Cleaner Air Oregon

Comments from Cleaner Air Oregon Advisory Committee Members on October 18 meeting topics

Comments from Mark Riskedahl, Huy Ong, Mary Peveto, Lisa Arkin, and Jessica Applegate

Comments from Jay Bozievich

Comments from Lisa Arkin

Comments from Jessica Applegate

Comments from Linda George

Comments from Laura Seyler

Comments from Diana Rohlman

Comments from Paul Lewis

Comments from Huy Ong, Lisa Arkin, Mark Riskedahl, Angela Kremer, Melanie Place, Kathleen Fowler, Jessica Applegate, Kathrine Salzmann, Mary Peveto, and Stacey Schroeder

Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Beyond Toxics • East Portland Air Coalition • Neighbors for Clean Air
Northwest Environmental Defense Center • OPAL Environmental Justice

October 20, 2016

Jacqueline Dingfelder
Co-Chair, Cleaner Air Oregon, Rulemaking Advisory Committee

Claudia Powers
Co-Chair, Cleaner Air Oregon, Rulemaking Advisory Committee

Re: Pollutant Scope Discussion in Cleaner Air Oregon Advisory Committee Meeting

Dear Co-Chairs Dingfelder and Powers,

This letter is to follow up on discussion that took place during the October 18 meeting of the Cleaner Air Oregon Advisory Committee regarding the scope of pollutants to be covered in Oregon's air toxics regulatory program. We appreciate the opportunity to provide these additional comments for consideration by the Oregon Department of Environmental Quality (DEQ) and Oregon Health Authority (OHA) as well as the Advisory Committee in advance of our next meeting on November 17.

The Pollutant Scope issue paper prepared by DEQ and OHA included nine separate "Potential Elements" for the Advisory Committee to consider when discussing what air toxics should be included in Oregon's air toxics program; however, the discussion at the October 18 meeting was heavily focused on only two of those elements. Specifically, the discussion centered primarily on a choice between Oregon's existing 52 Ambient Benchmark toxic pollutants (Element A) or EPA's list of 187 Hazardous Air Pollutants (Element B). Upon further consideration of the materials presented and the narrow scope of the discussion, our position is that the topic of pollutant scope warrants further discussion at a future Advisory Committee meeting.

The recommendations of the Technical Workgroup were summarized as supporting incorporation of EPA's list of 187 HAPs as a minimum threshold with the objective toward a more inclusive, yet prioritized, list of air toxics. Developing the program with a more inclusive list of air toxics on the front end provides greater certainty to the regulated industry and allows DEQ the flexibility to prioritize those pollutants with established risk based concentrations and those likely to cause the most human health risk to Oregonians. Several of the potential program elements set out in the issue paper included the type of inclusive and flexible toxics list recommended by the Technical Workgroup.

In order to foster a more robust discussion of the range of potential elements proposed for the scope of air toxics to be included in Oregon's program, we suggest that the Advisory Committee review and discuss the programs from Washington, California, and New York. Each

of these programs include an inclusive list of toxic air pollutants on varying scales. For example, California's South Coast Air Quality Management District uses a multi-faceted system to target toxic air pollution including:

- 23 higher risk pollutants for yearly fee assessment purposes.
- 150-200 pollutants with toxics criteria used for permitting.
- 450 chemicals listed for Hot Spots reporting requirements.
- 187 federally listed HAPs, plus tobacco smoke, diesel particulate, and asbestos.

In addition to an inclusive list of pollutants, California has dedicated substantial resources to researching and developing risk based concentrations (RBCs) for a large number of the listed toxics. DEQ could incorporate California's RBCs into the Oregon program to provide certainty upfront and to conserve limited agency resources for implementation of the program. This alternative was not adequately presented or discussed in the course of the first advisory committee meeting; therefore, we request that this topic be revisited during the next meeting.

Thank you for your consideration of our comments. We appreciate the opportunity to provide this input and look forward to our continued participation in the advisory committee meetings.

Sincerely,

Mark Riskedahl, Executive Director
Northwest Environmental Defense Center

Huy Ong, Executive Director
OPAL Environmental Justice

Mary Peveto, President
Neighbors for Clean Air

Lisa Arkin, Executive Director
Beyond Toxics

Jessica Applegate
Eastside Portland Air Coalition

From: BOZIEVICH Jay K
Sent: Tuesday, October 18, 2016 12:48 PM
Subject: Info for committee on air toxics in Lane County

Sue,

I feel the presentation from DEQ lacked utilizing information that LRAPA has gathered from their air toxics monitoring program. Here is a link to a presentation on the 2015 results and LRAPA's 2015 annual report.

If the committee is interested then I could provide information on the compliance plan for Oakridge PM 2.5 which we are just a couple of months away from attainment...hopefully.

Sincerely,

Jay

Air Toxics Monitoring:
http://www.lrapa.org/DocumentCenter/View/2039

Annual Report:

http://www.lrapa.org/ArchiveCenter/ViewFile/Item/413

From: Lisa Arkin
Sent: Thursday, October 20, 2016 9:56 AM
To: cleanerair
Subject: Scope of Toxics in the Program

To the Cleaner Air Oregon Policy Advisory Committee and Agency Staff -

During the October 18 meeting, we covered the topic of what toxics and how many toxic chemicals should be covered in the CAO regulatory process. At the time the choice seemed binary: should it be "52" or "187" (plus or minus a few).

