p>The public dose limits adequately protect the public by definition.</p> <p>Occupational doses are historically well below limits. Public doses probably are also.</p> <p>COMPLY is conservative and overestimates dose.</p> <p>Very small doses may be beneficial so the limit could cause harm.</p>	
15	Kerr-McGee	<p>Exclude Radon 220 and 222 + daughters</p> <p>Make a matter of level 1 not level 2 compatibility. Identical ok, more stringent not ok.</p>	

#	Commenter	Comment	Resolution
16	Environmental Coalition on Nuclear Power	<p>Proposed not adequate. Withdraw proposed and refuse responsibility for NESHAPS.</p> <p>Extend public comment period for 60 additional days.</p> <p>Adopt all our comments as a part of the MOU.</p> <p>Constraint is only guidance. It is not enforceable.</p> <p>ALARA is only a recommendation.</p> <p>NOV is not required for >10.</p> <p>NRC nor the agreement States conduct confirmatory monitoring.</p> <p>Raising the \$/person rem value to 2k will result in worse protection.</p> <p>NRC fails to provide for citizen law suits.</p>	
17	Sequoyah Fuels	<p>Not a constraint, it is a limit.</p> <p>For some, this is a 10 fold reduction in the public dose limit. It unfairly penalizes those licensees for whom the inhalation pathway dominates public dose.</p> <p>There is no benefit to the proposed rule.</p> <p>ALARA should not be codified as numerical values.</p>	
18	TVA	The term "actual individual" is undefined and unclear.	

#	Commenter	Comment	Resolution
19	CTBTG	<p>NRC standards are 10 to 50 times less stringent than EPA.</p> <p>Risk from NRC standards is far too high.</p> <p>Constraint is not a limit, violation is not a violation.</p> <p>ALARA is only a goal.</p> <p>Demonstration of compliance is far less stringent than EPA.</p> <p>Since it is only in Part 20, it is not a licensing standard.</p> <p>The EA and FONSI should be redone.</p>	

#	Commenter	Comment	Resolution
20	UCI	<p>The findings of the 2 EPA studies satisfy the requirements of the Simpson Amendment and should be adequate to justify rescission without the imposition of the constraint.</p> <p>HPS endorsed NCRP position statement stating that current limits are sufficiently protective, compliance is verifiable, they are achievable, and can be applied without consideration of background. There is therefore no need for new, more stringent limits.</p> <p>10 mrem is such a small fraction of the variability of background as to be insignificant.</p> <p>MOP should be defined as outside facility</p> <p>It has already been demonstrated, using incredibly conservative calculations, that the current regulatory structure controls doses to MOPs to < 10/y.</p> <p>Provide default values using more realistic parameters than EPA (such as 1E-4 and 1E-6 for volatile and non volatile forms)</p> <p>Exempt sealed containers, not just sealed sources.</p> <p>Explicitly exempt patient effluents.</p> <p>RA neglects burden to collect data to reconfirm previously reported results.</p>	
21	National Mining Association	<p>NRC's existing regulatory framework should be adequate to support rescission.</p> <p>If EPA insists, exclude radon 222 and radon 220 and all daughters.</p> <p>Do not codify ALARA. This is a limit.</p>	

#	Commenter	Comment	Resolution
22	NEI	<p>Concur with intent of rule.</p> <p>Clarify that existing regulations adequately protect the public.</p> <p>Do not tie constraint to ALARA.</p> <p>Specific wording changes.</p> <p>Single pathway limit is inconsistent with ICRP, IAEA, NCRP and good sense.</p> <p>Make sure the rule is not effective until rescission.</p>	
23	B. Geary	<p>Constraint is not good enough. Limit is essential.</p> <p>Allow citizen suits.</p>	
24	NIRS	Reiterates CTBTG comments.	
25	Dooley Kiefer	<p>Should be a limit not a constraint.</p> <p>Standard must be enforceable.</p>	
26	USEC	Supports constraint in order to achieve rescission.	
27	ACNP/SNM	<p>Impose constraint offsite only.</p> <p>Must be level 1 not 2 compatibility.</p> <p>Do not require annual calculations if nothing has changed since last report.</p>	
28	Walbridge J. Powell	evidence does not support loosening of standard. Constraint should be a 5 mrem/y LIMIT.	

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29	NIH	<p>The rule inappropriately defines a member of the public as someone on site.</p> <p>Don't require licensees to report names and SSNs of members of the public as it may not always be available.</p> <p>Reporting requirements are inconsistent with Part 20 which requires reporting only when in excess of 100.</p> <p>Given the results of the EPA studies, there is no basis for the rule or justification for the costs.</p> <p>The reg analysis ignores the cost for the time to use COMPLY and time spent filling out forms. COMPLY is not user friendly and requires repeated entry of the same data.</p>	
30	DuPont	<p>Constraint is preferable to dual regulation, but is still unnecessary.</p> <p>Constraint is not ALARA.</p> <p>Congressional intervention is necessary instead of NRC promulgating unnecessary, burdensome standards.</p> <p>Reporting and corrective action requirements are not justifiable given current demonstrated very low risk. Rather, require initial demonstration with annual updates only when there are major changes.</p>	

#	Commenter	Comment	Resolution
31	NYS Dept. Of Environmental Conservation	<p>If we are just transferring the burden from EPA to NRC, then leave it alone. There is no benefit and it is a limit. The EPA should be able to rescind on the basis of existing evidence. Making a matter of compatibility will eat up state resources with no improvement in health and safety.</p> <p>States should have been provided an opportunity to participate at an earlier stage.</p> <p>This constraint is a limit. Put it in §20.1301 where it belongs.</p> <p>Rather than requiring corrective actions to get doses <10, require corrective actions to get doses ALARA even if that is > 10.</p> <p>NRC is not fooling anyone by calling this something other than a limit.</p> <p>The constraint is not ALARA. Reasonable never enters into the equation. This alters the ALARA philosophy in a negative way.</p>	