


State of Oregon
Department of Environmental Quality

Memorandum

Date: July 3, 2018

To: Environmental Quality Commission

From: Richard Whitman, Director 

Subject: Agenda item G, Action item: Appointments to Cleaner Air Oregon Hazard Index Technical Advisory Committee
July 11-13, 2018, EQC meeting

Why this is important The commission must make the appointments to the Cleaner Air Oregon Hazard Index Technical Advisory Committee, per Legislative direction in Senate Bill 1541 (2018 Session).

Rule and Legislative background Consistent with the provisions of Senate Bill 1541 (2018 Session), the current draft proposed Cleaner Air Oregon rules set a non-cancer benchmark Hazard Index value of five. Senate Bill 1541 allows some non-cancer benchmarks to be set at a Hazard Index as low as three if the air toxics being considered are known to have “developmental human health effects associated with prenatal or postnatal exposure,” or other severe human health effects. The Hazard Index limit is the value at which facilities must take actions to reduce air toxics emissions.

Senate Bill 1541 requires the EQC to consider the recommendations of a panel of experts, appointed by the commission. DEQ is proposing a slate of individuals, as described below, for membership of the Cleaner Air Oregon Hazard Index Technical Advisory Committee (TAC).

Committee purpose Committee members will assist in a rulemaking to make recommendations to the commission regarding which air toxics should have a lower Hazard Index. DEQ anticipated that the committee will meet twice, one meeting likely in August 2018 and the other in October 2018. In the first meeting, the TAC will discuss and recommend criteria to evaluate approximately 140 toxic air contaminants that have non-cancer effects, based on whether each contaminant is expected to cause developmental or other severe health effects in humans. DEQ and Oregon Health Authority toxicologists will then use the criteria identified by the committee to evaluate these chemicals.

The committee's second meeting will be for the purpose of reviewing DEQ and OHA's application of the criteria to specific air contaminants, and making final recommendations to the EQC, which will then make a final decision by rule.

**Committee
member
selection process**

The committee, of up to seven members, is to include up to five candidates recommended for appointment by DEQ in consultation with the Oregon Health Authority, and two at-large candidates selected via an application process. Potential members were recommended based on their experience with the research, derivation, and evaluation of non-cancer toxicity values (e.g., Reference Concentrations), including the application of uncertainty factors.

The five agency-recommended members for direct appointment by the EQC are individuals who have one or more of the following characteristics:

- Currently work in one of the authoritative scientific agencies used as a source for setting non-cancer reference concentrations in the Cleaner Air Oregon draft rules
- Have clinical training in pediatrics and developmental toxicology;
- Currently work as an academic researcher whose work includes a focus on developmental toxicology
- Currently work as an academic researcher whose work includes a focus on inhalation toxicology or
- Currently work as a risk assessor or toxicologist in a health-based air toxics regulatory program in another state

The minimum qualifications for the two at-large positions were:

- A minimum educational level of a Master of Science in toxicology, epidemiology, or a related field; and
- Five years of experience with risk assessment and/or toxicology assessments of toxic air contaminants; and
- Expertise in one or more of specializations noted above for the appointed members (institutional affiliations not required); and
- Completion of a DEQ application by the required deadline

The at-large positions application period opened May 15, 2018. DEQ asked applicants to complete an online application form by June 12, 2018, and to disclose whether their membership would create any actual or potential

conflicts of interest, as is required by Oregon's government ethics law, ORS 244.020(14). DEQ received eight applications for the two at-large positions. DEQ believes that the two individuals listed below for the at-large positions have the qualifications and experience that most closely match the specific technical needs of the committee, as determined by DEQ and OHA.