Upon reflection I realized that there is no need to be confined to a binary choice. I recommend that we look at the most comprehensive list of toxics chemicals that is available. The result will be health protective regulations, rather than regulations based on "the way Oregon has always done it (before CAO)." Suggestions that Oregon stick with the good old "52" does not align with the stated purpose of the CAO mandate – to create new and health-based air toxics policies and the regulatory system to achieve the policy goals.

I would like to suggest that the CAO Policy Committee and staff look at the chemical reporting paradigms from other states and jurisdictions, including City of Eugene as well as California and New York. We should certainly take into account that HAPs are a subset of a larger group of air toxics. For example, California includes 450 "hot spot" chemicals along with the 187 HAPs.

The Eugene Toxics Reporting system requires tracking of over 1700 thousand chemicals. The list of chemical is compiled from federal sources of toxic and hazardous chemicals including CAA 602(b), CERCLA, RCRA, CWA, SARA 313, 40 CFR 261 and a number of TX listings. The chemicals are also evaluated for their characteristics including corrosivity, ignitability, reactivity, hazards and toxicity.

Relying on federal regulatory programs, chemical characteristics and exposure mechanisms (as described above) is a scientific, sound and rational approach to regulating and reporting of chemical emissions.

Thank you for the opportunity to expand upon my comments made during the October 18 meeting. Please include this communication in the official record.

Sincerely,
Lisa Arkin, Executive Director
Beyond Toxics

E P
A C Eastside Portland Air Coalition

October 21st, 2016

VIA ELECTRONIC MAIL to cleanerair@deq.state.or.us

Jacqueline Dingfelder
Co-Chair, Cleaner Air Oregon Rulemaking Advisory Committee

Claudia Powers
Co-Chair, Cleaner Air Oregon Rulemaking Advisory Committee

RE: Written comments for Pollutant Scope discussion for Cleaner Air Oregon

Dear Co-Chairs Dingfelder and Powers,

On behalf of citizen and community groups concerned for their health and environmental health in regard to air toxics, we are offering the following comments. Together we represent thousands of Oregonians across the state.

1) Please re-work the large chart that compares air toxics programs to include Oregon. It is helpful to see at a glance how Oregon compares across the board. This is part of transparency and will make it easier on all committee members to navigate this complex material.

2) We are requesting the most comprehensive list be used for the pollutant scope in Cleaner Air Oregon.

- An industry representative mentioned that covering Oregon's 52 air toxics is sufficient. We disagree. Why not cover the most toxics when there is reliable science? This will ensure that the regulations are as protective of public and environmental health as possible.

- We would like the committee to consider New York's extensive list of over 1000 air toxics, the city of Eugene's list of over 1700 chemicals and California's more comprehensive program. We also strongly encourage you to look to the European Union for standards to generate the most protective and comprehensive list possible.

- We would like the list scope to include stationary diesel generator/motors and criteria pollutants, especially Particulate Matter.

- Creating a comprehensive list now will save DEQ time and money in the long run and as the Technical Advisory Committee pointed out, it will be difficult to add additional pollutants once this list is made.

3) We are requesting benchmarks for 1 hour, 8 hour, 24 hour, and annual RBC averaging times. As David Ferrar notes, people experience different health effects at different exposure periods for toxics. We request a hybrid approach that is the most protective, looking to the European Union standards for guidance.

Thank you for your consideration and the opportunity to serve on the Cleaner Air Oregon Advisory Committee. We look forward to working with you in the future.

Sincerely,

Jessica Applegate, Community Based Representative, Eastside Portland Air Coalition

Katharine Salzmann, Alternate for Eastside Portland Air Coalition

On behalf of the following community groups:

Eastside Portland Air Coalition
Cully Air Action Team
South Portland Air Quality
The Dalles Air Coalition
NWDA Air Quality Committee
Air Advocacy
Hayden Island
Portland Clean Air
Hillsboro Air and Water
Ramsey McPhillips of McMinnville
Carroll Johnston of Brooks
FUTURE GENERATIONS

Portland State
UNIVERSITY

Department of Environmental Science and Management

October 24, 2016

To: Jacqueline Dingfelder, Co-Chair, Cleaner Air Oregon Advisory Committee
Claudia Powers, Co-Chair, Cleaner Air Oregon Advisory Committee

From: Linda A. George, Professor, Portland State University

Unfortunately, I was unable to remain the full day at the Advisory Committee meeting due to my teaching schedule. I am writing to provide my thoughts on the issues of Pollutant Scope and Applicability.

