RISK ASSESSMENT AND TOXICS IDENTIFICATION PROCESSES

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Identification of Toxic Substances

California has two tracks for identifying substances for regulation as air toxics

- * Health and Safety Code §§39650 39675 (Toxic Air Contaminants)
- Health and Safety Code §§25249.5-25249.13
 (Proposition 65 Safe Drinking Water and Toxic Enforcement Act)

Toxic Air Contaminants

- * "[T]he identification and regulation of toxic air contaminants should utilize the best available scientific evidence gathered from the public, private industry, the scientific community, and federal state, and local agencies, and that the scientific research on which decisions related to health effects are based should be reviewed by a scientific review panel and members of the public." H&S Code §39650(d).
- * The California Air Resources Board (CARB) "shall identify toxic air contaminants which are emitted into the ambient air of the state using the procedures and following the requirements prescribed by Article 3 (commencing with Section 39660)."

Identification Procedure-TACs

- * CARB requests OEHHA to evaluate health effects and prepare recommendations regarding substances that may be determined to be toxic air contaminants (TACs). H&S Code §39660(a)
- * OEHHA "shall consider all available scientific data" and perform evaluation "using current principles, practices, and methods used by public health professionals who are experienced practitioners in epidemiology, human health affects assessment, risk assessment and toxicity." H&S Code §39660(b)
- * OEHHA shall submit written evaluation and recommendations to CARB within 90 days after receiving request from CARB. H&S Code §39660(d)

TAC Identification (cont.)

- * CARB prepares report to serve as basis for regulatory action. H&S Code §39661(a)(1)
- * CARB report and scientific data on which it is based is reviewed by the scientific review panel. H&S Code §39661(b)
- * If scientific review panel determines that health effects report is not based on sound scientific knowledge, methods, or practices the report shall be returned to CARB for revisions and resubmittal to scientific review panel. H&S Code §39661(c)

Identification Procedure – Prop 65

* "A chemical is known to the state to cause cancer or reproductive toxicity within the meaning of this chapter if in the opinion of the state's qualified experts it has been clearly shown through scientifically valid testing according to generally accepted principles to cause cancer or reproductive toxicity, or if a body considered to be authoritative by such experts has formally identified it as causing cancer or reproductive toxicity, or it an agency of the state or federal governing has formally required it to be labeled or identified as causing cancer or reproductive toxicity." H&S Code §25249.8(b)

Prop 65 Identification (cont.)

- * "The members of the 'Carcinogen Identification Committee' shall be the 'state's qualified experts' as the term is used in Section 25249.8 of the Act" 27 Cal. Code Reg. §25102(c)(1)
- * "The members of the 'Developmental and Reproductive Toxicant (DART) Identification Committee'... shall be the 'state's qualified experts' as the term is used in Section 25249.8 of the Act" 27 Cal. Code Reg. §25102(c)(2)

Numerous Substances Regulated

- * 21 substances (and subgroups of such substances) have been identified as TACs (in addition to the federal list of hazardous air pollutants) 17 Cal. Code Reg. §93000
- * There are approximately 800 chemicals listed as carcinogenic or reproductive toxicants under Proposition 65. http://oehha.ca.gov/prop65/background/p65plain.html

Problems When Process Not Followed

- * Assessments based on "precautionary principle" rather than "weight of scientific evidence"
- * Assessments based on agency staff determinations unreviewed and unsanctioned by state's qualified experts
- * Use of studies that don't reflect "Good Laboratory Practice Standards" and appropriate analysis methods

Additional Problems

- * Substances reviewed "informally" outside of the mandated process subjected to greater scrutiny (and regulation) than substances of potentially equal or greater concern that were never subjected to review inside or outside of mandated process
- * Significant delays in getting OEHHA to "re-look" at informal determinations
- * Failure to meet the 90 day limit for preparing evaluation and recommendations to CARB

Conclusion

- * The process works when followed
 - * Substances subject to regulation based on rigorous, transparent, and fair scientific process
- * When not followed it can lead to "underground" and discriminatory regulation
 - * Examples: TBAC, DMC
 - * Neither are listed TACs, HAPs or Prop 65 chemicals but both have been singled out for concern over other low-VOC technologies and products

Conclusion (cont.)

- * Hazards of other low-VOC technologies can be overlooked, potentially leading to greater risks
- * There needs to be an expedited process for reviewing earlier determinations in light of new scientific evidence
- * Only substances that have been identified through the formal review process established in California law should be considered to be TACs, HAPs or carcinogens subject to air district review