

Field and Land Application Reporting Form

32 Ill. Adm. Code Section 330.40(d) - Radium Treatment Residuals



Division of Nuclear Safety

1301 Knotts St.
Springfield, IL 62703

Fax: 217-786-0146
www.illinois.gov/iema

If field has been previously reported to IEMA, complete only sections 1, 2, 4, and 5.

1. **Facility Name:** _____ **IEPA ID #** _____
 CWS POTW Applicator Other _____

2. Site Description and Location

County Name		Tax Parcel ID Number (PIN)*	
Section Number		Township (Number and Direction)	
Tillable Acres		Range (Number and Direction)	
* IEMA is moving to tracking fields by Tax Parcel ID rather than by a user-specified 'field name'. If this field has already been reported to IEMA, please list the previously reported 'Field Name' (for example, "Bremmer-5" or "KA-98"):			

3. Site Soil Characteristics and Landowner Acknowledgment *(Section 3 only required for new fields)*

- Does the site meet Section 330.40(d) pH, clay, and organic matter requirements? Yes No
- If a new field that has not been previously reported to IEMA, record the background radium soil concentrations and attach laboratory results:

Radium-226		+ / -		Radium-228		+ / -	
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INFORMATIONAL NOTICE TO LANDOWNERS: *(Landowner must sign and date)*

The Illinois Environmental Protection Agency, as well as the U.S. Environmental Protection Agency, requires the biosolids you are receiving to be monitored for trace metals, organic and inorganic chemicals as well as pathogens. In addition, the Illinois Emergency Management Agency (IEMA) requires the monitoring of radium pursuant to 32 Illinois Administrative Code 330.40(d). Radium is naturally present in soil and groundwater. When removed from drinking water and land-applied, these biosolids could elevate the radium content in the soil above natural levels.

IEMA, as the regulatory agency for ionizing radiation, requires that land-applied biosolids be monitored for radium including the cumulative amount of radium deposited on agricultural fields. Fields that approach the regulatory limit of 3.0 pCi/g are required to utilize alternative sources of fertilizer (i.e., biosolids without elevated radium from drinking water). The additional monitoring and land application provisions of Section 330.40(d) ensure that the public is protected from significant health, environmental, and agricultural impacts.

In an effort to inform the public, this form serves as an acknowledgement of awareness by the landowner, or authorized agent of the landowner, that biosolids applied to field(s) for beneficial nutrient purposes contain radium. For further information about radium, you may contact IEMA at 217-782-1322.

I hereby acknowledge my awareness of the above conditions resulting from land application of treatment residuals on my property.

AUTHORIZED SIGNATURE OF LANDOWNER OR THEIR DESIGNEE

PRINTED NAME

DATE

4. Land Applications Applied to this parcel of land during 2014. *Type or print legibly. Use additional sheets if necessary.*

Date(s) of Land Application	Dry Tons Applied	Application Rate (Dry Tons / Acre)	Acres Utilized	Radium-226 Concentration (pCi/g)	Radium-228 Concentration (pCi/g)

5. I certify the information provided above is accurate,

Signature: _____ Date: _____ Title: _____

Printed Name of Contact Person: _____ Phone Number: _____

Instructions for Completing the Land Application Reporting Form

*A commercial applicator may fill out and submit this form on your behalf.

1. Facility Name and IEPA ID Number (THIS SECTION IS ALWAYS REQUIRED)

1. **Facility Name** – This is the name of the drinking water or wastewater facility generating the treatment residuals and utilizing the application site.

2. Site Description and Location (THIS SECTION IS ALWAYS REQUIRED)

1. **County and Section Number** – List the county and section in which the land application site lies.
2. **Tillable Acres** - Enter the number of acres which are available for land application (not forest land or waterways) AND are eligible for land application under 330.40(d) (meet pH, OM, clay content, and other requirements).
4. **Tax Parcel ID Number** – Obtain this number from your tax bill or the county clerk's office. Some fields being utilized for land application are a combination of several tax parcel ID numbers. Use a separate form for each tax parcel.
3. **Township (Number and Direction)** - Record the township number and direction. Township numbers are a number between 1 and 46, followed by North or South (example, 35 N). If you cannot locate this information, consult the county plat map or utilize this Illinois State Geological Survey web resource: <http://isgs.illinois.edu/?q=plss>
5. **Range (Number and Direction)** – Record the range number and direction. Range numbers are a number between 1 and 15, followed by East or West (for example, 11E). If you cannot locate this information, consult the county plat map or utilize this Illinois State Geological Survey web resource: <http://isgs.illinois.edu/?q=plss>

3. Site Soil Characteristics and Landowner Acknowledgment (REQUIRED WHEN REPORTING A NEW FIELD TO IEMA)

1. **pH, Clay, and Organic Matter Requirements** – The land application site must have soil characteristics meeting the following minimum parameters: **pH** - average pH greater than 6.0 (not applicable if applying lime), **Clay content** - at least a 6" soil horizon containing at least 18% clay, and **Organic Matter** - at least a 6" soil horizon containing at least 12 tons/acre organic matter. Both clay and organic matter soil layers must be within the first five feet of the soil profile and reside above bedrock and the water table.
2. **Background Radium Samples** – Soil analysis for radium concentration is only required once – when a field is first reported to IEMA. A single, composite sample must be analyzed for radium-226 and radium-228. Specific criteria for sample collection are contained in the Implementation Guidance Document. The laboratory results must accompany this form, be reported in picocuries per gram and on a dry weight basis.
3. **Informational Notice to Landowners** - When registering a new field with IEMA, have the landowner or their designee sign the acknowledgement. Print their name and date. A signature is not required every time the field is utilized, but must be updated with changes in ownership.

4. Land Applications Applied to This Parcel (REQUIRED WHEN REPORTING LAND APPLICATIONS)

NOTE: IEMA recognizes some fields being utilized for land application are a combination of several tax parcel ID numbers. Due to changes in ownership, land applicators, and land use, arbitrary field names are no longer acceptable. In the instance of land applying to several tax parcel ID numbers at once, report each on a separate form. Based on the application rate used, report the biosolids applied to each tax parcel ID number.

1. **Date(s) of Land Application** – Specify date or date range during which biosolids were land applied to this site.
2. **Dry Tons Applied** – Based upon the average moisture content of the biosolids applied, determine and report the dry tons applied.
3. **Application Rate (Dry Tons per Acre)** – Enter the dry tons applied per acre. If reported as gallons applied per acre, also include the percent solids.
4. **Acres Utilized** – Enter the number of acres utilized in this application.
5. **Radium-226 Concentration** – 32 IAC 330.40(d) requires that the concentration of radium-226 be known prior to land applying. Attach lab results and report in picocuries per gram (pCi/g) on a dry weight basis.
6. **Radium-228 Concentration** - 32 IAC 330.40(d) requires that the concentration of radium-228 be known prior to land applying. Attach lab results and report in picocuries per gram (pCi/g) on a dry weight basis.

Submitting the Form

Mail or email the completed Treatment Residual Reporting Form, including any laboratory radium results to:

Illinois Emergency Management Agency
Attn: Radium Residuals Program, BRS-EC
1301 Knotts St.; Springfield, IL 62703

Questions and/or completed forms may be emailed to EMA.RadiumResiduals@illinois.gov.
Contact Gary Forsee at (217) 782-1322 or Cheryl Head at (217) 786 6372.