Pollutant Scope:

It is useful to consider the history of air toxics regulation in the US in this context. In the 1990 Clean Act Amendments (CAA), Congress mandated that EPA develop emission source regulations for 189 air toxics. Congress enacted this legislation because in the 20 years after the promulgation of the Clean Air Act in 1970 EPA was able develop regulations for only ~ 8 hazardous pollutants. It was widely recognized that EPA's difficulty in regulating other hazardous pollutants was due to legal and political debates, so in 1990 Congress provided EPA with a list of 189 air toxics. Unfortunately, the federal environment for regulating air toxics has remained paralyzed and the 1990 CAA list has been virtually unchanged despite the fact that approximately 300 new chemicals are introduced into the environment each year by industry[1].

In the face of inaction at the federal level, several states have taken a modern approach that evaluates the risk of chemicals that are emitted in their states beyond the ones on the 1990 list. As the State of Oregon considers how to move forward with managing air toxics, it is difficult to understand why Oregonians should not be protected by modern, up-to-date assessments of air toxics emitted in Oregon. California's South Coast Air Quality Management district has provided the country with comprehensive and scientifically defensible health standards for several hundred air toxics. With limited state resources to maximize protection, Oregon does not need to duplicate efforts in setting standards (Oregon can leverage the work of other states to adopt standards that have already passed scientific scrutiny), nor limit itself to the federal air toxics list developed over 25 years ago.

Applicability:

I am very concerned about the notion of a "*de minimis* emission rate" threshold that below which an emissions source would be directed out of the regulatory framework. The notion of a *de minimis* rate based on mass is truly nonsensical given the enormous effort we are now putting into evaluating risk. I would argue that mass based evaluations are rooted in history when little was known about the risk from air toxics, where mass was a simple proxy. This kind of thinking is how we ended up with small sources (such as art glass manufacturers) creating disproportionate air toxics risk. A small mass of a highly toxic substance can create a substantial risk while a larger mass emission of a lesser toxin may be actually "*de minimis*" toxicity. A rational system for *de minimis* threshold should be based on toxicity risk not mass.

Thank you for the opportunity to provide comments.

[1] Air Quality Management in the United States, National Research Council, 2004

Cleaner Air Oregon Advisory Committee - Comments for Summary of Program Elements

This is additional Input from Advisory Committee Member that was not able to be fully covered in the first Advisory Committee Meeting.

Program Element 1: Include existing sources in program, or not?

E. Placeholder element.

- Regulate only new and modified sources in the state's new air toxics program. New facilities and modified facilities are getting capital money - that can be used to design additional air toxics pollution controls in place at the time of construction.
- All air toxics sources will be regulated, but Oregon will use the federal NESHAPS program based on Maximum Achievable Control Technology (MACT) requirements for existing sources. This has been shown to be achievable by the top 12% of performers in the industry, and all others are required to achieve the reduction in air toxics that the top 12% can achieve. The federal NESHAPS MACT program has been used successfully by New York's air toxic program. This program is well developed and has a large amount of data/science associated with it. In addition, eight years after a MACT program is in place, a residual risk evaluation is done and EPA determines if the existing program is effective or whether additional controls are needed – if needed, additional controls must be installed to be protective of people's health.

Program Element 2: Regulating pieces of equipment in a facility vs regulating the whole facility?

E. Placeholder element.

- With NESHAPS Maximum Achievable Control Technology regulations in place at existing facilities, additional controls would be required to be evaluated only when there was a Type 3 or 4 change to a piece of equipment or an operating area. This would be a change that increased emissions above the significant emission rate, similar to the way the criteria pollutants are regulated in Oregon now. Suggest using the same type of framework, as it is familiar to industry and regulatory staff and a program that has worked very well to reduce criteria pollutant emissions in Oregon over the last 20+ years. New facilities would need to evaluate their entire site under the state's new air toxics program.

Program Element 3: Categorical Exemptions?

E. Placeholder element.

- Evaluate whether the Title V categorical insignificant activities exemption definition should be applied to both Title V and ACDP sources.
- If there is a NESHAPS MACT program for an industry, this should be applied, as this was an issue for the Portland glass factories that did not have their industry MACT applied.

Program Element 4: What air toxics should be included in the program?

A. Use the 52 Oregon Ambient Benchmarks – we should prioritize these first, to create a program that is implementable and that we KNOW will improve Oregonians health.

Program Element 5: Method for setting health risk-based concentrations?

A.Comprehensive review and evaluation of primary research by agency (ATSAC)

Program Element 6: Default Toxicity Values?

A.Do not use default toxicity values. Use values that have been identified by data/science so that Oregon's efforts are focused on the air toxics that we know will have detrimental effects on Oregonians and that reducing exposure will result in healthier Oregonians.

Program Element 7: Default Toxicity Values?

E. Placeholder element

- Chronic: Annual
- Acute: 24 hour (if indicated by data/science to have acute affects)

Thank you for the opportunity to comment on the topics addressed in the first Cleaner Air Oregon Advisory Committee. As a committee member, I appreciate the chance to more fully converse on the topics, as the issues before us are complex and it is not understood at this time what a new Oregon toxics program might look like.

