

Appendix 04-06 Groundwater screening table

| Linmere Groundwater Screening Summary | | | | BH2 | BH4A | BH5 | RC3 | RC4 | RC6 |
|---------------------------------------|-----------|-----------------|----------|------------|------------|------------|------------|------------|------------|
| | | | | 04/10/2022 | 04/10/2022 | 04/10/2022 | 04/10/2022 | 04/10/2022 | 04/10/2022 |
| Determinants | Units | Screening value | Source | | | | | | |
| Inorganics | | | | | | | | | |
| pH | | <6 or >9 | | 7.3 | 7.4 | 7.6 | 7.5 | 7.6 | 7.9 |
| Chloride | mg/l | 250000 | DWS | 17 | 16 | 29 | 23 | 24 | 15 |
| Dissolved Organic Carbon (DOC) | mg/l | | | 6.06 | 5.27 | 5.6 | 7.33 | 5.61 | 4.7 |
| Total Cyanide | µg/l | 50 | DWS | <10 | <10 | <10 | <10 | <10 | <10 |
| Ammoniacal Nitrogen as N | µg/l | 390 | DWS | 27 | 15 | 120 | 44 | 73 | 170 |
| Total Hardness as CaCO3 | mgCaCO3/l | | | 507 | 408 | 239 | 293 | 256 | 145 |
| Heavy Metals / Metalloids | | | | | | | | | |
| Antimony (dissolved) | µg/l | 5 | DWS | 0.5 | 0.9 | 0.8 | 1.3 | 0.8 | 1.4 |
| Arsenic (dissolved) | µg/l | 10 | DWS | 0.23 | 0.42 | 0.58 | 1.03 | 0.58 | 2.33 |
| Cadmium (dissolved) | µg/l | 5 | DWS | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 0.03 |
| Calcium (dissolved) | mg/l | | No value | 200 | 150 | 85 | 110 | 88 | 50 |
| Chromium (dissolved) | µg/l | 3 | ESQ | <0.2 | <0.2 | <0.2 | 0.4 | <0.2 | <0.2 |
| Copper (dissolved) | µg/l | 200 | DWS | 2.4 | 2.1 | 1.2 | 1.4 | 3.3 | 0.6 |
| Lead (dissolved) | µg/l | 10 | DWS | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Magnesium (dissolved) | mg/l | | No value | 2.8 | 6.3 | 6.3 | 5.9 | 8.6 | 5.1 |
| Manganese (dissolved) | µg/l | 50 | DWS | 1 | 11 | 12 | 25 | 12 | 7.2 |
| Mercury (dissolved) | µg/l | 1 | DWS | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Nickel (dissolved) | µg/l | 20 | DWS | 2.6 | 3.8 | 4.1 | 3.2 | 4.7 | 5.1 |
| Selenium (dissolved) | µg/l | 10 | DWS | <0.6 | 2.9 | 25 | 24 | 16 | 0.9 |
| Zinc (dissolved) | µg/l | 5000 | USEPA | 4.5 | 3.1 | 1.1 | 3.8 | 1.6 | 1.6 |
| Phenol | | | | | | | | | |
| Total Phenol | µg/l | | No value | <10 | 10 | 15 | 16 | 17 | 11 |
| BTEX | | | | | | | | | |
| Benzene | µg/l | 1 | DWS | <1 | <1 | <1 | <1 | <1 | <1 |
| Toluene | µg/l | 74 | EQS | <1 | <1 | <1 | <1 | <1 | <1 |
| Ethyl Benzene | µg/l | 20 | EQS | <1 | <1 | <1 | <1 | <1 | <1 |
| m/p Xylenes | µg/l | 20 | EQS | <1 | <1 | <1 | <1 | <1 | <1 |
| o Xylene | µg/l | 20 | EQS | <1 | <1 | <1 | <1 | <1 | <1 |
| PAH | | | | | | | | | |
| Naphthalene | µg/l | 2 | EQS | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Acenaphthylene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Acenaphthene | µg/l | 2000 | USEPA | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Fluorene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Phenanthrene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Anthracene | µg/l | 0.1 | EQS | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Fluoranthene | µg/l | 0.01 | EQS | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Pyrene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Benzo[a]anthracene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Chrysene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Benzo[b]fluoranthene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Benzo[k]fluoranthene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Benzo[a]pyrene | µg/l | 0.01 | DWS | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Indeno[1,2,3-cd]pyrene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Dibenzo[a,h]anthracene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Benzo[g,h,i]perylene | µg/l | | No value | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Total (USEPA16) PAHs | µg/l | 0.1 | DWS | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Petroleum Hydrocarbons | | | | | | | | | |
| Aliphatic >C5 - C6 | µg/l | 15000 | WHO | <1 | <1 | <1 | <1 | <1 | <1 |
| Aliphatic >C6 - C8 | µg/l | 15000 | WHO | <1 | <1 | <1 | <1 | <1 | <1 |
| Aliphatics >C8 - C10 | µg/l | 300 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aliphatics >C10 - C12 | µg/l | 300 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aliphatics >C12 - C16 | µg/l | 300 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aliphatics >C16 - C35 | µg/l | 300 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aliphatics >C35 - C44 | µg/l | | No value | <10 | <10 | <10 | <10 | <10 | <10 |
| Aliphatics >C5 - C44 | µg/l | | No value | <10 | <10 | <10 | <10 | <10 | <10 |
| Aromatic C5 - C7 | µg/l | 10 | WHO | <1 | <1 | <1 | <1 | <1 | <1 |
| Aromatic >C7 - C8 | µg/l | 10 | WHO | <1 | <1 | <1 | <1 | <1 | <1 |
| Aromatics >C8 - C10 | µg/l | 300 | WHO | <1 | <1 | <1 | <1 | <1 | <1 |
| Aromatics >C10 - C12 | µg/l | 90 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aromatics >C12 - C16 | µg/l | 90 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aromatics >C16 - C21 | µg/l | 90 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aromatics >C21 - C35 | µg/l | 90 | WHO | <10 | <10 | <10 | <10 | <10 | <10 |
| Aromatics >C35 - C44 | µg/l | | No value | <10 | <10 | <10 | <10 | <10 | <10 |
| Aromatics >C8 - C44 | µg/l | | No value | <10 | <10 | <10 | <10 | <10 | <10 |
| Total Petroleum Hydrocarbons | µg/l | | No value | <20 | <20 | <20 | <20 | <20 | <20 |