

DOCKET NUMBER
PROPOSED RULE **PR 71****(67FR21390)**DOCKETED
USNRC

130

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To: <cag@nrc.gov>
Date: Mon, Jul 29, 2002 4:54 PM
Subject: Fwd: nuclear regs

August 13, 2002 (1:09PM)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

In a message dated 7/29/2002 3:40:48 PM Central Standard Time,
 vharris@bsdtransit.org writes:

- > Comments to
- > US Department of Transportation (DOT)
- > Research and Special Programs Administration (RSPA)
- > 67 FR 83:21328-21388 4/30/2002
- > Docket No. RSPA-99-6283 (HM-230)
- > Hazardous Materials Regulations;
- > Compatibility with the Regulations of the International Atomic Energy
- > Agency
- >
- > Comments to US Nuclear Regulatory Commission (NRC) 10 CFR 71
- > 67 FR 21390-21484 4/30/2002
- > RIN 3150-AG71
- > Compatibility With IAEA Transportation Safety Standards (TS-R-1) and
- > Other Transportation Safety Amendments
- >
- > July 29, 2002
- >
- > The United States Department of Transportation (DOT) and Nuclear
- > Regulatory Commission (NRC) are proposing to weaken radioactive
- > transport regulations at a time of potentially massive increases in
- > nuclear waste shipments and the threats of deliberate terrorist attacks
- > on shipments and use of radioactive materials for "dirty bombs."
- >
- > Both agencies have stated that they will not address the issues that
- > have arisen since September 11, 2001 as part of this rulemaking despite
- > the obvious need. NRC is proposing 19 changes and DOT is proposing 10
- > changes, many of which should be fully evaluated in light of September
- > 11th and heightened security.
- >
- > Neither DOT nor NRC believes that the enormous expected increase in the
- > number of shipments needs to be considered in making these changes that
- > will inevitably affect those shipments and the thousands of communities
- > through which they will pass in the decades to come. In fact they are
- > satisfied to use twenty year old data to justify "updated" rule changes,
- > some of which reduce public safety. We argue that the real world
- > situation and updated data must be used to estimate the impacts of the
- > rule change. DOT and NRC should use more current data and future
- > projections including the expected increases in actual nuclear
- > shipments.
- >
- > Rather than address and improve the inadequacy of existing design
- > requirements for irradiated fuel containers in this rulemaking, the US
- > Nuclear Regulatory Commission is carrying out a separate Package
- > Performance Study, but that appears to be delayed, thus unable to
- > instruct this rulemaking. That study and real cask tests should be done
- > first and the results incorporated into this rulemaking.
- >

- > We oppose the weakening of existing standards, the failure to strengthen
- > existing deficiencies, and failure to fully evaluate the risks in light
- > of the enormous increases in various types of shipments that can be
- > expected in the near future.
- >
- > Political Concern:
- > We oppose the process that has evolved for the United States'
- > development of new radioactive transportation standards through the
- > United Nations International Atomic Energy Agency. The process is not
- > democratic. The documents are not easily or freely available. The
- > deliberations and negotiations are neither widely noticed nor easily
- > accessible to the general public.
- >
- > The International Atomic Energy Agency, chartered as a promoter of
- > nuclear industry technology around the world, developed the
- > recommendations without general public knowledge or input. The
- > regulations were transferred to other UN agencies, the International
- > Civil Aviation Organization and International Maritime Organization.
- > IAEA and these Organizations have agreements and routines for accepting
- > IAEA's rules into the UN Recommendations which member nations are
- > obliged to adopt for international regulatory "harmony."
- >
- > "Harmonization" (international conformity) is a poor excuse for
- > accepting the nuclear power industry's desires to weaken nuclear
- > transport regulations, yet this is the primary justification given in
- > both the NRC and DOT proposed rules for accepting changes that weaken
- > protections.
- >
- > Technical Concerns:
- > Old data, lack of data, reliance on ICRP, reliance on computer model
- > scenarios that may not be realistic to project doses, no calculations
- > for more than 350 radionuclides...
- >
- > Reliance is placed on unchallenged assumptions from the International
- > Commission on Radiological Protection (ICRP) on the risk of each of
- > hundreds of radionuclides.
- >
- > ICRP does not represent the full spectrum of scientific opinion on
- > radiation and health. Even though its most current risk estimates are
- > used in this rulemaking, they do not take into consideration important
- > information on the health impacts of radiation such as
- > A) synergism with other contaminants in the environment and
- > B) the bystander effect, in which cells that are near cells that are hit
- > but are not themselves hit by ionizing radiation exhibit effects of the
- > exposure. Other organizations are now formed to independently assess
- > various aspects of radiation and health, so ICRP can be questioned and
- > challenged.
- >
- > The realism of the exposure models used to justify certain exposure
- > scenarios is inadequate.
- >
- > The stated motive for changing the transportation regulations, including
- > adopting the Radioactivity Exemption Tables is to 1) facilitate nuclear
- > transportation and 2) harmonize international standards. Neither of
- > these objectives should supercede protecting public health and safety
- > nor do they justify reducing existing protections. The technically

