State of Oregon
Department of Environmental Quality Memorandum

Date: July 7, 2022

To: Environmental Quality Commission

From: Richard Whitman, Director

Subject: Item A: Air Toxics Science Advisory Committee membership confirmation (Action)
July 21-22, 2022, EQC meeting

Purpose of item

DEQ will present Director Whitman's nominees for appointment to the Air Toxics Science Advisory Committee (ATSAC) and seek concurrence from the commission. Oregon Administrative Rule 340-247-0050(4) prescribes the appointment process for the ATSAC. The rule states that DEQ's Air Quality Division Administrator will nominate potential members to the DEQ Director. The DEQ Director will then appoint ATSAC members with concurrence by the Environmental Quality Commission.

DEQ recommendation and proposed EQC motion

DEQ recommends that the Oregon Environmental Quality Commission concur with Director Whitman's appointments to the ATSAC.

Proposed motion language:
I move that the Oregon Environmental Quality Commission concur with Director Whitman's appointment of the following individuals to the Air Toxics Science Advisory Committee:

- *John Budroe*
- *Qiaoxiang (Daisy) Dong*
- *Jefferson Fowles*
- *Jessica Myers*
- *John Stanek*
- *Susan Tilton*
- *John Vandenberg*

Background

DEQ first convened an Air Toxics Science Advisory Committee in 2004. The original ATSAC was tasked with reviewing air contaminant toxicity information and voting on recommendations for new or updated non-regulatory health-based goals for toxic air contaminants, known as Ambient Benchmark Concentrations (ABCs). The EQC adopted a first set of ABCs in 2006 which agency staff used as the basis for evaluating air toxics trends in Oregon. More recently, DEQ and Oregon Health Authority staff considered the ABCs in setting some regulatory values used in the Cleaner Air Oregon program.

EQC's 2018 adoption of Cleaner Air Oregon rules established a regulatory program to require stationary sources of pollution to report toxic air contaminant emissions, assess their risk to neighbors, and, where needed, reduce risks. The rules include toxicity reference values, or TRVs, DEQ and OHA use to assess the risk of cancer and non-cancer health effects to people nearby.

Toxicity reference values are the concentration of a pollutant in the air that corresponds to an excess cancer risk of 1 in 1 million (i.e., the likelihood an additional one person out of one million equally exposed people would develop cancer), or the concentration in the air above which relevant noncancer health effects might occur in humans following environmental exposure. These are the science-based values that underpin regulation of air toxics at particular risk levels established by the commission and the Oregon Legislature.

EQC's adoption of an air toxics program with enforceable rules rather than non-regulatory goals requires a different type of committee to inform DEQ's program implementation. In November 2021, EQC repealed the original ATSAC rules in OAR 340-246 and adopted new rules governing the purpose, appointment process, and intended expertise of ATSAC. The commission also rescoped ATSAC to be an advisory body focused exclusively on providing input to DEQ and OHA on revisions to Oregon's TRVs, specifically:

> *"340-247-0050 (1) Purpose. The Commission recognizes the many scientific uncertainties associated with the effects of toxic air contaminants, and the continuing development of new information in this field. An Air Toxics Science Advisory Committee (ATSAC) will advise DEQ, on the development of Toxicity Reference Values (TRVs) to be recommended to the Commission for use in the state's toxic air contaminant program. The ATSAC will review and provide feedback on TRVs proposed by DEQ."*

With those updates, OAR 340-247-0050(3) specifies that ATSAC will be composed of five to seven scientific experts on toxicity values and directs DEQ to evaluate the qualifications of potential ATSAC members, and the body as a whole, by seeking the following skills and qualifications:

- Toxicology and/or Toxicity Assessment, with additional consideration for experts with specialization in:
    - Inhalation toxicology,
    - Reproductive toxicology, or
    - Developmental toxicology,

- Environmental and/or Atmospheric Chemistry, with additional consideration for experts with specialization in:
    - Multi-pathway exposure, or
    - Bioaccumulation, and
- Epidemiology/Biostatistics, with additional consideration for experts with specialization in:
    - Environmental public health,
    - Neonatal and children's health,
    - Medicine, or
    - Health of vulnerable populations.

ATSAC member recruitment and selection processes

DEQ created and circulated an interest form for interested candidates to apply. DEQ sent out a GovDelivery email notice and created a website where the application form was available to interested candidates. The application form requested a brief biographical background and curriculum vitae from each candidate and included questions regarding conflicts of interest.

DEQ and OHA promoted the recruitment and opportunity among federal and state agencies and professional organizations. The agencies prioritized recruiting ATSAC members that are affiliated with the following authoritative sources used for Oregon DEQ's inhalation toxicity reference values listed in OAR 340-247-0030: United States Environmental Protection Agency (EPA); United States Agency for Toxic Substances and Disease Registry (ATSDR); and California Environmental Protection Agency (CalEPA).

The agencies also promoted the opportunity and recruitment process with the following groups: National Institute of Environmental Health Sciences-funded academic centers; Society of Toxicology's Risk Assessment Specialty Section and Occupational and Public Health Specialty Section professional members; and Pediatric Environmental Health Specialty Unit (PEHSU) staff.

The agencies also circulated information about the recruitment process among people involved or interested in the Cleaner Air Oregon programs, including regulated entities, environmental and public advocates, industry associations and community members.

The recruitment materials specifically encouraged qualified applicants who identify as black, indigenous and people of color and people with disabilities to express interest in joining the ATSAC, as well as qualified applicants with environmental justice or health equity expertise. DEQ launched the recruitment process on April 28, 2022, and interest forms were due by May 31, 2022.

