Methods Activity Group

Update for the CCL Work Group Plenary Meeting February 5-6, 2003

Conference Call Participants

- Laura Anderko
- Douglas Crawford-Brown
- Mike Dourson
- Alan Elzerman
- Brian Ramaley
- Colin Stine
- Craig Stow
- Ed Thomas
- Lynn Thorp
- Dan Wartenberg
- Tom Carpenter, Joyce Donohue and other EPA staff
- Jo Anne Shatkin and other Cadmus staff
- Steve Via, AWWA
- Abby Arnold and Sara Litke

Deliverables Scheduled for February

Method for PCCL to CCL

- Review methods.
- Identify desired characteristics of decision approaches.
- Evaluate different methods, clarify pros and cons of each (in light of variety of data quality).
- Think ahead to which method or methods to recommend in March.

Screen from Universe to PCCL

- Review methods
- Identify desired characteristics of approaches
- Begin to evaluate and think ahead to what method or methods to recommend in March

Topics of Discussion

The Methods Activity Group held three conference calls in January. Topics of discussion included:

PCCL-CCL

- Review and discussion of Matrix of Decision Method Characteristics
 - Which characteristics are priorities
- Background memo prepared by Doug Crawford-Brown that reviews decision approaches and presents possible criteria to use to choose among various methods.
 - a priori, a posteriori, and expert judgment/discourse

Universe to PCCL

 Brainstormed ideas for which methods to examine to move from Universe to PCCL

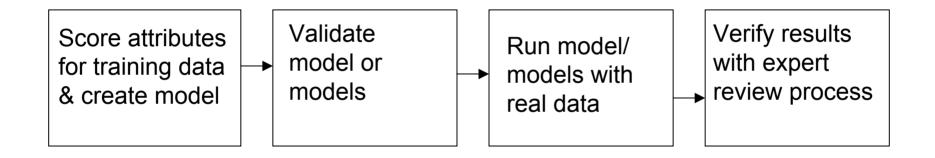
Summary of Discussion

- Reviewed five ways to reach decisions on CCL
- Quickly narrowed to three approaches
 - Expert judgement discourse
 - A priori rule based decisions id attributes then develop mathematical function = overall value of "risk to public health" assign weights to attributes in relation to overall value.
 - Algorithm form and weights are result of discussion on these two issues.
 - A posteriori id attributes, develop training set/protocol (list of agents that do or do not belong on CCL) develop equation(s)/model(s) that can be applied to this training set (sets of data) in creating a CCL
 - Form of equation(s)/model(s) is based on protocol and weightings that best approximates judgments made by the group on which agents should or should not be on the list.

Summary of Discussion

- On the last call the activity group agreed that a combined approach of a posteriori and expert judgment should be looked at more closely.
- Likely Steps:
- Use facilitated discourse in two steps:
 - 1. Create training set through facilitated discourse
 - Select risk agents want for training set
 - Assess strengths and weaknesses of alternative set of attributes, algorithms, and alternative weightings,
 - Score the agents in data set for each of attributes
 - 2. Among a "few" models "validate" how well models process training set
 - 3. Use or "go on line" and produce a "draft CCL"
 - 4. Challenge model: verify using expert judgment to address results of the model.

PCCL to CCL Process Under Consideration



Summary of Discussion

- Questions to address:
 - How to address contaminants with little or no data
 - Three options discussed:
 - Have a separate list of agents, that are of "concern" but where there is little data and additional research is required
 - On the CCL have 3-categories (high, low and indeterminate priority because of data gaps
 - Create the CCL as a ranked list and attend to top 50 contaminants on list
 - Activity group is aware of sensitivity of listing agents market impact
 - How to address microbials is an important issue (there may be a need for different model(s))

Immediate Next Steps

- Review various methods using a realistic data set selected by the group to better understand methods
- Review reasoning process for chemicals, microbes and radionuclides (D. Crawford-Brown) 12-27-02 list
- Review screening approaches to address and identify moving from Universe to PCCL

Next Steps to Prepare for March

- Proposed alternatives for screening from the universe to the PCCL
- Recommended decision method and associated prototype approach(es)