SETAC Long Beach AMEG Open Meeting Minutes

Time and Location: **Tuesday November 13th, 2012**
5-7pm
Hyatt - Seaview A

Welcome

1. **Introduction and summary of AMEG's purpose and structure**
Mark Hanson provided background information about the aims and background of AMEG and AMEGs activities over the last year. AMEG organized platform and poster sessions during the SETAC annual meetings in North America and Europe and participated in other conferences. All these activities are listed in the annual report of AMEG which will be posted on the AMEG website soon. Next year's AMEG session was announced for the SETAC Europe annual meeting in Glasgow. Abstracts for this session can be submitted the 30th of November at the latest.

2. **Updates on current working groups**:
   a. **Species Sensitivity Distributions**
   Jeff Giddings gave an update of the SSD Working Group. The Working Group has provided a report and has submitted this report to EFSA. The work has resulted in a manuscript that is currently in review for publication in IEAM. Currently it is suggested sun-setting the working group for the time being.

   b. ***Myriophyllum* spp. test methods**
   Gertie Arts gave an update of the *Myriophyllum* Working Group. Two *Myriophyllum* test protocols have been ring-tested over the last years. Statistical reports of both test methods and a third statistical report comparing both test approaches will be available in November and will be posted on the AMEG website. Attendants were interested in the background of both test methods and in the ideas behind the test approaches.

3. Update on new work group: ***Glyceria* spp. test methods**
The new *Glyceria* Working Group was announced. The working group will start in 2013.

4. **Presentation by Dr. Russell Erickson US EPA Mid-Continent Ecology Division**

The "Plant Assemblage Toxicity Index" (PATI)
Aquatic risk assessments are made uncertain by the use of measures of effect for only one level of effect and by the use of only one percentile in sensitivity distributions for the variation of this measure of effect across an assemblage of taxa. This leaves undefined the severity of effects except for one taxon at one concentration at one level of effect. Another major uncertainty is the

relationship of effects observed for one exposure time series to effects expected for a different exposure time series.. This is particularly true for atrazine, whose field exposures are much more time-variable than exposures in experiments establishing effects of atrazine on aquatic plant species and communities.
An "assemblage toxicity index" addresses these issues by describing the effects on each taxon as a function of both time and concentration, and then integrating this toxicity information over the assemblage of taxa to provide an index of impact of any exposure time series on that assemblage. For atrazine, such an index – the "plant assemblage toxicity index" (PATI) was developed based on published toxicity tests for a variety of aquatic plant species. The elements of this index will be described.
PATI provides a measure of the expected severity of direct toxicity to this assemblage of species for different exposure time-series, but does not directly relate to community-level assessment endpoints. Such a relationship can be developed by examining PATI values for field data or experimental ecosystems in which different levels of impact have been documented on endpoints of interest. An example of this will be given.

5. **Open discussions**

Dr. Russell Erickson gives more background information about the PATI approach as applied to atrazine laboratory data and to atrazine data from mesocosms. The advantage of the PATI approach is that nformation from dose-response curves does not get lost and is fully used in the collation of the integrated effect curves. The PATI approach has been fully elaborated for atrazine. The wealth of mesocosm data for atrazine make it possible to compare the PATI approach with data from mesocosm studies. Up to now, the PATI approach has not formally been used in the submission of risk assessments for chemicals.

6. **Closing**

We thank all for their interest and attendance.