

Sure Partners Limited

ARKLOW BANK WIND PARK
PHASE 2

**ONSHORE GRID
INFRASTRUCTURE**

VOLUME III

Chapter 9 APPENDICES

Appendix 9.3b Leachate Assessment

ARUP

 **sse**
Renewables

Appendix 9.3b

Generic Assessment

Criteria Leachate

Generic Assessment Criteria - Leachate				TP325	TP325	TP325
Test (CEN 10:1)	Units	LOD	EQS	0.90-1.00	1.70-1.80	2.80-2.90
Carbon						
Carbon, Organic (diss.filt)	mg/l	<3		<3	28.9	<3
Waste Acceptance Criteria (WAC)						
Temperature	°C			20.47	20.4	20.3
pH	pH Units		6.5 to 9.5	6.45	6.75	6.99
Conductivity @ 20 deg.C	µS/cm		2500	168	121	23.4
Inorganics						
Dissolved solids, Total (meter)	mg/l	<5		129	93.8	20
Fluoride	mg/l	<0.5	1.5	<0.5	1.72	<0.5
Sulphate	mg/l	<2	187.5	69.4	24.6	5.1
Chloride	mg/l	<2	187.5	<2	6.8	<2
Filtered (Dissolved) Metals						
Mercury (diss.filt)	mg/l	<0.01	0.00075	<0.00001	<0.00001	<0.00001
Antimony (diss.filt)	mg/l	<1	0.005	0.00404	0.00187	0.0093
Arsenic (diss.filt)	mg/l	<0.5	0.0075	0.0928	0.0219	0.0273
Barium (diss.filt)	mg/l	<0.2		0.00309	0.266	0.0051
Cadmium (diss.filt)	mg/l	<0.08	0.00375	0.00273	0.0294	0.000112
Chromium (diss.filt)	mg/l	<1	0.0075	<0.001	0.00131	<0.001
Copper (diss.filt)	mg/l	<0.3	1.5	0.0254	0.32	0.0034
Lead (diss.filt)	mg/l	<0.2	0.0075	<0.0002	0.0057	0.00105
Molybdenum (diss.filt)	mg/l	<3.0		0.109	<0.003	0.00619
Nickel (diss.filt)	mg/l	<0.4	0.015	0.00279	0.00184	0.00314
Selenium (diss.filt)	mg/l	<1.0	0.01	<0.001	0.00363	<0.001
Zinc (diss.filt)	mg/l	<1.0	0.075	0.617	1.54	0.0331
Phenols						
Phenol	mg/l	<0.002	46	<0.002	<0.002	<0.002
Cresols	mg/l	<0.006		<0.006	<0.006	<0.006
Xylenols	mg/l	<0.008		<0.008	<0.008	<0.008
Phenols, Total Detected monohydric	mg/l	<0.016		<0.016	<0.016	<0.016

Less than LOD
Concentration Exceeds Threshold

GAC Sources:

Groundwater Threshold Value 2016
Groundwater Threshold Value 2010
Surface Water Standards (2019)
Surface Water Standard (2009)
Drinking Water Standards (2014)