## Appendix 15

Risk of Impact of Pollution from Groundwater from Routine Runoff

Matrix to Determine Risk of Impact of Pollution to Groundwater from Routine Runoff

| Component Number (see text) | Source | Weighting Factor (See text) | $\begin{aligned} & \text { Property } \\ & \text { or } \\ & \text { Parameter } \end{aligned}$ | Low Risk (Score 1) | Medium Risk (Score 2) | $\begin{gathered} \text { High } \\ \text { Risk } \\ \text { (Score 3) } \\ \hline \end{gathered}$ | Component Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 15 | Traffic Density | <15,000 AADT | $\begin{gathered} 15,000- \\ 50,000 \\ \text { AADT } \end{gathered}$ | $\begin{gathered} >50,000 \\ \text { AADT } \end{gathered}$ | 15 |
| 2 |  | 15 | Rainfall <br> Volume <br> (Annual <br> Averages) | $<740 \mathrm{~mm}$ Rainfall | $\begin{gathered} 740- \\ 1060 \mathrm{~mm} \end{gathered}$ | $>1060 \mathrm{~m}$ <br> Rainfall | 30 |
|  |  |  | Rainfall <br> Intensity | $\begin{gathered} \text { Even (<35 FEH } \\ 1 \text { Hour } \\ \text { Rainfall) } \end{gathered}$ | Uneven (3547 mm FEH 1 Hour Rainfall) | Concentrated (>47mm FEH 1 Hour Rainfall) |  |
| 3 | Pathway | 15 | Soakaway Geometry | Continuous Linear (e.g. ditch, grassed channel) | Single Point, or Shallow Soakaway (e.g. <br> Lagoon) serving Low Area Road | Single Point, Deep Serving High Road Area ( $>5,000 \mathrm{~m} 2$ ) | 15 |
| 4 |  | 20 | Unsaturated Zone | Depth to Water Table >15m and NonAquifers | Depth to Water Table <15>5m | Depth to Water Table $<5$ m | 60 |
| 5 |  | 20 | Flow Type | Unconsolidated or NonFractured Consolidated Deposits (i.e. Dominantly Intergranular Flow) | Consolidated Deposits (i.e. Mixed <br> Fracture and Intergranular Flow) | Heavily Consolidated Sedimentary Deposits, Igneous and Metamorphic rocks (Dominated by Fracture Porosity) | 40 |
| 6 |  | 7.5 | Effective Grain Size | Fine Sand and Below | Coarse Sand | Very Coarse Sand and Above | 22.5 |
| 7 |  | 7.5 | Lithology | >15\% Clay Minerals | Clay <br> Minerals | <1\% Clay Minerals | 7.5 |
|  |  |  |  |  |  |  | 190 |

AADT $=$ Annual Average Daily Traffic (Two Way)
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