Sincerely –

Laura Seyler

LRAPA Advisory Committee Member

Air Quality Supervisor International Paper Springfield

Oregon Public Health Association
818 SW Third Avenue, #1201, Portland, OR 97204
www.OregonPublicHealth.org

October 25, 2016

Cleaner Air Oregon Advisory Committee
Oregon Public Health Association Response to the October 18, 2016 Meeting

Following the Oregon 18 2016 Advisory Committee meeting, the Oregon Public Health Association Representative (Dr. Rohlman) met with the association to discuss recommendations for the DEQ and OHA. Below are comments representative of the Oregon Public Health Association (OPHA) and the Healthy Environments section within OPHA.

Response to the Applicability White Paper

Program Element 1: Include existing sources in program, or not?
The Oregon Public Health Association urges DEQ and OHA to include existing sources in the program along with new and modified sources for the following reasons:

- Existing sources may have older equipment that has a larger contribution to air toxics
- Existing sources are often located within environmental justice communities, placing a higher burden of air pollution on these communities
- From the Technical Workgroup: "Existing facilities are more likely to have older technology and may emit more than newer sources"
- We echo the 'fairness' concern listed by the Technical workgroup. To not include existing sources will also place the burden of regulating air quality on new and growing (requiring modifications) industries
- OPHA agrees with the technical workgroup on the following statement: "Concentrations of toxics present in ambient air are not dependent upon whether the facilities emitting them are new or existing"

In summary, OPHA supports option C: Regulate new/modified/existing sources and provide incentives to reduce air toxic emissions. OPHA recognizes the burden of work this would place on DEQ, and would support a phased approach for existing sources to be brought into compliance.

Program Element 2: Regulating pieces of equipment in a facility versus regulating the whole facility
The Oregon Public Health Association agrees with the Technical Workgroup on the following statements:

- Concentrations of toxics present in ambient air are not dependent upon where emissions originate from, whether the whole facilities are from individual pieces of equipment within the facility. If an air toxics program is being evaluated, one must assess all air toxics from all equipment, in other words, the facility as a whole.
- Prescribing regulations to a piece of equipment does not encourage the facility to look at how best to reduce emissions overall, especially in regard to pollution prevention.
- The impacts from a whole facility can be dramatically different than the impacts from a single piece of equipment because computer modeling takes into account the location of each exhaust stack.

- Health impacts can occur regardless of whether harmful emissions are from individual pieces or the entire facility.
- Oregon's current program permits the whole facility, so using this approach would be in alignment with current practice.

In summary, OPHA supports options B and D: (B) Regulate air toxics from new/modified whole facility and (D) Regulate air toxics from existing whole facility. Furthermore, OPHA does not support an "off-setting" approach, given the concerns raised by the Committee, i.e. that one area of the facility may be lax, knowing that another area is stringently regulated.

Program Element 3: Categorical exemptions
In summary, OPHA supports option B. Use categorical exemptions with on-ramps back into the regulatory program for extenuating circumstances. Here, we would recommend that in addition to computer monitoring of air toxics, an additional assessment be conducted for whole facilities, such as a Health and Environmental Impact Assessment. Such an assessment would help identify impacts to environmental justice communities, and identify additional circumstances, such as proximity to daycares/schools, hospitals, senior care centers, vulnerable environments, etc. This additional information may help identify potential 'on-ramps' to re-evaluate categorical exemptions.

Response to the Pollutant Scope and Setting Concentrations White Paper

Program Element 4: What air toxics should be included in the program?
Of concern- the committee members were not provided a list of current RBCs and the date at which those RBCs were adopted. A comprehensive list of current RBCs from other agencies (national and international) is necessary to provide an informed opinion regarding which pollutants should be regulated, and the applicability of these RBCs to human health.
We request that this program element be revisited once such a list of RBCs can be provided to the Advisory Committee for review.

With the limited information currently available, OPHA recommends the following air toxics be included:

- Hydrogen Sulfide
- Diesel particulate (idling trucks and diesel-powered equipment) can contribute to whole facility emissions
- EPA list of 187 hazardous air pollutants (as recommended by the Technical Workgroup)
- 52 Oregon Ambient Benchmark air toxics
- Air toxics from additional lists with RBCs
- Air toxics monitored by the California Environmental Protection Agency
- (Pending RBCs from additional agencies) Air toxics that are likely:
    - Carcinogens
    - Neurotoxins
    - Endocrine disruptors
    - Irritants (dermal, respiratory, etc.)
        - Such an approach provides an inclusive list of air toxics and allows additional air toxics to be regulated should an RBC become available or necessary

In summary, we support the recommendation made by the Technical Workgroup to have an inclusive list of regulated air toxics, which would allow later regulation of emerging chemicals if they become of potential

concern. For example, the list may include air toxics that currently do not have an RBC. Should such an RBC become available, and it is within a level suggesting regulation, this could then be enforced without having to change the list of regulated air toxics. Furthermore, such an approach recognizes that industry is growing and expanding, and the current list of Oregon Ambient Benchmarks may no longer be applicable. In short, OPHA supports an inclusive list of air toxics that is highly adaptable and flexible to accommodate advances in science without being overly cumbersome to industrial regulation. For example, an air toxic could be on the list, and then upgraded to active regulation should an RBC become available and of concern.

