



Annual Class A EQ Biosolids Quality Report

All results are reported as "dry weight" unless otherwise noted

Sampled Year 2024

Parameter	Range of Detection			Regulatory Limits	Units
	Minimum	Average	Maximum		
Fecal Coliform	< 2.0	2.0	2.0	1000.0	MPN/g
Arsenic	5.4	7.0	8.6	41.0	mg/kg
Cadmium	< 2.1	< 2.1	< 2.1	39.0	mg/kg
Chromium	35.9	47.4	67.4	1200.0	mg/kg
Copper	168	188	211	1500	mg/kg
Lead	10.9	15.8	20.8	300.0	mg/kg
Mercury	0.180	0.230	0.300	17.000	mg/kg
Molybdenum	8.9	10.5	12.6	NA	mg/kg
Nickel	22.0	27.0	35.1	420.0	mg/kg
Selenium	3.7	5.1	7.0	36.0	mg/kg
Zinc	476	514	552	2800	mg/kg
Manganese	1182	1542	1824	NA	mg/kg
Magnesium	2409	2812	3169	NA	mg/kg
Sodium	341	395	460	NA	mg/kg
Potassium	1428	1916	2419	NA	mg/kg
Ammonia	669	1537	2602	NA	mg/kg
Iron	22091	27210	32342	NA	mg/kg
Boron	28.1	34.1	39.5	NA	mg/kg
% Solid	91.8	95.0	97.6	90.0	%
%Nitrogen	3.4	4.0	5.0	NA	%
%Phosphorus	1.8	2.2	2.8	NA	%
%Potassium	0.07	0.10	0.13	NA	%
% Calcium	2.5	3.4	4.2	NA	%

Polychlorinated Biphenols (PCBs) - Required Every Five Years

Sampled Year 2022

Parameter	Results	Regulatory Limit†	Units
Aroclor 1016	< 0.8630	10.0	mg/kg
Aroclor 1221	< 0.8630	10.0	mg/kg
Aroclor 1232	< 0.8630	10.0	mg/kg
Aroclor 1242	< 0.8630	10.0	mg/kg
Aroclor 1248	< 0.8630	10.0	mg/kg
Aroclor 1254	< 0.8630	10.0	mg/kg
Aroclor 1260	< 0.8630	10.0	mg/kg

† Regulatory limit = sum of all PCB compounds not to exceed 10 mg/kg

Toxicity Characteristics - Required Every Three Years*

Sampled Year 2022

Parameter	Results	Regulatory Limits	Units
Arsenic TCLP	< 0.250	5.0	mg/L
Barium TCLP	< 0.250	100	mg/L
Cadmium TCLP	< 0.05	1.0	mg/L
Chromium TCLP	< 0.100	5.0	mg/L
Lead TCLP	< 0.100	5.0	mg/L
Mercury TCLP	< 0.020	0.2	mg/L
Selenium TCLP	< 0.500	1.0	mg/L
Silver TCLP	< 0.050	5.0	mg/L
Benzene TCLP	< 0.010	0.5	mg/L
Carbon Tetrachloride TCLP	< 0.010	0.5	mg/L
Chlorobenzene TCLP	< 0.010	100	mg/L
1,4-Dichlorobenzene TCLP	< 0.010	7.5	mg/L
1,2-Dichloroethane TCLP	< 0.050	0.5	mg/L
Methyl Ethyl Ketone TCLP	< 0.20	200	mg/L
Tetrachloroethene TCLP	< 0.010	0.7	mg/L
Vinyl Chloride TCLP	< 0.010	0.2	mg/L
2-Methylphenol TCLP	< 0.020	200	mg/L
3&4 Methylphenol TCLP	< 0.040	200	mg/L
2,4-Dinitrotoluene TCLP	< 0.020	0.1	mg/L
Hexachlorobenzene TCLP	< 0.020	0.1	mg/L
Hexachlorobutadiene TCLP	< 0.020	0.5	mg/L
Hexachloroethane TCLP	< 0.020	3.0	mg/L
Nitrobenzene TCLP	< 0.020	2.0	mg/L
Pentachlorophenol TCLP	< 0.040	100	mg/L
Pyridine TCLP	< 0.020	5.0	mg/L
2,4,5-Trichlorophenol TCLP	< 0.020	400	mg/L
2,4,6-Trichlorophenol TCLP	< 0.020	2.0	mg/L
Paint Filter	PASS	FAIL	PASS or FAIL
Reactive Cyanide	< 0.125	NA	mg/kg
Reactive Sulfide	< 25.4	NA	mg/kg
Flash Point	> 96.0	60.0	°C

*Toxicity Characteristics Leaching Procedure (TCLP) required testing is completed every three years. This procedure is designed to mimic any leaching of contaminants that may occur when solid materials are applied to land or landfill over a period of time. TCLP Testing results are all reported as mg/L.

