

# Reasons Why THMs Should Not Be Prioritized for Listing

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# Overview: Reasons for Not Prioritizing THMs

- THMs do not meet the 2004 prioritization criteria
- Prop 65 regulates chemicals, not groupings
- THMs is ill-defined
- Individual THMs are not “clearly shown to cause” reproductive toxicity
- It would be impossible to establish a NOEL or MADL for THMs as a group

# US EPA Review (2006) Indicates THMs Are Not a Priority

- “It is unlikely that chemicals will be proposed ... that have been recently reviewed by an authoritative body and found to have insufficient evidence of ... reproductive toxicity” – *2004 Prioritization Process*
- “EPA concludes that no dose-response relationship or causal link has been established between exposure to chlorinated drinking water or disinfection byproducts and adverse developmental or reproductive health effects.” – *US EPA, 2006*

# No Animal Studies of THMs as a Group

- The Background Materials identified 2 positive animal studies of “total THMs”
  - An in vitro study of chloroform, dichloromethane, & dibromoethane (only one of these substances is a THM)
  - A rat study of 4 THMs given individually
- Neither is a positive animal study of THMs as a group
- Negative study: not of THMs as a group

# Prop 65 regulates chemicals, not chemical classes or mixtures

- THMs are a group, class or category of compounds, not “a chemical”
- Prop 65 regulates individual chemicals
- This is supported by the language of the statute (e.g., the warning standard, the listing standard, and the discharge standard)

# Language of the Statute

- “No person ... shall knowingly and intentionally expose any individual to ***a chemical*** known to the state ...”
- “... a list of those ***chemicals*** known to the state to cause cancer or reproductive toxicity ...”
- “The discharge or release will not cause any significant amount of the discharged or released ***chemical*** to enter any source of drinking water.”

# Duties of the DART Committee

“Render an opinion, pursuant to subdivision (b) of Section 25249.8 of the Health and Safety Code, as to whether *specific chemicals* have been clearly shown, through scientifically valid testing according to generally accepted principles, to cause reproductive toxicity.”

-- Section 12305(b)(1)

# Category of THMs Is Not Clearly Defined

- THMs are a broad group of more than 20 chemicals
- Halogens include Cl, Br, F, I, At
- Background materials focus on 4 THMs
- Agenda says “trihalomethanes”
- Critical to define whether action is for all THMs or a subset of THMs

# Neither Prioritizing nor Listing THMs as a Group Is Scientifically Appropriate

- Listing the category THMs would mean treating each and every THM as though it were individually listed
- For some, the data are extremely limited
- For example, DBCM does not warrant a high priority
- Chloroform was not listed in 2004

# Listing THMs Would Be Unworkable

- No NOEL for THMs as a class
- No way to establish a Maximum Allowable Dose Level (MADL)
- No defense available to show that exposure is below the MADL
- All THM exposures, however minute, would potentially require a “known to cause” reproductive toxicity warning

# Recommendations

- Advise OEHHA that you do not wish to consider the potential group listing of THMs
- BDCM has already been prioritized
- No other THM made it through the recent Prioritization Process – with good reason