- > significant motive for the adopting exemption values is to facilitate
- > radioactive "release" and "recycling" or dispersal of nuclear waste into
- > daily commerce and household items.
- > We oppose this action and the motive.
- >
- > These comments address some of the proposed changes. Silence should not
- > be interpreted as agreement with the unaddressed issues.
- >
- > We specifically oppose:
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- > 1-Legalizing the exemption of varying amounts of radionuclides from
- > transportation regulatory control (raising allowable exempt
- > concentrations for majority of radionuclides and allowing exempt
- > quantities of radioactive materials in transit, not permitted before)
- >
- > 2- Allowing certificate holders for Dual Purpose Containers (irradiated
- > fuel casks used for both storage and transport) to make design changes
- > without NRC approval or notification.
- >
- > 3-Removing the US requirement that plutonium be shipped in double
- > shelled containers.
- >
- > 4- Allowing greater contamination on surfaces of irradiated fuel and
- > high level radioactive waste containers (NRC says it will not adopt this
- > change and we support NRC in refusing to do so.)
- >
- > Detailed Concerns with Exempting Radionuclides from Transport
- > Regulations:
- >
- > We ask DOT to remove DOT Issue #1 and NRC to remove NRC Issue #2, the
- > Radioactivity/Radionuclide Exemption Tables, and accompanying change in
- > the definition of "radioactive materials" (part of Issue #9) from the
- > proposed rules on nuclear transportation regulations (10 CFR 71 and 49
- > CFR 171 et al).
- >
- > Due to daily reminders about the danger of radioactive "dirty bombs,"
- > the government has been supplying detection equipment to watch for and
- > prevent nuclear materials getting out of regulatory control. Absurdly,
- > the US DOT and NRC are proposing to EXEMPT some of every radionuclide,
- > including plutoniums, strontiums, cesiums, and hundreds of others, at
- > various amounts and concentrations, from regulatory control. It is
- > already enormously difficult and expensive to detect and find
- > radioactive materials that might be used for dirty bombs. What sense
- > does it make now to intentionally exempt shipments of radioactive wastes
- > and materials from the existing controls, tracking and regulations that
- > have been in place for decades? If the regulations are changed, various
- > levels of radioactive wastes and materials would be considered no longer
- > radioactive and free to be shipped as if uncontaminated.
- >
- > The Nuclear Regulatory Commission has admitted that the proposed
- > increases in exempt concentrations of radioactive materials will reduce
- > public health and safety.
- >
- > The Department of Transportation and Nuclear Regulatory Commission
- > should be tightening controls on radioactive materials, not taking steps
- > that will open the door to deliberately dispersing them into unregulated