DEQ received 16 interest forms from candidates, and the list of all interested applicants is included as Attachment A to this staff report. The agencies used the applicants' materials to assess how well they fit the expertise requirements listed in rule as described above and the degree to which candidates had actual or potential conflicts of interest. As directed in the rule, DEQ also considered the degree to which the body as a whole is qualified to fulfill its purpose by assuring a balance of technical expertise, organizational affiliations, and experiences in various professional settings.

Proposed ATSAC members

Director Whitman proposes to appoint the seven following individuals to ATSAC:

- **John Budroe, MS, PhD.** Dr. Budroe is the Chief of Air Toxicology and Risk Assessment Section of the Office of Environmental Health Hazard Assessment (OEHHA) in the CalEPA and has 25 years of experience performing human health risk assessments on environmental chemicals. Dr. Budroe meets the ATSAC expertise requirement with expertise in toxicology, toxicity assessment, and epidemiology, with additional specializations in inhalation toxicology and environmental public health.
- **Qiaoxiang (Daisy) Dong, MS, PhD.** Dr. Dong has been a Toxicologist in the Department of Pesticide Regulation at California EPA and Adjunct Professor at The Second Affiliated Hospital and Yuying Children's Hospital of Wenzhou Medical University in China for over six years. Dr. Dong meets the ATSAC expertise requirement with expertise in toxicology and toxicity assessment, with additional expertise in inhalation, reproductive and developmental toxicology.
- **Jefferson Fowles, PhD.** Dr. Fowles is a Staff Toxicologist (Specialist) in the Environmental Health Investigations Branch at the California Department of Public Health. He has been in this role for over 11 years. Dr. Fowles meets the ATSAC expertise requirement with expertise in toxicology and toxicity assessment, with additional expertise in inhalation toxicology and environmental public health.
- **Jessica Myers, PhD.** Dr. Myers is a senior toxicologist and risk assessor at the Texas Commission on Environmental Quality and has been a toxicologist at this agency for the past nine years. Dr. Myers meets the ATSAC expertise requirement with expertise in toxicology and toxicity assessment, with additional expertise in inhalation and reproductive toxicology. Soon Dr. Myers will be transitioning to a new position as a Toxicologist at SRC Inc., which is a not-for-profit company that performs toxicity assessments used to develop toxicity values for government agencies including EPA and ATSDR.
- **John Stanek, PhD.** Dr. Stanek is a Toxicologist with the Center for Public Health and Environmental Assessment at the U.S.

Environmental Protection Agency (EPA) and been in this position for about 20 years. Dr. Stanek meets the ATSAC expertise requirement with expertise in toxicology and toxicity assessment, with additional expertise in inhalation toxicology.

- **Susan Tilton, MS, PhD.** Dr. Tilton is an Associate Professor within the Environmental and Molecular Toxicology Department at Oregon State University (OSU) and Director of Academic Programs for Toxicology. Dr. Tilton is also a member of the OSU Environmental Health Sciences Center, an affiliated member of the OSU Center for Quantitative Life Sciences, and Principal Investigator on the OSU Superfund Research Program. Dr. Tilton's research focuses on modeling toxicity and disease from environmental factors, including complex chemical mixtures. Dr. Tilton meets the ATSAC expertise requirement with expertise in toxicology, with additional expertise in inhalation toxicology.
- **John Vandenberg, MS, PhD.** Dr. Vandenberg has over 35 years of experience in environmental health risk assessment. He recently retired from the US EPA in 2021, where he served as Director of the Health and Environmental Effects Assessment Park Division of the Center for Public Health and Environmental Assessment. Dr. Vandenberg meets the ATSAC expertise requirement with expertise in toxicology, toxicity assessment, and epidemiology, with additional expertise in inhalation, reproductive and development toxicology, and environmental public health.

Next steps and EQC involvement

DEQ anticipates the ATSAC will meet six to ten times over the coming 18 months. Meetings will be held virtually and DEQ anticipates that each meeting will be two hours or less. DEQ also anticipates contracting with an independent, third-party facilitator for these meetings.

The ATSAC is not a decision-making body. Its role is to advise staff on revisions to existing, and development of new, TRVs. Discussions about the policy, health and fiscal impacts of revisions would occur in the context of a subsequent rulemaking process, subject to commission decision-making.

DEQ will update EQC as the ATSAC performs its work. The commission will have additional involvement should DEQ initiate a rulemaking to revise, remove or add any TRVs.

Attachment

A. List of all ATSAC applicants

Report prepared by:
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Holly Dixon, Oregon Health Authority

List of applicants: Air Toxics Science Advisory Committee, 2022

- Marcy Banton, DVM, PhD**,** Self-employed independent consultant
- Steven Boomhower, PhD, Gradient
- John Budroe, MS, PhD, California Environmental Protection Agency
- Qiran Chen, MPH, PhD, University of Florida
- Qiaoxiang (Daisy) Dong, MS, PhD, California Environmental Protection Agency, The Second Affiliated Hospital and Yuying Children's Hospital of Wenzhou Medical University, China
- Michael Dourson, PhD, DABT, FATS, FSRA, Toxicology Excellence for Risk Assessment
- Neeraja Erraguntla, PhD, DABT, American Chemistry Council
- Alma Maria-Cardenas Feldpausch, MS, DABT, Ramboll US Consulting
- Jefferson Fowles, PhD, California Department of Public Health
- Lauralee Fernandez, MPH, Oregon Health Sciences University and Portland State University School of Public Health, Washington County
- Jessica Myers, PhD, Texas Commission on Environmental Quality
- Robyn Prueitt, PhD, DABT, Gradient
- John Stanek, PhD, US Environmental Protection Agency
- Susan Tilton, MS, PhD, Oregon State University
- John Vandenberg, MS, PhD, Recently retired from US EPA in 2021, Self-employed
- Grant Walker, MPH, EIT, Geosyntec Consultants