



Illinois Emergency Management Agency

Division of Nuclear Safety

Pat Quinn, Governor

Joseph Klingner, Interim Director

October 7, 2010

Mark Satorius  
Regional Administrator  
US NRC Region III  
2443 Warrenville Road  
Suite 210  
Lisle, IL 60532-4352

Dear Mr.Satorius:

Many communities in Northern Illinois draw their municipal water from deep aquifers which contain naturally occurring radium. In order to meet US EPA standards for radium in drinking water, these municipalities employ a variety of processing techniques some of which have a waste stream that is discharged to the sanitary sewer. Examples of these systems are hydrous manganese oxide (HMO) and reverse osmosis (RO). As a result of these EPA approved radium removal systems discharging their backwash into the sanitary sewer, the finished sewage treatment sludge contains elevated concentrations of radium (reaching as high as 139 pCi/g for combined Ra228 and Ra226). The method preferred by most sewage treatment plant operators for disposing of the radium contaminated sludges is through land application as an agricultural fertilizer.

The Illinois Emergency Management Agency, Division of Nuclear Safety has been working to establish a rule that would provide an exemption from radioactive material licensing for municipalities producing water treatment residuals and sewage treatment sludges containing elevated concentrations of radium. In addition to exempting municipalities from licensing, the rule attempts to limit the level of radium contamination that is allowed to be built up on individual parcels of privately owned farmland. This rulemaking has met with significant resistance from municipalities and sewage treatment plant operators. The complete rulemaking along with transcripts from 2 public hearings and responses to oral and written comments received are available at the Agency's website <http://www.state.il.us/iema/legal/emergency.htm>.

Since this is a radioactive waste disposal issue that could involve landfill disposal of sludges and filter media and interstate transport of radioactive materials in sludge or filter media, destined for disposal at non-licensed subtitle C or D facilities in neighboring states, we believe your agency may be interested in this rulemaking.

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The Agency is hosting a public meeting on Wednesday, October 27, 2010, on the campus of Illinois Valley Community College, 815 North Orlando Smith Avenue, Room C316, Oglesby, IL from 9:00 a.m. to 12:00 p.m. and 1:00 to 4:00 p.m. This hearing will afford you the opportunity to listen to the concerns and opinions of the regulated community and to provide your views on the appropriateness of discharging backwash from these radium removal systems to the sanitary sewer and whether sewage treatment sludges with radium concentrations ranging from 5 to 139 pCi/g should be land applied as agricultural fertilizer.

Any questions you have regarding the rulemaking or participating in the upcoming public hearing should be directed to Michael Klebe at (217) 785- 9986 or [Michael.Klebe@illinois.gov](mailto:Michael.Klebe@illinois.gov). Thank you in advance for your participation.

Sincerely,

A handwritten signature in cursive script that reads "Gary W. McCandless".

Gary W. McCandless, Chief  
Bureau of Environmental Safety