- > commerce.
- >
- > If or when NRC and DOT adopt the Radioactivity Exemption Tables and
- > redefine "radioactive materials," they remove a significant barrier to
- > the purposeful release of radioactive materials, from nuclear power and
- > weapons production, into raw materials that can be used to make daily
- > items that come into intimate contact with unsuspecting members of the
- > public.
- >
- > The public opinion is quite clear that nuclear power and weapons wastes
- > should remain sequestered from the environment and the public for as
- > long as they remain hazardous.
- >
- > The assumptions and scenarios used to justify the adoption of the Exempt
- > Radioactivity (Radionuclide) Concentration Tables do not prove that
- > exempting radionuclides from regulatory control will have no effect or
- > an insignificant effect. Neither DOT nor NRC (nor the international
- > promoters) have developed and pursued actual transport exposure
- > scenarios for every radionuclide to justify exempt quantities and
- > concentrations, yet they plan to exempt hundreds of them at individually
- > selected levels.
- >
- > The DOT definition of "radioactive material" changes in the new rules.
- > It is now defined as "any material having a specific activity greater
- > than 70 Bq per gram (.002 microcurie per gram)." The current exempt
- > concentration for all radioactivity is 70 becquerels per gram per square
- > centimeter or 70 radioactive disintegrations (alpha or beta particles or
- > gamma rays) per second/gram. Currently there are no exempt quantities.
- > The new definition of "radioactive material" would change to "any
- > material containing radionuclides where both the activity concentration
- > and the total activity in the consignment exceed the values specified
- > in...[the Exemption Tables]." Since the tables enable much more
- > radioactivity to be exempt, more radioactive material can move
- > unregulated in commerce on our roads, rails, and other transport
- > pathways.
- >
- > DOT and NRC appear not to have carried out calculations for
- > transportation scenarios for over 350 of the radionuclides listed, yet
- > individual exempt concentration and quantity values are assigned each
- > radionuclide. DOT and NRC appear to be assuming, without technical
- > support for transportation scenarios, that exempting radionuclides poses
- > no risk to the public. DOT describes calculations done for 20 of the 382
- > radionuclides listed which come within a couple of orders of magnitude
- > to the numbers proposed in the European Union (Euratom 96/29) for
- > "recycling" radioactive waste into everyday consumer goods, which lead
- > the department to conclude that all the radioactive "recycling" numbers
- > can be used for transportation exemptions.
- >
- > For the minority of radionuclides whose exempt values decrease lower
- > than the existing 70 bq/gm, we could accept reducing the amount of
- > material that would be exempt from regulation. However, this does not
- > justify increasing the exempt levels for the majority of radionuclides
- > in the Exempt Concentration Table and accepting the Exempt Consignment
- > Table.
- >
- > The exempt levels in the new tables don't appear to reflect the

- > longevity in the environment and hazard to living creatures.
- >
- > The new regulations (TS-R-1) are being adopted to relax protections and
- > let more radioactive waste out into commerce unregulated. We ask that
- > DOT and NRC remove the Exemption Tables and redefinition of "radioactive
- > materials" to help prevent more and more radioactive waste from being
- > deregulated-treated as if not radioactive-and deliberately dispersed
- > into commercial items we come into contact with routinely.
- >
- > We also ask that NRC reject the proposal to allow plutonium to be
- > shipped in single shelled containers, when double shells have been
- > required for 30 years. Thousands of plutonium shipments are projected to
- > go to the WIPP dump in New Mexico. The original WIPP shipping
- > containers, TRUPACT-I were rejected because they only had single
- > containment. Current and proposed WIPP containers have double
- > containment. Reducing the required containment on plutonium shipments
- > increases public exposure risk and the release risk from containers. The
- > Environmental Evaluation Group at WIPP has documented that double
- > containers are significantly safer than single. We oppose any weakening
- > or indefensible substitutions in cask design requirements.
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- > We ask NRC to reject the provisions that would allow changes to be made
- > to irradiated fuel casks, dual purpose-storage and transport casks,
- > without notifying or getting permission from NRC. Some groups opposed
- > this provision when it was being adopted for storage casks (into Part 72
- > of the NRC regulations) and many of us continue to oppose it for the
- > transport aspect of the dual purpose cask regulations. The public has a
- > right to know if design changes are being made and NRC should evaluate
- > those changes.
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- > The listed organizations and individuals oppose the adoption of new
- > transport regulations that reduce the protection to the public from
- > transporting nuclear wastes.
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- > Sincerely,
- > Genevieve O'Hara and Dorothy Poor
- > Co-Chairs, St. Louis Section of Women's International League for Peace and
- > Freedom
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- > St. Louis, Mo. 63130
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