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Mail Stop: TWB-05-B01M,
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Washington, DC 20555-0001

Subject: **CORAR Comments to NRC on Potential 10CFR61 Revisions.**

Reference: **Federal Register Vol.76, No 39, February 28, 2011, Pages 10810-10811. Public Workshop to Discuss Low-Level Radioactive Waste Management.**

These comments are submitted on behalf of the Council on Radionuclides and Radiopharmaceuticals (CORAR)[1]. CORAR manufacturer members and their customers throughout the U.S. generate LLRW some of which cannot be disposed due to lack of access to suitable LLRW disposal sites. Updating 10CFR61 to accommodate current disposal conditions and practices could expedite disposal and improve LLRW management safety and security for thousands of licensees.

CORAR appreciates participating in the public DOE/NRC Workshop on 03/04/11, has provided the attached additional comments and would be glad to provide clarification or additional information.

Yours Sincerely,

L R Smith

Leonard R. Smith, CHP
Co-chair CORAR Committee on Manufacturing Quality and Safety.

Enclosure: CORAR COMMENTS TO THE NRC ON POTENTIAL 10CFR61 REVISIONS

1. CORAR members include the major manufacturers and distributors of radioactive chemicals, radioactive sources, radiopharmaceuticals and research radionuclides used in the U.S. for therapeutic and diagnostic medical applications and for industrial, environmental and biomedical research and quality control.

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CORAR COMMENTS TO THE NRC ON POTENTIAL 10CFR61 REVISIONS

1. 10CFR61.55 Concentration Limits for Class A, B and C LLRW are based on obsolete radwaste disposal site criteria and practices:
   a. Assumes 2m depth of cover for Class A LLRW whereas current practices use much greater depths.
   b. Assumes the most restrictive wet climate and local geology for LLRW disposal sites in use over 30 years ago instead of the much more protective conditions in arid Western LLRW disposal sites in current use.
   c. Based on highest concentration of radwaste in single containers whereas realistic exposure scenarios are characterized by exposure to average concentration in much larger volumes of radwaste.
   d. Assumes radwaste to be highly inhomogeneous whereas only a small percentage of LLRW is inhomogeneous. The small percentage of inhomogeneous radwaste could be reprocessed or provided with separate more protective disposal conditions.
   e. Assumes that stable Class A LLRW is disposed in trenches without concrete liners and covers contrary to current practices.
   f. Assumes the highest activity radwaste is disposed high in the trench instead of the current practice of placing the highest activity at the deepest level in the trench.
   g. Does not consider the current use of concrete vaults to provide additional stability.

2. NRC requires strict compatibility of Agreement State regulations with 10CFR61.55 instead of allowing the State to adopt specific requirements more suitable to the local conditions.

3. Concentration Limits should be recalculated for current site conditions and practices.

4. Concentration limits should be considered for each LLRW disposal site and calculated for a generic model LLRW disposal site characteristic of the arid commercial Western sites in current use and development. CORAR recommends determining concentration limits for a generic arid disposal site if this is more cost-effective than making detailed calculations for each Western site.

5. Even when material licensees have access for LLRW disposal another significant barrier is the artificially high cost of disposal. This is particularly problematic for the biomedical community. Potential changes to 10CFR61 should be carefully assessed and structured to ensure that LLRW disposal costs are kept ALARA for institutional LLRW generators. This is necessary to avoid the unintended consequences of generators continuing long-term onsite storage of LLRW or abandoning biomedical research using radioactive materials that is critically beneficial to healthcare in the U.S..

6. If the NRC does decide to make significant changes to 10CFR61 this would be a good time to consider aligning the radwaste classification system with that of the IAEA. We need an Intermediate -Level radwaste category to accommodate GTCC radwaste and other radwaste forms that are considered unsuitable for shallow land or geologic disposal. There is also great value to material licensees in establishing a Very Low-Level Radioactive Waste category that can be safely disposed in RECRA disposal facilities that have been qualified by the NRC for this purpose. It has long been clear that radwaste generators need an Exemption -Level for slightly contaminated waste that has essentially no radiological risks associated with disposal.