Version 1 – 04-31-08

Pesticide Risk Mitigation Engine

Policy on Accuracy of Data

Goal: Assure that the relative risk estimates made by the tool are based on pesticide-specific data that: (1) have been accepted for use in research studies or risk assessment after evaluation for accuracy by a government agency or independent research institution, and (2) reflect, to the degree possible, a consistent approach and set of assumptions in terms of how studies were designed, carried out, and interpreted.

General policies:

1. The establishment of relative risk indices covering the risks of pesticides to various non-target organisms relies on the integration of several types of data. The accuracy and reliability of relative risk rankings will be a function of the analytical methods and models used to estimate exposures, and how toxicological "levels of concern" are established. In addition, the accuracy of data used in both estimating exposures and establishment of toxicological risk thresholds will clearly determine the reliability of risk index rankings.

2. Toxicological data deemed acceptable for use in carrying out a risk assessment by a regulatory agency, in particular the U.S. Environmental Protection Agency (EPA), will be judged as sufficiently accurate for use within the tool. In cases where conflicting or inconclusive data have been submitted to the EPA, the project team will adopt the data values currently used by the EPA in cases where the agency has evaluated the strengths and weaknesses of alternative values and stated a preference for a given value. In cases where the EPA has not expressed a preference, the Management Team will choose the value to use based on its review of conflicting values, in consultation with the Advisory Committee and outside experts.

3. Residue data from the U.S. Department of Agriculture's "Pesticide Data Program" (PDP) will be deemed as accurate and acceptable in estimating relative dietary exposure and risk indices. Residue data files compiled by the EPA in the course of carrying out dietary risk assessments will also be deemed as accurate and may be used for specific applications of the tool. When PDP data are not available or are inadequate because of the number of samples tested, other sources of residue data will be considered on a case-by-case basis for use in specific applications of the tool.

4. For all other sorts of data that are required for a given application of the tool, the project team will identify data sources known to disseminate unbiased, reasonably

accurate data. The three key tests in determining whether a given source of data is reliable shall be the extent to which:

a. The methods used to collect the data are public and have been vetted in a public process, or subject to peer review;
b. Articles have appeared in peer reviewed journals that reference and use the data source; and/or
c. A regulatory agency, or a government science agency, has used the data in the course of their work.

5. The development and application of a tool designed to project pesticide risks in a reasonably comprehensive way will require many methods to deal with data gaps, as well as variability in the quantity and quality of data available across pesticides and risk indices. In developing methods to overcome these data-related problems, the project team will strive for the most reasonable estimates possible based on what is known about a given data point, with the goal of minimizing the chance that risk index values are substantially underestimated.