

TABLE 1: LITHGOW SOLID WASTE FACILITY - RESULTS OF LABORATORY ANALYSIS  
DECEMBER 2018

SURFACE WATER



| Group                             | Analyte                             | LOR     | Units    | Criteria  | Sample ID   |
|-----------------------------------|-------------------------------------|---------|----------|-----------|-------------|
|                                   |                                     |         |          |           | SW1         |
|                                   |                                     |         |          |           | Sample Date |
|                                   |                                     |         |          |           | 24/12/2018  |
|                                   |                                     |         |          |           | PS          |
| Physical Parameters               | pH (Lab)                            | (blank) | pH Units | 6.5 - 8.5 | 6.8         |
|                                   | Electrical Conductivity (Lab)       | 1       | µS/cm    | -         | 320         |
|                                   | Total Suspended Solids              | 5       | mg/L     | 30        | 140         |
|                                   | Chemical Oxygen Demand              | 50      | mg O2/L  | -         | < 50        |
| Alkalinity                        | Bicarbonate Alkalinity as CaCO3     | 5       | mg/L     | -         | 63          |
|                                   | Hydroxide Alkalinity as CaCO3       | 5       | mg/L     | -         | < 5         |
|                                   | Carbonate Alkalinity as CO3         | 5       | mg/L     | -         | < 5         |
|                                   | Total Alkalinity as CaCO3           | 5       | mg/L     | -         | 63          |
| Anions                            | Chloride                            | 1       | mg/L     | -         | 38          |
|                                   | Fluoride                            | 0.1     | mg/L     | -         | < 0.1       |
|                                   | Sulfate (SO4)                       | 1       | mg/L     | -         | 35          |
| Cations                           | Calcium (Ca)                        | 0.5     | mg/L     | -         | 31          |
|                                   | Magnesium (Mg)                      | 0.5     | mg/L     | -         | 6.3         |
|                                   | Potassium (K)                       | 0.5     | mg/L     | -         | 8.6         |
|                                   | Sodium (Na)                         | 0.5     | mg/L     | -         | 15          |
| Forms of Carbon                   | Total Organic Carbon                | 1       | mg/L     | -         | 9           |
| Nutrients                         | Ammonia (NH3) as N                  | 0.005   | mg/L     | -         | 0.11        |
|                                   | Nitrate (NO3) as N                  | 0.005   | mg/L     | -         | 2.4         |
|                                   | Total Phosphorus                    | 0.05    | mg/L     | -         | < 0.05      |
| Trace Metals                      | Hexavalent Chromium (Cr-VI)         | 0.005   | mg/L     | -         | < 0.005     |
|                                   | Chromium (Cr)                       | 1       | µg/L     | -         | 2           |
|                                   | Aluminium (Al)                      | 10      | µg/L     | -         | 4000        |
|                                   | Aluminium (Al) Dis.                 | 10      | µg/L     | -         | < 10        |
|                                   | Iron (Fe)                           | 10      | µg/L     | -         | 1200        |
|                                   | Manganese (Mn)                      | 5       | µg/L     | -         | 49          |
| Ionic Balance                     | Ionic Balance                       | 0       | %        | -         | -3          |
| Phenolics                         | Total Phenols                       | 0.05    | mg/L     | -         | < 0.05      |
| OC Pesticides                     | Aldrin                              | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Alpha BHC                           | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Alpha Chlordane                     | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Alpha Endosulfan                    | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Beta BHC                            | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Beta Endosulfan                     | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Delta BHC                           | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Dieldrin                            | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Endosulfan sulphate                 | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Endrin                              | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Endrin aldehyde                     | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Heptachlor                          | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Heptachlor epoxide                  | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Hexachlorobenzene (HCB)             | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Lindane (gamma BHC)                 | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Methoxychlor                        | 0.2     | µg/L     | -         | < 0.2       |
|                                   | p,p'-DDD                            | 0.2     | µg/L     | -         | < 0.2       |
|                                   | p,p'-DDE                            | 0.2     | µg/L     | -         | < 0.2       |
|                                   | p,p'-DDT                            | 0.2     | µg/L     | -         | < 0.2       |
|                                   | trans-Chlordane                     | 0.2     | µg/L     | -         | < 0.2       |
| OP Pesticides                     | Azinphos-methyl                     | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Bromophos Ethyl                     | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Chlorpyrifos (Chlorpyrifos Ethyl)   | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Chlorpyrifos-methyl                 | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Diazinon (Dimpylate)                | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Dichlorvos                          | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Dimethoate                          | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Ethion                              | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Fenitrothion                        | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Malathion                           | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Parathion-ethyl (Parathion)         | 0.2     | µg/L     | -         | < 0.2       |
|                                   | Ronnel                              | 0.2     | µg/L     | -         | < 0.2       |
| Polynuclear Aromatic Hydrocarbons | Naphthalene                         | 1       | µg/L     | -         | < 1         |
| Total Petroleum Hydrocarbons      | TRH C6-C9                           | 10      | µg/L     | -         | < 10        |
|                                   | TRH C10-C14                         | 50      | µg/L     | -         | < 50        |
|                                   | TRH C15-C28                         | 100     | µg/L     | -         | < 100       |
|                                   | TRH C29-C36                         | 100     | µg/L     | -         | < 100       |
| Total Recoverable Hydrocarbons    | TRH C6-C10                          | 10      | µg/L     | -         | < 10        |
|                                   | TRH C6-C10 minus BTEX (F1)          | 10      | µg/L     | -         | < 10        |
|                                   | TRH >C10-C16                        | 50      | µg/L     | -         | < 50        |
|                                   | TRH >C10-C16 minus Naphthalene (F2) | 50      | µg/L     | -         | < 50        |
|                                   | TRH >C16-C34 (F3)                   | 100     | µg/L     | -         | < 100       |
|                                   | TRH >C34-C40 (F4)                   | 100     | µg/L     | -         | < 100       |
| BTEXN Analytes                    | Benzene (F0)                        | 1       | µg/L     | -         | < 1         |
|                                   | Toluene                             | 1       | µg/L     | -         | < 1         |
|                                   | Ethylbenzene                        | 1       | µg/L     | -         | < 1         |
|                                   | meta- & para-Xylene                 | 2       | µg/L     | -         | < 2         |
|                                   | ortho-Xylene                        | 1       | µg/L     | -         | < 1         |

mg/L milligrams per litre  
 µg/L micrograms per litre  
 µS/cm microsiemens per centimetre  
 LOR limit of reporting  
 PS primary sample  
 Criteria 'Concentration Limits' in Section L2.4 of NSW EPA Environment Protection Licence 6004  
 within criteria  
 criteria exceeded