Program Element 5: Method for setting health risk-based concentrations (RBCs).
For values that do not currently have an RBC, surrogate analysis approaches such as QSAR or using approaches such as those used for green screens (http://www.greenscreenchemicals.org/method) may be useful to identify RBCs.

In summary, we support option A for air toxics that currently have no known RBCs, option B and option D. In all cases however, the RBCs should be evaluated to ensure they are appropriate for use in Oregon and are based on the best science available).

Program Element 6: Default toxicity values
We support option B, recognizing that such an approach should only be used as a last resort.

Program Element 7: Risk based concentration averaging times
To fully address the concerns raised by Program Element 7, a more comprehensive evaluation may be necessary. For example, industries located near schools should calculate 8-hour risk-based averaging times, as this is typically the length of a school day. One hour averaging values may also be useful, to account for accidental discharges or equipment failures.

A similar concern from Program Element 4 – without knowing the status of current RBCs for 1 hour, 8 hour, 48 hour and annual time-points, it is difficult to provide guidance. As noted in Program Element 4, a comprehensive list of current RBCs, along with the date such RBCs were set, will be helpful in determining the scientific integrity of the values.

We support developing Chronic Annual and 8 hour concentration averaging times, as well as 1-hr and 24-hr acute exposures, yet suggest that there be a phased approach to allow time for appropriate calculation of these RBCs. We also suggest that such averages only be applied where necessary, as the 8-hr value may not be necessary for some industry.

<u>Final Summary</u>
In summary, we hope this process will be iterative, allowing members of the Committee to revisit program elements as more information is prevented.

Thank you for your consideration of these comments.

Diana Rohlman

Jessica Nischik-Long

Diana Rohlman, PhD
OPHA Committee Representative

Jessica Nischik-Long, MPH
Executive Director

Clackamas Community Health Division | Multnomah County Health Department | Washington County Health and Human Services

October 25, 2016

Delivered via electronic mail to: cleanerair@deq.state.or.us

Jacqueline Dingfelder
Co-Chair, Cleaner Air Oregon Rulemaking Advisory Committee

Claudia Powers
Co-Chair, Cleaner Air Oregon Rulemaking Advisory Committee

RE: Written comments regarding Cleaner Air Oregon Rulemaking Advisory Committee Program Elements 1-7, covered during the advisory session on October 18th, 2016

Dear Co-Chairs Dingfelder and Powers,

The following represents formal comments compiled by Advisory Committee member Dr. Paul Lewis, on behalf of Clackamas, Multnomah and Washington counties.

Applicability

Program element 1: Include existing sources in program, or not?
Option C as described on page six of the Applicability Issue Memo represents an approach that is most protective of public health. Events transpiring earlier this year involving art glass manufacturing facilities clearly demonstrate that existing sources can pose serious threats to public health. Not regulating existing sources would leave unresolved the issues at stake in this rulemaking. The recommendations of the technical advisory committee make clear that new and existing sources must be included in order for the Oregon program to be effective. DEQ and OHA should develop a prioritization tool that looks at the toxicity of emissions and the proximity of those emissions to vulnerable populations to target limited regulatory resources at the sources that pose the most serious threats to public health.

Program element 2: Regulating pieces of equipment in a facility versus regulating the whole facility.
Options C and D as described on page eight of the Applicability Issue Memo represent an approach to permitting that is most protective to public health. Currently, DEQ regulates entire facilities within a single permit. Individual processes and equipment are delineated within the larger permit, and similar components are often combined to promote simplicity. Existing regulated whole facility permits also account for emissions not associated with a particular piece of equipment, such as fugitive dust and surrounding community livability concerns regarding nuisance odors. We recommend integrating the ability to regulate individual pieces of equipment in addition to the entire facility, to prevent the possibility of emissions trading between equipment and processes- i.e. an ‘on ramp’ for extenuating circumstances. Take for example a facility that installs particle controls on a furnace, which reduces their PM2.5 emissions significantly, bringing the facility well under their PSEL threshold. This could allow the facility to bring an older furnace back online without violating the whole facility emissions cap. Therefore, if rules were designed so that whole facilities were regulated, with the ability to regulate individual pieces of

equipment on an as needed basis, this could prevent situations where required installation of pollution controls results in negligible change in total emissions. If the rulemaking body can integrate ability to exercise authority over individual pieces of equipment, within the scope of an entire facility, we would support Option D as a standalone. DEQ should tailor their approach facility by facility to require pollution controls or practices for equipment and/or the entire facility that would prevent emissions of the most toxic pollutants, especially when proximate to sensitive receptors.

Program element 3: Categorical exemptions.
Option B as described on page 9 of the Applicability Issue Memo ensures that public health is protected while allowing for efficiencies related to permit issuance and renewal made possible through categorical exemptions. We believe that exemptions for processes that present negligible risk are acceptable- and necessary- to ensure that limited resources can be prioritized for facilities and processes that pose the greatest risk to human and environmental health. Option B makes allowance for 'on ramps' that would allow categorical exemptions to be brought back into the permitting program, if there is determined to be sufficient risk. The agency should require some level of reporting (either emissions or a proxy measure such as material throughput) for sources receiving categorical exemptions to maintain accurate emission inventory data and for the purpose of assessing cumulative impact or risk.

