

COMMONWEALTH OF KENTUCKY

Energy and Environment Cabinet

2021

Wastewater Laboratory Certification Program
In Accordance with KRS 224.10-670 and 401 KAR Chapter 5:320



THIS CERTIFIES THAT

Environmental Monitoring, Inc.
5730 Industrial Park Rd
Norton , VA 24273
Laboratory ID Number: KY98012



The above laboratory has complied with Kentucky Administrative Regulation 401 KAR 5:320, Wastewater Laboratory Certification Program, for the analyses of wastewater samples, as specified in 33 U.S.C. 1342, for the method-analyte pairs specified on the attached certification list.

Effective From: January 1, 2021

To: December 31, 2021

Kevin Stewart

Certification Program Manager

Signed by: Kevin Stewart

Environmental Monitoring, Inc.
98012

Effective: January 1, 2021

| KY Category | CAS # | Analyte | Status | Reference Method | Method Code for PT Reporting | MRL | MRL Units |
|-----------------------------|------------|---|-----------|--------------------------------|------------------------------|-----|-----------------|
| Field | 7782-50-5 | Chlorine, Total Residual | Interim | HACH 8167 | 60003807 | 0.1 | mg/L |
| Field | | Oxygen, Dissolved | Interim | SM 4500-O G-2011 | 20121668 | | mg/L |
| Field | | Specific Conductance | Certified | SM 2510 B-2011 | 20048617 | 10 | umhos/cm |
| Field | | Temperature | Interim | SM 2550 B-2010 | 20053229 | | degrees Celsius |
| Field | | Turbidity | Certified | SM 2130 B-2011 | 20048220 | 1 | NTU |
| Field | | pH | Interim | SM 4500-H+ B-2011 | 20105220 | | S.U. |
| Inorganic/General Chemistry | | Acidity, Total (as CaCO ₃) | Certified | SM 2310 B-2011 | 20044615 | 4 | mg/L |
| Inorganic/General Chemistry | | Alkalinity, Total (as CaCO ₃) | Certified | SM 2320 B-2011 | 20045618 | 4 | mg/L |
| Inorganic/General Chemistry | 7664-41-7 | Ammonia | Certified | EPA 350.1 Rev. 2.0 (1993) | 10063602 | 0.2 | mg/L |
| Inorganic/General Chemistry | | BOD, 5-day | Certified | SM 5210 B-2011 | 20135266 | 2 | mg/L |
| Inorganic/General Chemistry | 24959-67-9 | Bromide | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 0.6 | mg/L |
| Inorganic/General Chemistry | | Carbonaceous Biochemical Oxygen Demand (CBOD ₅) | Certified | SM 5210 B-2011 | 20135266 | 2 | mg/L |
| Inorganic/General Chemistry | | Chemical Oxygen Demand (COD) | Certified | HACH 8000 (1979) | 60003001 | 25 | mg/L |
| Inorganic/General Chemistry | 16887-00-6 | Chloride | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 5 | mg/L |
| Inorganic/General Chemistry | 16887-00-6 | Chloride | Certified | SM 4500-Cl ⁻ B-2011 | 20084611 | 1 | mg/L |
| Inorganic/General Chemistry | 57-12-5 | Cyanide, Total (as Cn) | Certified | EPA 335.4 Rev. 1.0 (1993) | 10061402 | 10 | ug/L |
| Inorganic/General Chemistry | 16984-48-8 | Fluoride | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 0.4 | mg/L |
| Inorganic/General Chemistry | | Hardness, Total (as CaCO ₃) | Certified | SM 2340 C-2011 | 20047614 | 4 | mg/L |
| Inorganic/General Chemistry | 84145-82-4 | Nitrate | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 0.6 | mg/L |
| Inorganic/General Chemistry | | Nitrate-Nitrite (as N) | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 1 | mg/L |
| Inorganic/General Chemistry | 14797-65-0 | Nitrite | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 0.4 | mg/L |



