APPENDIX K

Post Processing of Residential and Rights-of-way Scenarios to Estimate Aquatic EECs

Using two scenarios in tandem requires post-processing of the modeled output in order to derive a weighted EEC that represent the contribution of both the pervious (residential and ROW scenarios) and the impervious surfaces. A Microsoft Excel spreadsheet was developed that allows for the weighting and aggregation of exposure from both scenarios. The daily time series from each model run, from the times series file (*_TS.out) generated from the PRZM graphical user interface (PE5, PE Version 5, dated Nov. 15, 2006), was used in the calculations. The time series data were weighted based on percentage of impervious surface, the percentage of the pervious surface treated, and an adjusted time series was created. Rolling averages for the relevant durations of exposure (4 day, 14 day, 21 day, and 60 day averages) are calculated, and the relevant one-in-ten year return EEC equivalent to the Table 20 output from PE5 is generated from these distributions. In general, incorporation of impervious surfaces into the exposure assessment results in increasing runoff volume in the watershed, which tends to reduce overall pesticide exposure assuming 1% overspray to the impervious surface.