

**Table 3-1. Analytical Methods for Constituents for Land Use and Mass Emission**

Class	Constituent	Sample		DL	PQL	Units	Preservation	Holding Time	ME	LU
		Type	Method							
Conventional										
	Cyanide	Grab	A335.2	0.01	0.01	mg/l	NaOH, ascorbic acid	14 days	x	
	TPH	Grab	A418.1	1.0	1.0	mg/l	-	28 days	x	
	Oil and Grease	Grab	A413.1	1.0	1.0	mg/l	-	28 days	x	
	Total Phenols	Grab	A420.1	0.1	0.1	mg/l	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	7 days	x	
Indicator Bacteria										
	Total Coliform	Grab		20	20	MPN/100ml	-	6 hours	x	x
	Fecal Coliform	Grab		20	20	MPN/100ml	-	6 hours	x	x
	Fecal Streptococcus	Grab		20	20	MPN/100ml	-	6 hours	x	x
General										
	Ammonia	Comp	A350.3	0.1	0.1	mg/l	H <sub>2</sub> SO <sub>4</sub>	28 days	x	x
	Calcium	Comp	A215.2	1.0	1.0	mg/l	HNO <sub>3</sub>	6 months	x	x
	Magnesium	Comp	C3500MgD	1.0	1.0	mg/l	HNO <sub>3</sub>	6 months	x	x
	Potassium	Comp	A258.1	1.0	1.0	mg/l	HNO <sub>3</sub>	6 months	x	x
	Sodium	Comp	A273.1	1.0	1.0	mg/l	HNO <sub>3</sub>	6 months	x	x
	Bicarbonate	Comp	A310.1	2.0	2.0	mg/l	-	14 days	x	x
	Carbonate	Comp	A310.1	2.0	2.0	mg/l	-	14 days	x	x
	Chloride	Comp	B429	2.0	2.0	mg/l	-	28 days	x	x
	Fluoride	Comp	B429	0.1	0.1	mg/l	-	28 days	x	x
	Nitrate	Comp	B429	0.1	0.1	mg/l	-	48 hours	x	x
	Sulfate	Comp	B429	0.1	0.1	mg/l	-	48 hours	x	x
	Alkalinity	Comp	A310.1	4.0	4.0	mg/l	-	14 days	x	x
	Hardness	Comp	A130.2	2.0	2.0	mg/l	HNO <sub>3</sub> or H <sub>2</sub> SO <sub>4</sub>	6 months	x	x
	Dissolved Phosphorus	Comp	A365.2	0.05	0.05	mg/l	-	48 hours	x	x
	Total Phosphorus	Comp	A365.2	0.05	0.05	mg/l	H <sub>2</sub> SO <sub>4</sub>	28 days	x	x
	COD	Comp	A410.4	5	5	mg/l	H <sub>2</sub> SO <sub>4</sub>	28 days	x	x
	pH	Comp	A150.1	na	na		-	immed.	x	x
	NH <sub>3</sub> -N	Comp	A350.3	0.1	0.1	mg/l	H <sub>2</sub> SO <sub>4</sub>	28 days	x	x
	Nitrate-N	Comp	C4110B	0.1	0.1	mg/l	-	48 hours	x	x
	Nitrite-N	Comp	C4110B	0.1	0.1	mg/l	-	48 hours	x	x
	TKN	Comp	A351.4	0.1	0.1	mg/l	H <sub>2</sub> SO <sub>4</sub>	28 days	x	x
	Specific Conductance	Comp	A120.1	1	1	umhos/cm	-	immed.	x	x
	Total Dissolved Solids	Comp	A160.1	2.0	2.0	mg/l	-	7 days	x	x
	Turbidity	Comp	A180.1	0.1	0.1	NTU	-	48 hours	x	x
	Suspended Solids	Comp	A160.2	2.0	2.0	mg/l	-	7 days	x	x
	Vol.Sus.Solids	Comp	160.4	1.0	1.0	mg/l	-	7 days	x	x
	MBAS	Comp	A425.1	0.05	0.05	mg/l	-	48 hours	x	x
	Total Organic Carbon	Comp	A415.1	1.0	1.0	mg/l	HCl, H <sub>2</sub> SO <sub>4</sub> , or H <sub>3</sub> PO <sub>4</sub>	28 days	x	x
	BOD <sub>5</sub>	Comp	A405.1	2.0	2.0	mg/l	-	48 hours	x	x
Metals										
	Dissolved Aluminum	Comp	A202.2	1000	1000	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Aluminum	Comp	A202.2	1000	1000	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Antimony	Comp	A204.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Antimony	Comp	A204.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Arsenic	Comp	A206.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Arsenic	Comp	A206.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Barium	Comp	A208.2	10	10	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Barium	Comp	A208.2	10	10	µg/l	HNO <sub>3</sub>	6 months	x	x

