



Appendix 9.5

Surface Water and Ground Water Quality Screening

Coolglass Wind Farm EIAR Volume 3

Coolglass Wind Farm Limited

SLR Project No.: 501.V00727.00006

07 June 2023

Parameter	Units	SI No 366	SI No 122	EPA IGVs	BH T2 (05/09/2022)	Comments
		of 2016 (GW Regs)	of 2014 (DW Regs)			
Inorganics						
Ammoniacal Nitrogen as N (low level)	mg/l	0.175		0.15	0.051	
Ammoniacal Nitrogen Low as NH4	mg/l	0.21245		0.1821	0.0656	
Chloride	mg/l	187.5	250	30	15.9	
Conductivity @ 20 deg.C	mS/cm	1.875*	2.5	1	0.349	
Cyanide, Free (low level)	µg/l	37.5	50	10	<2.5	
Cyanide, Total (low level)	µg/l	37.5	50	10	<5	
Nitrate as NO3	mg/l	37.5	50	25	<0.3	
pH	pH Units		6.5 - 9.5	6.5 - 9.5	7.02	
Phosphate (Ortho as P)	mg/l			0.03	<0.02	
Sulphate	mg/l	187.5	250	200	6.1	
Sulphide	mg/l				<0.01	
Total Oxidised Nitrogen as N	mg/l				<0.1	
Filtered (Dissolved) Metals						
Aluminium (diss.filt)	µg/l	150	200	200	<10	
Arsenic (diss.filt)	µg/l	7.5	10	10	<0.5	
Cadmium (diss.filt)	µg/l	3.75	5	5	<0.08	
Chromium (diss.filt)	µg/l	37.5	50	30	<1	
Copper (diss.filt)	µg/l	1500	2000	30	<0.3	
Iron (Dis.Filt)	mg/l		0.2	0.2	2.24	Exceeds the DW regs
Lead (diss.filt)	µg/l	7.5	10	10	<0.2	
Mercury (diss.filt)	µg/l	0.75	1	1	<0.01	
Nickel (diss.filt)	µg/l	15	20	20	<0.4	
Zinc (diss.filt)	µg/l	75		100	11.6	
TPH Criteria Working Group (TPH CWG)						
Aliphatics >C10-C12	µg/l				<10	
Aliphatics >C12-C16 (aq)	µg/l				<10	
Aliphatics >C16-C21 (aq)	µg/l				<10	
Aliphatics >C21-C35 (aq)	µg/l				<10	
Aliphatics >C5-C6	µg/l				<10	
Aliphatics >C6-C8	µg/l				<10	
Aliphatics >C8-C10	µg/l				<10	
Aromatics >EC10-EC12	µg/l				<10	
Aromatics >EC12-EC16 (aq)	µg/l				<10	
Aromatics >EC16-EC21 (aq)	µg/l				<10	
Aromatics >EC21-EC35 (aq)	µg/l				<10	
Aromatics >EC5-EC7	µg/l				<10	
Aromatics >EC7-EC8	µg/l				<10	
Aromatics >EC8-EC10	µg/l				<10	
GRO >C5-C12	µg/l				<50	
Total Aliphatics & Aromatics >C5-35 (aq)	µg/l				<10	
Total Aliphatics >C12-C35 (aq)	µg/l	7.5		100	<10	Lab detection limits are above the GW regs
Total Aromatics >EC12-EC35 (aq)	µg/l				<10	
Volatile Organic Compounds (VOCs)						
Benzene	µg/l	0.75	1	1	<1	Lab detection limits are above the GW regs
Ethylbenzene	µg/l			10	<1	
m,p-Xylene	µg/l				<1	
Methyl tertiary butyl ether (MTBE)	µg/l	10			<1	
o-Xylene	µg/l				<1	
Sum of BTEX	µg/l				<5	
Sum of detected Xylenes	µg/l				<2	
Toluene	µg/l				<1	
EPH CWG (Speciated)						
Aliphatics >C16-C35 Aqueous	µg/l				<10	

