Drinking Water Position Paper

Increasingly drinking water estimates are filling up the dietary "risk cup" for pesticide active ingredients. Agricultural stakeholders and industry are increasingly concerned these unrealistic assessments prevent new uses from being added to labels or cause the elimination of critical uses. While probabilistic methods and a well-defined tiered assessment approach that takes advantage of available monitoring data has been developed for the food component of dietary assessment, the development of similar tools or structured assessment for drinking water has not progressed to the same extent. This is despite best efforts and long-standing objectives to; standardize modeling tiers, factor drinking water treatment into assessments, develop watershed-scale regression models and incorporate tier II model refinements into ground water and surface water models (EPA, 2004). It should be possible to also have a well-defined tiered approach to drinking water exposure estimation incorporating more data into assessment to generate more realistic estimates and identify specific areas where more scrutiny is required. There are several actions that EPA's Office of Pesticide Programs can take now that would improve the communication and functionality of drinking water exposure estimates without placing an undue burden on EPA resources.

Specific Improvements EPA could make to make assessments more reflective of actual exposure:

- Incorporate use/usage into modeling, i.e., intensity of use
    - Incorporation of PCT in addition to PCA
- Incorporate a distribution of vulnerabilities into SW and GW modeling
    - Support SAM / PRZM Scenario development
        - e.g., DW catchments of different vulnerabilities and population served
- Generally support SEWAVE-Q for incorporating monitoring data into RA
    - Need discussions on implementation
- Increase robustness of risk characterization
    - Incorporate distribution of vulnerabilities
        - (mitigations could be tiered to vulnerability)
- Develop guidance for approaches to refine both degradation and sorption processes in modeling exposure from ground water where appropriate.
    - Some EU approaches may inform discussion

These changes would go a long way toward making the drinking water risk assessments more reflective of actual exposure. Additionally, it would allow EPA to more effectively communicate risk to the public and would be consistent with current Information Quality Guidelines, and direction from several panels of the National Academies of Science.