



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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IL ELAP Update to Accredited Labs: August 19, 2024

This note is intended to provide an update to all Illinois (Primary) labs accredited by the Illinois Environmental Laboratory Accreditation Program (IL ELAP).

1. 2024 and 2025 On-Site Assessment and IL ELAP Updates....

- We have hired Landon Pratt as a second Laboratory Quality Specialist 1, he is a Chemist that previously worked for Archer Daniel Midland as an Instrument Supervisor. He will take the TNI Basic Assessor's course in September. He is working on learning the methods with our IEPA Laboratory.
- Currently, the new On-Site Schedule for 2025 is being reviewed and updated. I hope to contact the laboratories that will have January, February and March assessments soon.

2. Adding new methods to your laboratory's scope:

- IEPA LAU will work with your laboratory to get new methods requiring on-site assessments scheduled as soon as possible. (Any new technologies that have not been assessed previously require an on-site assessment).
- IEPA LAU requires the following items submitted before a date can even be discussed:
 - i. SOP for the new method
 - ii. MDL's
 - iii. Analysts IDOCs and continuing DOCs if applicable
 - iv. Data packet/test report examples
 - v. Two passing PTs (per 2016 TNI Standards, passing includes being 7 days apart from closing of one to opening of the second).

3. IEPA LAU is hiring:

- Our unit is in the process of hiring a third new assessor. The title on the State of Illinois Job site is Laboratory Quality Specialist 1 (LQS 1). If you know someone in the Springfield area or that would like to live in the Springfield area, please share the information about the position.
- More information about the position and benefits the State of Illinois offers can be provided if warranted.

4. Going Digital/Paperless

- Many laboratories are trying to go paperless. During a recent TNI Conference we listened to some assessors and accreditors explain what is needed.
- If you scan a document and save it with the data, the original is no longer needed. The key to this is that the scan is legible and clear. This can archive data better than the original, one example is using thermal printed data...eventually the color will fade on the original.
- When scanning for electronic records for digital documentation;

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
115 S. LaSalle Street, Suite 2203, Chicago, IL 60603
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000

595 S. State Street, Elgin, IL 60123 (847) 608-3131
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

- i. Records shall be legible,
- ii. Records shall be stored in a way that minimizes deterioration and prevents loss,
- iii. Records stored in an electronic data base shall be backed up and,
- iv. Documentation needs to be **ALCOA+** which is Attributable, legible, contemporaneous, original, accurate, complete, consistent, enduring, and available.

- Electronic documentation needs to have audit trails or track changes enabled.

5. Most Common Nonconformities seen on assessments.

- Using portions of one method and mixing with another similar method. This is not allowed, even if more stringent requirements are being used.
- Clear documentation of non-accredited analytes/methods.
- Not enough standard concentration levels for the calibration curve.
- Not documenting pH of samples at sample receiving.
- Laboratories reporting data below the lowest calibration standard.

6. Measurement Traceability

Suitable ways to obtain traceability of measurement results. Accredited laboratories can achieve traceability by using certified reference materials obtained from competent providers accredited to ISO 17034 standards, calibrations to the SI units (such as for NIST-traceable weight in grams and temperature in Celsius / Kelvin degrees), and standardizations of secondary standards with primary standards. Additionally, the TNI standard related to measurement traceability is V1, M2, 5.6.

7. Methylene Chloride ban (Dichloromethane)

- New USEPA requirements will be much more stringent with initial exposure monitoring listed below. These requirements are to be met within 360 days after rule publication (May 5th 2025). Please take some time to read the below document.
<https://www.epa.gov/system/files/documents/2024-07/mecl-compliance-guide.pdf>
- IEPA LAU is working with US EPA to get more clear answers on monitoring and where to report the air monitoring results.
- The NELAC Institute is sending a letter to US EPA requesting the exclusion of Environmental Laboratories. Many of the US EPA methods are prescriptive using Methylene Chloride as the only option for the solvent.
- Figure 1 below shows a chart regarding the implemented monitoring for laboratories.
- IEPA LAU has contacted MethyleneChlorideTSCA@epa.gov for further information on this upcoming monitoring requirement and we will relay what information we receive back to our affected laboratories. Further information on who to contact can be found in the USEPA guidance document <https://www.epa.gov/system/files/documents/2024-07/mecl-compliance-guide.pdf>.

Figure 1 NEW EPA TSCA REQUIREMENTS

Table 3: Periodic Monitoring Requirements Based on Initial Exposure Monitoring Results ^a

Air Concentration Condition	Periodic Monitoring Requirement
The initial exposure monitoring concentration is below the ECEL action level and at or below the EPA STEL. ¹⁷ (concentration < 1 ppm, 8-hr TWA; AND concentration ≤ 16 ppm, 15-min TWA)	ECEL and EPA STEL periodic monitoring at least once every 5 years.
The initial exposure monitoring concentration is below the ECEL action level and above the EPA STEL. (concentration < 1 ppm, 8-hr TWA; AND concentration > 16 ppm, 15-min TWA)	ECEL periodic monitoring at least once every 5 years AND EPA STEL periodic monitoring required every 3 months.
The initial exposure monitoring concentration is at or above the ECEL action level and at or below the ECEL; and at or below the EPA STEL. (1 ppm, 8-hr TWA ≤ concentration ≤ 2 ppm, 8-hr TWA; AND concentration ≤ 16 ppm, 15-min TWA)	ECEL monitoring every 6 months.
The initial exposure monitoring concentration is at or above the ECEL action level and at or below the ECEL; and above the EPA STEL. (1 ppm, 8-hr TWA ≤ concentration ≤ 2 ppm, 8-hr TWA; AND concentration > 16 ppm, 15-min TWA)	ECEL periodic monitoring every 6 months AND EPA STEL periodic monitoring every 3 months.
The initial exposure monitoring concentration is above the ECEL and below, at, or above the EPA STEL. (concentration > 2 ppm, 8-hr TWA, regardless of monitored concentration relative to 16 ppm, 15-min TWA)	ECEL periodic monitoring every 3 months AND EPA STEL periodic monitoring every 3 months.

* Initial ECEL and EPA STEL monitoring must be repeated at least every 5 years to reestablish current exposure conditions and a new baseline to determine monitoring frequency.

^a Additional scenarios in which monitoring may be required are discussed in ["Additional Monitoring"](#), below.

It was great to see some of our laboratories represented at the 2024 Environmental Measurement Symposium last week. Thank you for coming up to visit with us.

Please feel free to take the anonymous survey to let us know how we are doing:

<https://www.surveymonkey.com/r/WWDDHLM>

IL ELAP Staff

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Open Position	Laboratory Quality Specialist 1		

Please recommend any topics for our Laboratory Communication Newsletter. Chances are if you have a question about something, someone else does, too.

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