

## Appendix 13.7-C Risk Assessment Matrix

## TCL Risk Assessment Tables

### Summary of Likelihood definitions

|                   |                       |                                                                                                                                          |
|-------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Likelihood</b> | <b>Almost Certain</b> | The unwanted event has occurred frequently: occurs in order of one or more times per year and is likely to reoccur within one (1) year   |
|                   | <b>Likely</b>         | The unwanted event has occurred infrequently: occurs in order of less than once per year and is likely to reoccur within three (3) years |
|                   | <b>May</b>            | The unwanted event has happened in the business at some time or could happen within five (5) years                                       |
|                   | <b>Unlikely</b>       | The unwanted event has happened in the business at some time or could happen within 15 years                                             |
|                   | <b>Rare</b>           | The unwanted event has never been known to occur in the business or it is highly unlikely that it will occur within 25 years             |

### Summary of Risk Assessment ratings

|                   |                       | <b>Hazard Effect/Consequence</b> |              |                 |              |                   |
|-------------------|-----------------------|----------------------------------|--------------|-----------------|--------------|-------------------|
|                   |                       | <b>SEVERE</b>                    | <b>MAJOR</b> | <b>MODERATE</b> | <b>MINOR</b> | <b>NEGLIGIBLE</b> |
| <b>Likelihood</b> | <b>ALMOST CERTAIN</b> | CRITICAL                         | VERY HIGH    | HIGH            | MEDIUM       | LOW               |
|                   | <b>LIKELY</b>         | VERY HIGH                        | HIGH         | MEDIUM          | MEDIUM       | LOW               |
|                   | <b>MAY</b>            | HIGH                             | MEDIUM       | MEDIUM          | MEDIUM       | VERY LOW          |
|                   | <b>UNLIKELY</b>       | MEDIUM                           | MEDIUM       | MEDIUM          | LOW          | VERY LOW          |
|                   | <b>RARE</b>           | MEDIUM                           | LOW          | LOW             | VERY LOW     | NEGLIGIBLE        |

Summary of Consequence definitions

| Consequence Rating | Harm to people                                                           | Environmental Impact                                         | Business Interruption/ Material Damage                                                      | Legal & Regulatory                                                                           | Impact on Reputation/Social/ Community                           | Effects on Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|--------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negligible         | First aid case/exposure to minor health risk                             | Minimal environmental harm                                   | No disruption to operation, 5% loss of budgeted operating profit                            | Low level legal issue                                                                        | Slight impact – public awareness may exist but no public concern | <b>Biophysical Environment:</b> Resulting adverse effects are barely to not detectable, of very limited extent, and can be reversed in two days or less.<br><b>Human Environment:</b> Resulting adverse effects are not detectable or are in the normal range of variability in the human environment.                                                                                                                                                                          |
| Minor              | Medical treatment case/exposure to major health risk                     | Material environmental harm – incident remediable short term | Brief disruption to operation, 10% loss of budgeted operating profit/listed assets          | Minor legal issue, noncompliance and breeches of the law                                     | Limited impact – local public concern                            | <b>Biophysical Environment:</b> Resulting adverse effects are barely detectable, and can be reversed in one month or less, or are low extent.<br><b>Human Environment:</b> Resulting adverse effects are detectable but are not likely to be experienced at the community level.                                                                                                                                                                                                |
| Moderate           | Lost time injury/reversible impact on health                             | Serious environmental harm – incident remediable within LOM  | Partial shutdown, 15% loss of budgeted operating profit/listed assets                       | Serious breach of law/investigation/re port to authority prosecution and/or moderate penalty | Considerable impact - regional public concern                    | <b>Biophysical Environment:</b> Resulting in lethal and/or sub-lethal effects at the individual level indistinguishable from natural variation or resulting adverse effects are detectable and can be reversed in one year or less.<br><b>Human Environment:</b> Adverse effects would result in demonstrable change and are possible at the community-wide level but remain within historic norms and present no or a minor management challenge.                              |
| Major              | Single fatality or loss of quality of life/irreversible impact on health | Major environmental harm – incident remediable post LOM      | Partial loss of operation, 20% loss of budgeted operating profits/listed assets             | Major breech of the law, considerable prosecution and penalties                              | National impact – national public concern                        | <b>Biophysical Environment:</b> Resulting in some structural and functional changes at the population level above natural variation, or resulting adverse effects occur regionally and can be reversed in 10 years or less.<br><b>Human Environment:</b> Adverse effects would result in changes beyond historical norms and present a moderate management challenge.                                                                                                           |
| Severe             | Multiple fatalities/impact on health ultimately fatal                    | Extreme environmental harm – incident irreversible           | Substantial or total loss of operation, 25% loss of budgeted operating profit/listed assets | Very considerable penalties and prosecutions. Multiple law suits and jail terms              | International impact – International public concern              | <b>Biophysical Environment:</b> Resulting in structural and functional changes at the population level to an extent which could potentially result in severe changes at the community and ecosystem levels, or resulting adverse effects occur regionally and will take more than 10 years to reverse.<br><b>Human Environment:</b> Adverse effects would result in changes beyond historical norms and present a major management challenge. One or more fatalities may occur. |