

Contaminant Candidate List 3: A New Process

**Science Advisory Board
Drinking Water Committee**

**Washington, DC
April 23, 2008**

**Eric Burneson/Thomas Carpenter
Office of Ground Water
and Drinking Water
US EPA**



Draft CCL 3: Overview

- Statutory Requirements
- Improvements in CCL Approach
 - Chemical Contaminants
 - Microbial Contaminants
- Schedule/Next Steps



Statutory Requirements

- **1996 Safe Drinking Water Act (SDWA) Amendments require EPA:**
 - Publish a list of unregulated contaminants (the CCL) which may require regulation and are known or anticipated to occur in public water supplies every 5 years.
 - Determine whether or not to regulate at least 5 CCL contaminants.
- **In developing the list, SDWA also specifies that EPA:**
 - Consider substances listed on CERCLA and FIFRA.
 - Consult with the scientific community including the Science Advisory Board (SAB).
 - Provide an opportunity for public comment.
- **The decision to list a contaminant is not judicially reviewable.**
- **CCL 1 (Published final in FR in March 1998)**
- **CCL 2 (Published final in FR in February 2005)**



CCL 1 and 2 Process

- **Separate processes for Chemical and Microbial contaminants**
 - **Chemicals**
 - Selected “universe” from 8 EPA program lists
 - 270 possible contaminants
 - Selection criteria for chemicals
 - Applied occurrence criteria and then health effects
 - **Microbial**
 - Expert Workshops reviewed 30 microbes
- **Public comments on Draft List**
- **CCL 1 published on March 2, 1998**
 - 60 contaminants: 10 microbes, 50 chemicals
- **CCL2 Carried list forward after Regulatory Determination**



Guiding Principle of CCL3 Development

Occurrence in public water systems at frequency and levels of public health concern

Health Effects



Occurrence





CCL 3 Universe

- Evaluated 104 data sources
- Compiled Health Effects and Occurrence information for over 6,000 chemicals and 1,400 pathogens
- Applied screening criteria to identify contaminants for further consideration
- Screen identifies 632 chemicals for further evaluation

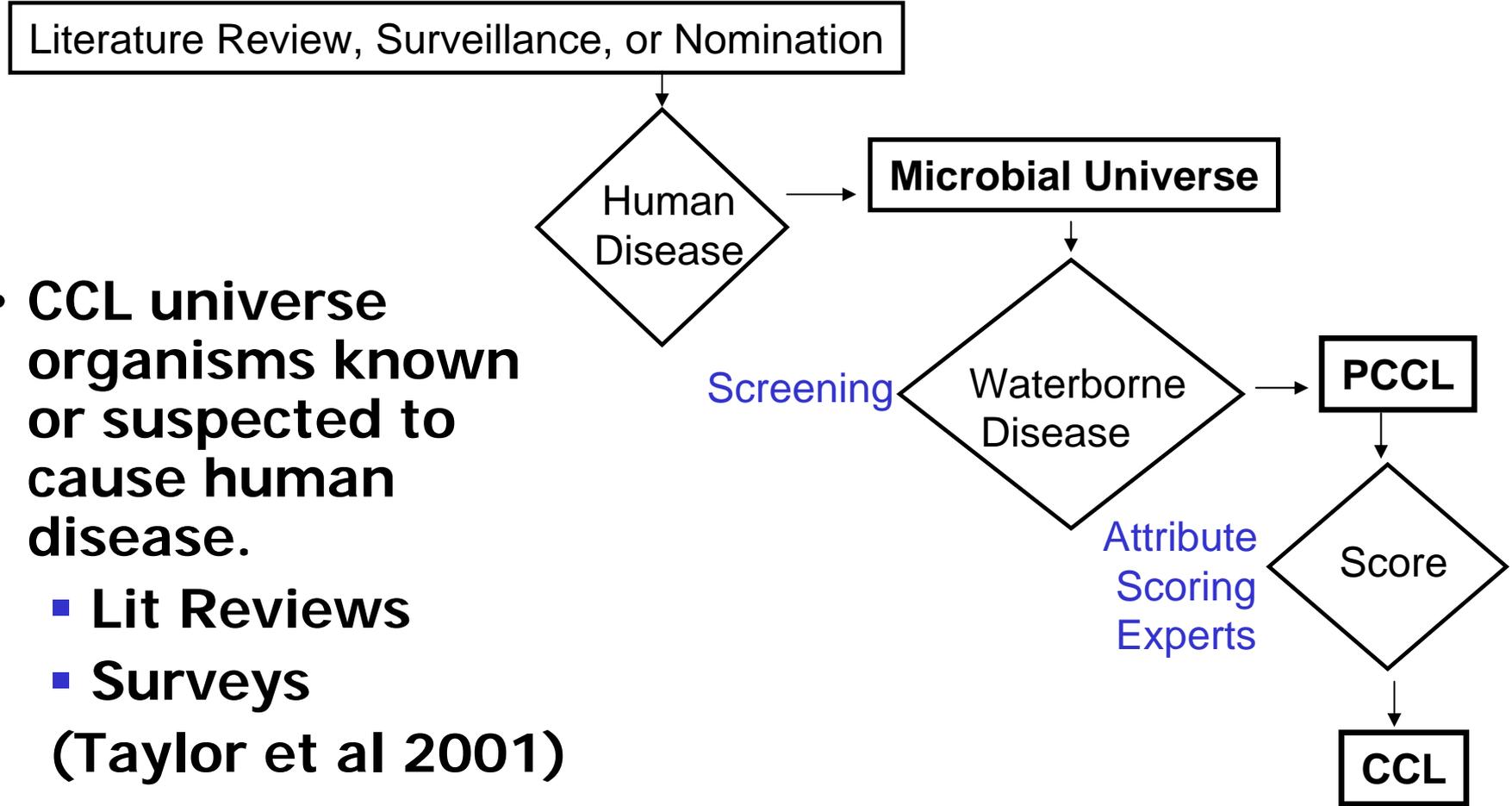


Selecting Chemicals for the Draft CCL 3

- **Classification Models as Decision Tools**
 - Compares different types of data
 - Detections, Environmental Release or Application, Produced in High Volumes
 - Evaluates contaminants relative to one another across types of health effects and occurrence data
- **Decision Tool used to Focus resources**
 - Identify or develop an estimate of occurrence
 - Health Effects to occurrence ratio used when possible
- **Identifies contaminants with limited data for research**



Microbial CCL Process



- **CCL universe organisms known or suspected to cause human disease.**
 - **Lit Reviews**
 - **Surveys**
- (Taylor et al 2001)**



Expert Review and Nominations

Many nominated contaminants already under consideration

- 150 of 174 individual chemicals
- 22 of 24 microbes
- Compared data previously collected to data provided through the nominations

Expert Review

- Noted that process is data driven, comprehensive, transparent and an improvement on previous CCLs.
- Provided specific comments on the screening, scoring protocols, and chemicals on the draft list



CCL and Pharmaceuticals

- *Federal Register* notice explains process asks for additional data and information
- Sent request to state public health and environmental administrators for information.
 - Exchange information among states and EPA
 - Occurrence
 - Human health
 - Analytical methods development
 - Stewardship
- EPA is co-lead in Inter-Agency Workgroup Pharmaceuticals in the Environment (PIE)