Sampled Year 2024

PFAS/PFOS Compounds	Abbrev.	Limits**	CAS#	Results	Units
Perfluorobutanoic acid	PFBA	NA	375-22-4	< 1.48	ng/g
Perfluoropentanoic acid	PFPeA	NA	2706-90-3	0.42	ng/g
Perfluorohexanoic acid	PFHxA	NA	307-24-4	1.11	ng/g
Perfluoroheptanoic acid	PFHpA	NA	375-85-9	0.23	ng/g
Perfluorooctanoic acid	PFOA	NA	335-67-1	1.15	ng/g
Perfluorononanoic acid	PFNA	NA	375-95-1	0.53	ng/g
Perfluorodecanoic acid	PFDA	NA	335-76-2	3.26	ng/g
Perfluoroundecanoic acid	PFUnA	NA	2058-94-8	0.73	ng/g
Perfluorododecanoic acid	PFDoA	NA	307-55-1	1.88	ng/g
Perfluorotridecanoic acid	PFTTrDA	NA	72629-94-8	0.26	ng/g
Perfluorotetradecanoic acid	PFTeDA	NA	376-06-7	0.50	ng/g
Perfluorobutanesulfonic acid	PFBS	NA	375-73-5	7.07	ng/g
Perfluoropentanesulfonic acid	PFPeS	NA	2706-91-4	< 0.11	ng/g
Perfluorohexanesulfonic acid	PFHxS	NA	355-46-4	20.56	ng/g
Perfluoroheptanesulfonic acid	PFHpS	NA	375-92-8	< 0.10	ng/g
Perfluorooctanesulfonic acid	PFOS	NA	1763-23-1	15.20	ng/g
Perfluoronanesulfonic acid	PFNS	NA	68259-12-1	< 0.14	ng/g
Perfluorodecanesulfonic acid	PFDS	NA	335-77-3	< 0.13	ng/g
Perfluorododecanesulfonic acid	PFDoS	NA	79780-39-5	< 0.13	ng/g
Perfluorooctanesulfonamide	PFOSA	NA	754-91-6	3.49	ng/g
4:2 Fluorotelomer sulfonic acid	4:2 FTS	NA	757124-72-4	< 0.43	ng/g
6:2 Fluorotelomer sulfonic acid	6:2 FTS	NA	27619-97-2	< 0.58	ng/g
8:2 Fluorotelomer sulfonic acid	8:2 FTS	NA	39108-34-4	< 0.85	ng/g
N-methylperfluorooctanesulfonamide	N-MeFOSA	NA	31506-32-8	< 0.63	ng/g
N-Ethylperfluorooctanesulfonamide	N-EtFOSA	NA	4151-50-2	0.27	ng/g
N-methylperfluorooctane sulfonamidoacetic acid	N-MeFOSAA	NA	2355-31-9	5.50	ng/g
N-ethylperfluorooctane sulfonamidoacetic acid	N-EtFOSAA	NA	2991-50-6	8.16	ng/g
N-Methylperfluorooctanesulfonamidoethanol	N-MeFOSE	NA	24448-09-7	26.80	ng/g
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulfonamide	N-EtFOSE	NA	1691-99-2	42.20	ng/g
3:3 Fluorotelomer carboxylic acid	3:3FTCA	NA	356-02-5	4.67	ng/g
2H,2H,3H,3H-Perfluorooctanoic acid	5:3FTCA	NA	914637-49-3	43.20	ng/g
2H,2H,3H,3H-Perfluorodecanoic acid	7:3FTCA	NA	812-70-4	19.40	ng/g
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoic acid	HFPO-DA	NA	13252-13-6	0.64	ng/g
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	NA	919005-14-4	< 0.25	ng/g
perfluoromethoxypropionic acid	PFMPA	NA	377-73-1	< 0.27	ng/g
Perfluoro-4-methoxybutanoic acid	PFMBA	NA	863090-89-5	< 0.31	ng/g
nonafluoro-3,6-dioxaheptanoic acid	NFDHA	NA	151772-58-6	< 0.47	ng/g
Perfluoro(2-((6-chlorohexyl)oxy)ethanesulfonic acid)	9Cl-PF3ONS	NA	756426-58-1	< 0.23	ng/g
11-chloroicosafafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUDS	NA	763051-92-9	< 0.25	ng/g
1,1,2,2-Tetrafluoro-2-(perfluoroethoxy)ethanesulfonic acid	PFEESA	NA	113507-82-7	< 0.16	ng/g

** Regulatory Limits for Per- and Polyfluoroalkyl Substances (PFAS) have yet to be established by the Environmental Protection Agency (EPA) or Tennessee Department of Environment and Conservation (TDEC).

Units and abbreviations

- mg/kg = milligrams per kilogram
- mg/L = milligrams per liter
- ng/g = nanogram per gram
- ℄ = Celcius

NA = Not Applicable, no established limits for the specified contaminant