Recommended membership

- **John Vandenberg**, Director, Research Triangle Park Division, National Center for Environmental Assessment, Office of Research and Development, U.S. EPA, Research Triangle Park, North Carolina
- **John Budroe**, senior toxicologist with California's Office of Environmental Health Hazard Assessment.
- **Dr. Perry Hystad**, environmental epidemiologist; Assistant Professor, College of Public Health and Human Services, Oregon State University
- **Dr. Steven Gilbert**, Institute of Technology and Neurological Disorders, Seattle, WA
- **Dr. Amy Padula**, Assistant Professor at University of California at San Francisco, Department of OB/Gyn and Reproductive Sciences, San Francisco, CA
- **Member-at-large: Dr. Neeraja Erraguntla**, Ph.D., DABT, Director, Chemical Products and Technology Division, American Chemistry Council, Washington D.C.
- **Member-at-large: Dr. Kathryn Kelly**, Doctor of Public Health, President, Delta Toxicology, Nevada and Oregon.

Attachment

A. Membership recommendations

DEQ recommendation and EQC motion

DEQ recommends that the Oregon Environmental Quality Commission:

- Appoint the individuals shown in attachment A of this report to serve on the Cleaner Air Oregon Hazard Index Technical Advisory Committee for the duration of that rulemaking process.

Report prepared by Sue MacMillan
Air Quality Division Science and Policy Analyst

Names and Descriptions for Recommended Appointees to Cleaner Air Oregon Hazard Index Technical Advisory Committee

	Technical Backgrounds Needed for TAC Based on DEQ and OHA Toxicologists Input ¹					
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CAO HI TAC Appointee Candidate Name	Work in CAO-listed authoritative agency setting non-cancer reference values	Pediatrics/ Developmental toxicology	Academic, Developmental toxicology	Academic, Inhalation toxicology	Risk Assessor/ Toxicologist in State Air Toxics program	Candidate information
Dr. John Budroe	X				X	Chief Senior Toxicologist, Cancer Toxicology and Epidemiology Section, Office of Environment Health Hazard Assessment (OEHHA). Manages large team of technical staff that focuses on identifying and updating non-cancer inhalation reference concentrations, among other technical tasks.
Dr. Steven Gilbert, DABT			X	X		Affiliate Professor, Environmental and Occupational Health Sciences, University of Washington; Director and Founder of Neurotoxicity and Neurological Disorders (INND). His research has focused on neurobehavioral effects of low-level exposure to lead and mercury on the developing nervous system. Previously, he conducted pre-clinical contract researach, toxicology, and specialized model development as former owner and President of Biosupport, LTD.
Dr. Perry Hystad				X		Environmental epidemiologist focused on understanding health impacts related to place, including chronic health effects associated with exposure to air pollutioni such as cardiovascular and respiratory diseases and cancer. Assistant Professor at the College of Public Health and Human Services at Oregon State University.
Mr. John Vandenberg	X			X		Director of Research Triangle Park Division of the National Center for Environmental Assessment, Office of Research and Development, USEPA. Defines goals; develops program plans; establishes operating policies, priorities and procedures; evaluates progress and provides direction to a multidisciplinary staff, especially in regard to human health and ecological assessment of air pollutants. Formerly served as the National Program Director of the Human Health Risk Assessment Program, NCEA, ORD, USEPA, including oversight, planning and budgeting for the Integrated Risk Information System (IRIS).
Dr. Amy Padula		X				Assistant Professor at University of California at San Francisco in the Department of OB/Gyn and Reproductive Sciences, San Francisco, CA. Her research has been on the effects of ambient air pollution during pregnancy on adverse birth outcomes including pre-term birth, low birth weight, and birth defects. This research has expanded to include neighborhood socioeconomic status and acculturation, and comorbidities such as diabetes and hypertension during pregnancy. More recently, she has looked at interactions between biotransformation enzyme gene variants and air pollution and risk of congenital abnormalities.

¹ = Please refer to related document describing CAO HI TAC process
PEHSU = Pediatric Environmental Health Specialty Unit, University of Washington; DABT = Diplomate of the American Board of Toxicology.