



**Land Reclamation Division  
Memorandum No. 2025-03**

To: All Coal Operators

From: Daniel W. Barkley, Supervisor  
Land Reclamation Division

Date: November 4, 2025

Re: New Groundwater Monitoring Requirements

The Department has recently become aware of new requirements that the Illinois Environmental Protection Agency (IEPA) will begin imposing on mine sites for the establishment of background, routine, and post-reclamation groundwater sampling.

Please review the following requirements and update your groundwater monitoring plans accordingly:

- 1) Background must be established prior to mining activities and must consist of eight (8) samples collected within a twelve (12) month period. This equates to a collection rate of 1 sample every 6.5 weeks.
  - a. The option to collect background on a monthly basis remains.
  - b. As a reminder, LRD requires a determination of seasonality, not just quality and quantity data.
  - c. Sampling must be conducted for the IEPA Parameter List A below.
  - d. Data should be submitted to satisfy LRD requirements quarterly, and to IEPA as directed.
- 2) Groundwater monitoring data must be collected and reported for **totals**.
- 3) Groundwater wells associated with coal refuse disposal, coal storage areas, CCW disposal areas, and/or any sedimentation basins collecting runoff from such areas must be sampled quarterly for the IEPA Parameter List A below.
- 4) Routine monitoring for groundwater wells not included in Item No. 3 above shall be conducted on a quarterly basis for the IEPA Parameter List B below.
- 5) Post-reclamation groundwater monitoring is required to be collected at a rate of eight (8) samples over a twelve (12) month period.

- a. It is recommended that this sampling be conducted prior to any bond release on lands that involve groundwater monitoring wells.
  - b. Sampling must be conducted for the IEPA Parameter List A below.
  - c. Data should be submitted to satisfy LRD requirements quarterly, and to IEPA as directed.
- 6) The IEPA will no longer dictate a statistical method to Mine Operators. Any method chosen must comply with the March 2009 Unified Guidance document. Please refer to 35 Ill. Adm. Code 620.510(b)(3) for additional information on the Unified Guidance document OR please contact the IEPA's Bureau of Water Groundwater Section.
- 7) The IEPA will require a separate submittal of groundwater monitoring reports, which must include laboratory data sheets, chain of custody forms, all sampling and laboratory documentation, etc. Please see 35 Ill. Adm. Code 620.510(c) for additional information OR please contact the IEPA's Bureau of Water Groundwater Section. **These reports are only requirements of the IEPA, not by the LRD, and therefore should not be submitted to the office with quarterly reporting.**

**IEPA Parameter List – A**

Aluminum	Fluoride	Sulfate
Antimony	Iron (dissolved)	Thallium
Arsenic	Iron (total)	Total Dissolved Solids
Barium	Lead	Vanadium
Beryllium	Manganese (dissolved)	Zinc
Boron	Manganese (total)	pH (field)
Cadmium	Mercury	Acidity
Chloride	Molybdenum	Alkalinity
Chromium	Nickel	Hardness
Cobalt	Phenols	Static Water Elevation
Copper	Selenium	
Cyanide	Silver	

**IEPA Parameter List – B**

Chloride	Total Dissolved Solids
Iron (dissolved)	Hardness
Iron (total)	Acidity
Manganese (dissolved)	Alkalinity
Manganese (total)	pH (field)
Sulfate	Static Water Elevation