Pollutant Scope and Setting Concentration Levels

Program element 4: What air toxics should be included in the program?
Option D as described on page six of the Pollutant Scope and Setting Concentration Levels Issue Memo represents an approach that is both protective of public health and not overly burdensome to the state agencies responsible for implementing these rules. Relying on the 187 hazardous air pollutants identified in the federal Clean Air Act (which includes 50 of the air toxics identified in Oregon Administrative Rule 340-246) and pollutants of concern in Oregon, Washington and California (such as Diesel Particulate Matter) allows the agency to leverage existing evidence and regulatory standards from "like-programs" in neighboring states. The rules should include a mechanism for on-ramping new and emerging pollutants to allow for changes in Oregon's industrial landscape and the evolution of toxicological and epidemiological evidence.

The current list of 52 Oregon Air Toxics is too narrow to provide adequate protection to Oregon residents. By indexing the air toxics list from CA to the OR air toxics program, the state captures known pollutants of concern, and avoids the need to go through rulemaking as new chemicals of concern emerge.

Oregon's Air Toxics Science Advisory Committee (ATSAC) could maintain a formal role in regular systematic review of epidemiological evidence for toxics included in the program, so that new and emerging chemicals can be added to the list, and that Oregon's risk based concentrations are representative of the best and latest science.

Program element 5: Method for setting health risk-based concentrations (RBCs)
Oregon's Air Toxics Science Advisory Committee has been active for approximately twelve years. Although the committee's deliberations are based on a review of primary toxicological and epidemiological literature, their findings overwhelmingly reaffirm risk based concentrations established by authoritative bodies such as the California Office of Environmental Health Hazard Assessment and the Agency for Toxics Substances and Disease Registry. Given the substantial body of work involved in

promulgating and implementing new rules for industrial sources and the quality of existing risk based concentrations from authoritative bodies, it seems prudent to select from existing values. Given there may be an appropriate role for ATSAC moving forward in reviewing data on emerging pollutants or pollutants where no RBC exists, I support a hybrid of options B and H.

Program element 6: Default toxicity values

I concur with comments from the technical workgroup that default toxicity values should be used as a last resort when little or no health information is known about a pollutant of concern. Thousands of chemicals exist in industrial processes, and new substances are being developed every year- many of which the health effects are unknown. The establishment of RBCs for new chemicals is a process that can take many years and involves thorough research. However, assumptions as to a chemical's toxicity can be made through various methods, such as quantitative structure-activity relationship models. Option B as described on page eleven of the memo is an effective proposed system of categorization for air pollutants that lack sufficient evidence to establish a Risk Based Concentration (RBC). However caution should be taken when applying a single default RBC to an entire category of pollutants. This approach should be reserved as a last resort method of assigning RBCs.

Program element 7: Risk based concentration averaging times

Options A, C and D as described on page thirteen of the issue brief represent RBC averaging times that would allow for comparison against ambient monitored concentrations, and would ensure that public health is protected, especially for those living nearby permitted facilities. Option A, the annual averaging time, is particularly effective in limiting emissions to levels below thresholds for causing long term (chronic) disease. However, as illustrated through events at Bullseye Glass earlier this year, batch processing can result in unacceptable spikes of emissions, with potential to cause immediate (acute) health effects. Therefore, we believe that RBC averaging times of annual, acute 1-hour and acute 24-hour will be protective of short and long term health effects, and would intrinsically account for potential health impacts associated with the 8-hour chronic RBC averaging time. Additionally, 1-hour and 24-hour averaging times are possible to validate with short term monitoring- making this possible for many sites, while the longer annual monitoring projects can be engaged on a case by case basis at facilities presenting the most risk.

As described in program element 5, the agencies should use RBC values established by authoritative bodies. When differences exist between authoritative bodies, the agencies should default to the most health protective value, until ATSAC is able to review the relevant science. The agencies should move with speed to adopt RBC values for air toxics included in the program (see program element 4), with an emphasis on establishing annual benchmarks first.

I appreciate the opportunity to provide written comment on the discussion from our first meeting. Please do not hesitate to contact me with any questions.

Sincerely,

/S/ Paul Lewis

Paul Lewis, MD, MPH
Tri-County Health Officer, Clackamas, Multnomah and Washington Counties

October 31, 2016

VIA ELECTRONIC MAIL

Mr. Richard Whitman, Interim Director, and David Ferrer, Toxicologist
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204

Lynne Saxton, Director
Oregon Health Authority
500 Summer Street NE, E-20
Salem, OR 97301

Jacqueline Dingfelder and Claudia Powers,
Co-Chairs, Cleaner Air Oregon, Rulemaking Advisory Committee

Re: Comments on Cleaner Air Oregon Advisory Committee Meeting 1 (Oct. 18, 2016)

Dear Interim Director Whitman, Dr. Ferrer, Director Saxton, and Co-Chairs Dingfelder and Powers,

Thank you for the opportunity to provide feedback on the first Cleaner Air Oregon Advisory Committee Meeting. We appreciate the Department of Environmental Quality's professed commitment to its legal obligations[1] of incorporating environmental justice meaningfully into all aspects of the Cleaner Air Oregon process. Our letter will address two issues to be considered in advance of the next meeting on November 17, 2016. These two issues are: 1) the implementation of Title VI throughout the Cleaner Air Oregon process and into the text of the regulations that result from this process and 2) the decision of which air toxics should be included in Oregon's new air toxics regulations. Each of these issues shall be addressed in turn.

