

Rulemaking Comments

From: tom foust [tom_foust@archerconstructioninc.com]
Sent: Wednesday, May 07, 2008 1:57 AM
To: Rulemaking Comments
Subject: RIN3150-AH45

May 7, 2008 (9:54am)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

To whom it may concern;

Im commenting on the proposed rule changes for Decommissioning Planning/Residual Radioactivity.

Based on past NRC experience, significant concentrations or quantities of undetected and unmonitored contamination, caused primarily by subsurface migration or ground water, has been a major contributor to a site becoming a legacy site and a potential radiological hazard.

That being said I feel residual radioactivity is a problem that should be addressed promptly for the following reasons:

- As time passes residual radioactivity can spread vertically and laterally driven by downward percolating rainfall and snow melt increasing the volume of materials requiring excavation. It can worsen over time without the addition of more radioactive material.
- As more time passes institutional memory regarding the location and extent of the residual radioactivity can be lost.

Licensees should be compelled to conduct thorough subsurface investigations of their sites that include drilling and should residual radioactivity be found should be compelled to remediate or otherwise address it promptly.

Monetary obligations should not be a viable reason to leave this contamination for future generations to deal with. The contamination should be removed if it doesn't pose a greater safety risk than leaving it.

- Disposal should be as follows;
 - Once excavated the contaminated materials must be placed somewhere for permanent disposal. The Commission should take immediate action to insure adequate disposal capacity. Disposal capacity in the United States is very limited at this time.
 - This action should include allowing the use of uranium mill tailings sites for disposal of bulk quantities of non-11(e).2 materials contaminated with source, special nuclear, transuranic and 11(e).1 (reactor) byproduct materials.
- Characterization of contamination.
 - Accuracy in defining the lateral and vertical extent of the residual radioactivity prior to excavation
 - Often additional material is found that is not apparent from drill hole data that has to be excavated causing changes in the excavation to be made when it reaches the lower defined depths.
 - This often requires additional benching and removal of surface infrastructure that was not originally performed when the excavation was first dug and is more difficult to do when the planned excavation is at the lower limits of the initial plan.
 - In addition to that it makes planning extremely difficult at best.
- Distinguishing residual radioactivity from background at uranium recovery sites.
 - Natural uranium, thorium-230 and radium-226 are a part of the natural environment.
 - When excavating residual radioactivity at uranium recovery sites background radiation must be distinguished from residual radioactivity which is difficult and time consuming.
- Excavation problems.
 - Excavations to remove residual radioactivity are not conventional excavations and are far more difficult, time consuming and costly because:
 - The excavation is a restricted area.
 - The equipment cannot enter and leave as needed but must be released for unrestricted use when leaving the area.
 - This makes repair difficult.

- The equipment must either be released for unrestricted use prior to repair or repaired in the restricted area meaning the mechanics must be radiation safety trained, their equipment must be released for unrestricted use upon completion of the job and prior to leaving the restricted area and the mechanics must monitor as well.
- Excavation workers must be bioassayed before starting work, during operations and upon completion of the job.
- Air sampling (high volume air sampling and individual breathing zone sampling) must be done.
- Excavation workers generally must wear dosimeters.
- Industrial safety concerns.
 - Often the industrial hazards (normal hazards associated with operation of heavy equipment) associated with excavating contaminated materials exceeds the hazards associated with the materials themselves.
- It is often difficult to distinguish contaminated materials from material with high concentrations of naturally occurring radionuclides.
- Problems regarding bioassaying, dosimetry and training are exacerbated by high turnover rates in the construction/excavation field. This makes for a constant stream of pre and post job bioassays, and the need to conduct radiation safety training sessions often to train replacement workers.
 - The high turnover rate is due to:
 - Competition for workers from oil and gas related industries.
 - A severe countrywide drug abuse problem makes it difficult to find workers that can pass our stringent standards of pre-employment and a 50 percent weekly random drug test pool of our entire workforce.
- Archer Construction Inc. is an excavation contractor with substantial experience in excavating residual radioactivity having excavated over 220,000 yards of the material for a uranium recovery licensee in 2006 and 2007. We saw this licensee take an extremely proactive approach in addressing the residual radioactivity at its site and witnessed firsthand how these problems need to be dealt with.

Thanks! Tom

Email: tom_foust@archerconstructioninc.com

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Message-ID: <000001c8b007\$2e9bc800\$8bd35800\$@com>

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