Environmental Monitoring, Inc.
98012

Effective: January 1, 2021

| KY Category | CAS # | Analyte | Status | Reference Method | Method Code for PT Reporting | MRL | MRL Units |
|-----------------------------|------------|--------------------------------------|-----------|--|------------------------------|-------|-----------|
| Inorganic/General Chemistry | | Oil and Grease | Certified | EPA 1664 Rev. A | 10127807 | 5 | mg/L |
| Inorganic/General Chemistry | 7723-14-0 | Phosphorus, Total (as P) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.5 | mg/L |
| Inorganic/General Chemistry | | Solids, Settleable | Certified | SM 2540 F-2011 | 20052215 | 0.4 | mL/L |
| Inorganic/General Chemistry | | Solids, Total Dissolved | Certified | SM 2540 C-2011 | 20050413 | 1 | mg/L |
| Inorganic/General Chemistry | | Solids, Total Suspended (TSS) | Certified | SM 2540 D-2011 | 20051212 | 1 | mg/L |
| Inorganic/General Chemistry | 14808-79-8 | Sulfate, Total (as SO ₄) | Certified | EPA 300.0 Rev 2.1 (1993) | 10053006 | 5 | mg/L |
| Inorganic/General Chemistry | 18496-25-8 | Sulfide, Total (as S) | Certified | SM 4500-S ₂ ⁻ F-2011 | 20126663 | 1 | mg/L |
| Inorganic/Metals | 7429-90-5 | Aluminum, Total (as Al) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.05 | mg/L |
| Inorganic/Metals | 7440-36-0 | Antimony, Total (as Sb) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-36-0 | Antimony, Total (as Sb) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-38-2 | Arsenic, Total (as As) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-38-2 | Arsenic, Total (as As) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-39-3 | Barium, Total (as Ba) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-39-3 | Barium, Total (as Ba) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-41-7 | Beryllium, Total | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.002 | mg/L |
| Inorganic/Metals | 7440-41-7 | Beryllium, Total | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-42-8 | Boron | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-43-9 | Cadmium, Total (as Cd) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-43-9 | Cadmium, Total (as Cd) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-70-2 | Calcium, total [as Ca] | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.5 | mg/L |
| Inorganic/Metals | 7440-47-3 | Chromium, Total (as Cr) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-47-3 | Chromium, Total (as Cr) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-48-4 | Cobalt, Total | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |



Environmental Monitoring, Inc.
98012

Effective: January 1, 2021

| KY Category | CAS # | Analyte | Status | Reference Method | Method Code for PT Reporting | MRL | MRL Units |
|------------------|-----------|---------------------------|-----------|----------------------------|------------------------------|-------|-----------|
| Inorganic/Metals | 7440-48-4 | Cobalt, Total | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-50-8 | Copper, Total | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.01 | mg/L |
| Inorganic/Metals | 7440-50-8 | Copper, Total | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7439-89-6 | Iron, Total (as Fe) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.05 | mg/L |
| Inorganic/Metals | 7439-92-1 | Lead, Total (as Pb) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7439-92-1 | Lead, Total (as Pb) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7439-95-4 | Magnesium, Total (as Mg) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.5 | mg/L |
| Inorganic/Metals | 7439-96-5 | Manganese, Total (as Mn) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.05 | mg/L |
| Inorganic/Metals | 7439-98-7 | Molybdenum, Total (as Mo) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7439-98-7 | Molybdenum, Total (as Mo) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-02-0 | Nickel, Total (as Ni) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-02-0 | Nickel, Total (as Ni) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-09-7 | Potassium, Total (as K) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.5 | mg/L |
| Inorganic/Metals | 7782-49-2 | Selenium, Total (as Se) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | | Silica, Dissolved | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.2 | mg/L |
| Inorganic/Metals | 7440-22-4 | Silver, Total (as Ag) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.015 | mg/L |
| Inorganic/Metals | 7440-22-4 | Silver, Total (as Ag) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-23-5 | Sodium, Total (as Na) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.5 | mg/L |
| Inorganic/Metals | 7440-28-0 | Thallium, Total | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-28-0 | Thallium, Total | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |
| Inorganic/Metals | 7440-31-5 | Tin, Total | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-62-2 | Vanadium, Total | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.03 | mg/L |
| Inorganic/Metals | 7440-62-2 | Vanadium, Total | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 2 | ug/L |



Environmental Monitoring, Inc.
98012

Effective: January 1, 2021

| KY Category | CAS # | Analyte | Status | Reference Method | Method Code for PT Reporting | MRL | MRL Units |
|------------------|-----------|---------------------|-----------|----------------------------|------------------------------|------|-----------|
| Inorganic/Metals | 7440-66-6 | Zinc, Total (as Zn) | Certified | EPA 200.7, Rev. 4.4 (1994) | 10013806 | 0.01 | mg/L |
| Inorganic/Metals | 7440-66-6 | Zinc, Total (as Zn) | Certified | EPA 200.8, Rev. 5.4 (1994) | 10014605 | 5 | ug/L |