Title VI of the Civil Rights Act imposes a mandatory duty of adherence to anti-discriminatory practices upon any program receiving Federal financial assistance.[2] These anti-discrimination requirements apply to both the process and the benefits of the activity that receives Federal financial assistance. Because DEQ receives Federal financial assistance, the agency is legally bound to the anti-discrimination mandate of Title VI. It would seem reasonable that the policy behind adherence and implementation of Title VI principles would fall under the umbrella topic of "environmental justice" when looking at the agenda items laid out for CAO meetings. However, over a working lunch in Meeting 1 the environmental justice topic came and went in a mere 20 or 30 minutes, with no deep consideration of the Title VI mandates.

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[1] ORS § 182.545
[2] 42 U.S.C . § 2000d
[3] 42 U.S.C. § 2000d
Applegate, Arkin, Ong, Peveto, Riskedahl, Winter. "Re: Comments on Memo to Environmental Justice Task Force on Environmental Justice in Air Toxics Permitting" Received by Interim Director Pete Shepard

We ask that the committee and DEQ address implementation of mandatory Title VI language into the final air toxics regulations. As stated in the September 29, 2016 letter to DEQ from 6 organizations, "it is essential that DEQ and OHA, as well as the Advisory Committee, develop up front a full understanding of DEQ's legal obligations under federal civil rights law as a part of this rulemaking process."[3] This letter gives an excellent summation of the responsibilities DEQ has both under Title VI and EPA's enforcement regulations when formulating and implementing new air toxics rules. These responsibilities include actively fighting against discriminatory practices and disparate impacts, along with ensuring the new air toxics rules will not cause disproportionate harm of any type to persons of color and low-income communities.

Additionally, there was no mention of Executive Order 12898 in the environmental justice segment of Meeting 1. This EO serves as a foundation for agencies to observe anti-discriminatory practices while actively working against disparate impacts (both intentional and non-intentional) and should be included in the materials given to the CAO committee, in addition to the relevant sections of Title VI and the EPA's enforcement regulations. The CAO committee can not properly discuss the directive of Governor Kate Brown (to reform industrial air toxics regulations and enact new health-protective regulations) without an understanding of DEQ's obligations to environmental justice. Once the committee has a groundwork of understanding, it can work on its recommendations for how to best incorporate the language of Title VI, and EPA's Section 602 (b)[4] into the new air toxics regulations.

Related to these legal responsibilities is the issue of how many, and which, toxics DEQ will choose to include in its program. The need for the most protective and inclusive regulations has been addressed in a previous letter[5], but upon reflection we wish to elaborate on how critical this point is. If DEQ chooses to regulate only the 52 pollutants for which it currently has ambient benchmarks, it will be egregiously failing to meet its responsibility of protecting human health. DEQ will also be failing to meet its responsibility to environmental justice. Air toxics do not exist in an isolated space, they interact with one another and often result in synergistic and/or cumulative effects adverse to human health. Some air toxics may be prematurely determined to be benign without knowledge or consideration of the serious health effects they cause when combined with other toxics. Although data on these interactions is limited, studies have consistently shown two or more pollutants might act at the same or different steps in the same mechanistic pathway. Additionally, the presence of one air toxic might influence ability to mitigate the action of the other(s) and/or the presence of one might influence the dose of the other. Synergism can be dose dependent, the same combined exposure might be synergistic for one effect and not for others, and that same effect may be synergistic in some tissues and not in others.[6] Although we expect this to be discussed during the "risk assessment" portion of the CAO process, the analysis applies to number of toxics

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[3] Applegate, Arkin, Ong, Peveto, Riskedahl, Winter. "Re: Comments on Memo to Environmental Justice Task Force on Environmental Justice in Air Toxics Permitting" Received by Interim Director Pete Shepard and Ms. Sue Langson, 29 September 2016.

[4] 40 C.F.R. § 7.35

[5] Applegate, Arkin, Ong, Peveto, and Riskedahl "Re: Pollutant Scope Discussion in Cleaner Air Oregon Advisory Committee" Received by Co-Chairs Dingfelder and Powers, 20 October 2016.

[6] Mauderly, Joe and Samet, Jonathan. *Is there Evidence for Synergy Among Air Pollutants in Causing Health Effects?* 117(1) Environmental Health Perspectives 1, 3 (2009)

regulated as well. The wider the group of toxics regulated, the more these regulations can account for the negative effects of cumulative and synergistic air toxics and, in turn, adequately protect human health.

