

Table 8
Five-Year Compost Leachate Monitoring Parameters
Sioux Falls Regional Sanitary Landfill

Parameters & Sample Container ¹	Preservatives	Analytical Method	Laboratory Reporting Limits ²	Holding Time
Total Metals - 1-500 mL Plastic				
Aluminum	HNO ₃ , Cool < 4°C	EPA 200.7	0.1 mg/L	6 Months
Arsenic	HNO ₃ , Cool < 4°C	EPA 200.7	0.08 mg/L	6 Months
Beryllium	HNO ₃ , Cool < 4°C	EPA 200.7	0.001 mg/L	6 Months
Boron	HNO ₃ , Cool < 4°C	EPA 200.7	0.1 mg/L	6 Months
Calcium	HNO ₃ , Cool < 4°C	EPA 200.7	0.1 mg/L	6 Months
Cadmium	HNO ₃ , Cool < 4°C	EPA 200.7	0.02 mg/L	6 Months
Chromium	HNO ₃ , Cool < 4°C	EPA 200.7	0.02 mg/L	6 Months
Cobalt	HNO ₃ , Cool < 4°C	EPA 200.7	0.02 mg/L	6 Months
Copper	HNO ₃ , Cool < 4°C	EPA 200.7	0.02 mg/L	6 Months
Iron	HNO ₃ , Cool < 4°C	EPA 200.7	0.1 mg/L	6 Months
Lead	HNO ₃ , Cool < 4°C	EPA 200.7	0.004 mg/L	6 Months
Lithium	HNO ₃ , Cool < 4°C	EPA 200.7	0.05 mg/L	6 Months
Magnesium	HNO ₃ , Cool < 4°C	EPA 200.7	1.0 mg/L	6 Months
Manganese	HNO ₃ , Cool < 4°C	EPA 200.7	0.01 mg/L	6 Months
Mercury	HNO ₃ , Cool < 4°C	EPA 245.1	0.0002 mg/L	6 Months
Molybdenum	HNO ₃ , Cool < 4°C	EPA 200.7	0.05 mg/L	6 Months
Nickel	HNO ₃ , Cool < 4°C	EPA 200.7	0.05 mg/L	6 Months
Potassium	HNO ₃ , Cool < 4°C	EPA 200.7	1.0 mg/L	6 Months
Selenium	HNO ₃ , Cool < 4°C	EPA 200.7	0.15 mg/L	6 Months
Sodium	HNO ₃ , Cool < 4°C	EPA 200.7	1.0 mg/L	6 Months
Vanadium	HNO ₃ , Cool < 4°C	EPA 200.7	0.05 mg/L	6 Months
Zinc	HNO ₃ , Cool < 4°C	EPA 200.7	0.02 mg/L	6 Months
Total Metals - 1-500 mL Plastic				
Hexavalent Chromium (Cr ^{VI})	Cool < 4°C	SM 350 CrB	0.02 mg/L	24 Hours
Preserved Inorganics - 1-1 Liter Plastic				
Ammonia as N	H ₂ SO ₄ , Cool < 4°C	EPA 350.1	0.5 mg/L	28 Days
Nitrate + Nitrite as N	H ₂ SO ₄ , Cool < 4°C	SM 4500 NO3 E	0.1 mg/L	28 Days
Total Kjeldahl Nitrogen	H ₂ SO ₄ , Cool < 4°C	EPA 351.2	1.0 mg/L	28 Days
Total Phosphorus	H ₂ SO ₄ , Cool < 4°C	EPA 365.1	1.0 mg/L	28 Days
Non-preserved Inorganics - 2-1 Liter Plastic				
Alkalinity	Cool < 4°C	SM 2320B	5.0 mg/L	14 Days
Bicarbonate as HCO ₃	Cool < 4°C	SM 2320B	5.0 mg/L	14 Days
BOD	Cool < 4°C	SM 5210B	3.0 mg/L	48 Hours
Conductivity	Cool < 4°C	SM 2510B	1.0 mg/L	28 Days
pH	Cool < 4°C	SM 4500B	0.1 s.u.	Immediately
Nitrite as N	Cool < 4°C	EPA 353.2	0.1 mg/L	48 Hours
Chloride	Cool < 4°C	EPA 300.0	1.0 mg/L	28 Days
Fluoride	Cool < 4°C	EPA 300.0	0.1 mg/L	28 Days
Sodium Adsorption Ratio	Cool < 4°C	Calculation	N/A	N/A
TSS	Cool < 4°C	USGS I-3765-85	10.0 mg/L	7 Days

Table 8 (cont)
Five-Year Compost Leachate Monitoring Parameters
Sioux Falls Regional Sanitary Landfill

Parameters & Sample Container ¹	Preservatives	Analytical Method	Laboratory Reporting Limits ²	Holding Time
Oil and Grease - 2-1 Liter Glass				
Non-Polar Materials	H2SO4, Cool <4°C	SW 1664A	4.8 mg/L	28 Days
Oil & Grease	H2SO4, Cool <4°C	SW 1664A	4.8 mg/L	28 Days
Pesticides & Herbicides - 3-1 Liter Glass				
2,4-D	Cool < 4°C	EPA 615	0.21 ug/L	7 Days
4,4-DDDE	Cool < 4°C	EPA 608	0.032 ug/L	7 Days
Alachlor	Cool < 4°C	EPA 8270C	5.0 ug/L	7 Days
Atrazine	Cool < 4°C	EPA 8270C	5.0 ug/L	7 Days
Chlorodane	Cool < 4°C	EPA 608	2.0 ug/L	7 Days
Diazinon	Cool < 4°C	EPA 8270C	5.0 ug/L	7 Days
Dieldren	Cool < 4°C	EPA 608	0.032 ug/L	7 Days
Dicamba	Cool < 4°C	EPA 615	0.21 ug/L	7 Days
MCPA	Cool < 4°C	EPA 615	0.21 ug/L	7 Days
Pendimethalin	Cool < 4°C	EPA 8270C	5.0 ug/L	7 Days
Simazine	Cool < 4°C	EPA 8270C	5.0 ug/L	7 Days
Trifluralin	Cool < 4°C	EPA 8270C	5.0 ug/L	7 Days

Table adapted from Sioux Falls Regional Sanitary Landfill Comprehensive Monitoring Plan, September and November 2011

mg/L - milligrams per liter

ug/L - micrograms per liter

S.U. - standard units

N/A - not applicable

¹Container listed is typical. Container selected for sample collection to be approved by laboratory performing analysis for the parameter listed.

²Laboratory reporting limits with no dilutions