DL = Detection limit

PQL = Practical quantitation limit

ME = Constituents marked analyzed for mass emission stations.

LU = Constituents marked analyzed for land use stations.

"-" = No preservation required other than cooling the sample to 4° C.

na = not applicable

**Table 3-1. Analytical Methods for Constituents for Land Use and Mass Emission**

Class	Constituent	Sample			Units	Preservation	Holding			
		Type	Method	DL			PQL	Time	ME	LU
Metals (cont.)										
	Dissolved Beryllium	Comp	A210.2	1	1	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Beryllium	Comp	A210.2	1	1	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Boron	Comp	A212.3	100	100	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Boron	Comp	A212.3	100	100	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Cadmium	Comp	A213.2	1	1	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Cadmium	Comp	A213.2	1	1	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Chromium	Comp	A218.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Chromium	Comp	A218.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Chromium +6	Comp		10	10	µg/l	-	24 hours	x	x
	Total Chromium +6	Comp		10	10	µg/l	-	24 hours	x	x
	Dissolved Copper	Comp	A220.1	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Copper	Comp	A220.1	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Iron	Comp	A236.1	100	100	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Iron	Comp	A236.1	100	100	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Lead	Comp	A239.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Lead	Comp	A239.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Manganese	Comp	A243.1	100	100	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Manganese	Comp	A243.1	100	100	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Mercury	Comp	A245.1	1	1	µg/l	HNO <sub>3</sub>	28 days	x	x
	Total Mercury	Comp	A245.1	1	1	µg/l	HNO <sub>3</sub>	28 days	x	x
	Dissolved Nickel	Comp	A249.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Nickel	Comp	A249.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Selenium	Comp	A270.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Selenium	Comp	A270.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Silver	Comp	A272.2	1	1	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Silver	Comp	A272.2	1	1	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Thallium	Comp	A279.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Thallium	Comp	A279.2	5	5	µg/l	HNO <sub>3</sub>	6 months	x	x
	Dissolved Zinc	Comp	A289.1	50	50	µg/l	HNO <sub>3</sub>	6 months	x	x
	Total Zinc	Comp	A289.1	50	50	µg/l	HNO <sub>3</sub>	6 months	x	x
Semi-Volatile Organics										
	Bis(2-ethylhexyl)phthalate	Comp	625M	3.0	1.0	µg/l	-	7 days	x	x
	All other SVOCs	Comp	625M	0.5 - 5.0	0.05 - 5.0	µg/l	-	7 days	x	x
Pesticides										
	Organochlorine Pesticides & PCBs	Comp	D608	0.05 - 1.0	0.05 - 1.1	µg/l	-	7 days	x	x
	Diazinon	Comp	8141SOP	0.01	0.01	µg/l	-	7 days	x	x
	Chlorpyrifos	Comp	8141SOP	0.05	0.1	µg/l	-	7 days	x	x
	Other N- and P-Containing Pesticides	Comp	507	1.0 - 2.0	1.0 - 2.0	µg/l	-	7 days	x	x
	Carbofuran	Comp	531.1	5.0	5.0	µg/l	-	7 days	x	x
	Chlorinated Herbicides & Bentazon									
	2,4-D	Comp	515.1	10.0	10.0	µg/l	-	7 days	x	x
	2,4,5-TP	Comp	515.1	1.0	1.0	µg/l	-	7 days	x	x
	Bentazon	Comp	515.1	2.0	2.0	µg/l	-	7 days	x	x
	Glyphosate	Comp	547	25	25	µg/l	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	14 days	x	x

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