The importance of regulating a wide (and flexible) swath of air toxics is especially vital to those living in low income and communities of color. Environmental justice communities face risks to their health not only through air toxics, but also through their high susceptibility to other environmental stressors. Because of the increased body burden these communities carry, even a small dose of an unregulated air toxic can be significant. The policy decisions of CAO should include, but go beyond, community participation in order to produce actual reductions in air toxics for environmental justice and overburdened communities. Putting regulations in place that protect the health of environmental justice communities will benefit not only these communities, but the community at large. In order to provide comprehensive protection of health, the CAO committee needs to re-visit the scope of pollutants regulated and explore other programs nation-wide.

Thank you for your time and consideration,

Huy Ong, Executive Director,
OPAL Environmental Justice Oregon

Lisa Arkin, Executive Director,
Beyond Toxics

Mark Riskedahl, Executive Director,
Northwest Environmental Defense Center (NEDC)

Angela Kremer,
Public Health Advisory Board, Uroborus Committee

Melanie Place and Kathleen Fowler, Co-Chairs,
Clean Corvallis Air

Jessica Applegate and Katharine Salzmann
Eastside Portland Air Coalition

Mary Peveto, Executive Director
Neighbors for Clean Air

Stacey Schroeder, founder,
North Portland Air Quality

DJ/dj

Federal Register
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Presidential Documents

Title 3—

The President

Executive Order 12898 of February 11, 1994

Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1–1. *Implementation.*

1–101. *Agency Responsibilities.* To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands.

1–102. *Creation of an Interagency Working Group on Environmental Justice.* (a) Within 3 months of the date of this order, the Administrator of the Environmental Protection Agency (''Administrator'') or the Administrator's designee shall convene an interagency Federal Working Group on Environmental Justice (''Working Group''). The Working Group shall comprise the heads of the following executive agencies and offices, or their designees: (a) Department of Defense; (b) Department of Health and Human Services; (c) Department of Housing and Urban Development; (d) Department of Labor; (e) Department of Agriculture; (f) Department of Transportation; (g) Department of Justice; (h) Department of the Interior; (i) Department of Commerce; (j) Department of Energy; (k) Environmental Protection Agency; (l) Office of Management and Budget; (m) Office of Science and Technology Policy; (n) Office of the Deputy Assistant to the President for Environmental Policy; (o) Office of the Assistant to the President for Domestic Policy; (p) National Economic Council; (q) Council of Economic Advisers; and (r) such other Government officials as the President may designate. The Working Group shall report to the President through the Deputy Assistant to the President for Environmental Policy and the Assistant to the President for Domestic Policy.

(b) The Working Group shall: (1) provide guidance to Federal agencies on criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(2) coordinate with, provide guidance to, and serve as a clearinghouse for, each Federal agency as it develops an environmental justice strategy as required by section 1–103 of this order, in order to ensure that the administration, interpretation and enforcement of programs, activities and policies are undertaken in a consistent manner;

(3) assist in coordinating research by, and stimulating cooperation among, the Environmental Protection Agency, the Department of Health and Human Services, the Department of Housing and Urban Development, and other agencies conducting research or other activities in accordance with section 3–3 of this order;

(4) assist in coordinating data collection, required by this order;

(5) examine existing data and studies on environmental justice;

(6) hold public meetings as required in section 5–502(d) of this order; and

(7) develop interagency model projects on environmental justice that evidence cooperation among Federal agencies.

1–103. *Development of Agency Strategies.* (a) Except as provided in section 6–605 of this order, each Federal agency shall develop an agency-wide environmental justice strategy, as set forth in subsections (b)–(e) of this section that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The environmental justice strategy shall list programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to, at a minimum: (1) promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations; (2) ensure greater public participation; (3) improve research and data collection relating to the health of and environment of minority populations and low-income populations; and (4) identify differential patterns of consumption of natural resources among minority populations and low-income populations. In addition, the environmental justice strategy shall include, where appropriate, a timetable for undertaking identified revisions and consideration of economic and social implications of the revisions.

(b) Within 4 months of the date of this order, each Federal agency shall identify an internal administrative process for developing its environmental justice strategy, and shall inform the Working Group of the process.

(c) Within 6 months of the date of this order, each Federal agency shall provide the Working Group with an outline of its proposed environmental justice strategy.

(d) Within 10 months of the date of this order, each Federal agency shall provide the Working Group with its proposed environmental justice strategy.

(e) Within 12 months of the date of this order, each Federal agency shall finalize its environmental justice strategy and provide a copy and written description of its strategy to the Working Group. During the 12 month period from the date of this order, each Federal agency, as part of its environmental justice strategy, shall identify several specific projects that can be promptly undertaken to address particular concerns identified during the development of the proposed environmental justice strategy, and a schedule for implementing those projects.

(f) Within 24 months of the date of this order, each Federal agency shall report to the Working Group on its progress in implementing its agency-wide environmental justice strategy.

(g) Federal agencies shall provide additional periodic reports to the Working Group as requested by the Working Group.

1–104. *Reports to the President.* Within 14 months of the date of this order, the Working Group shall submit to the President, through the Office of the Deputy Assistant to the President for Environmental Policy and the Office of the Assistant to the President for Domestic Policy, a report that describes the implementation of this order, and includes the final environmental justice strategies described in section 1–103(e) of this order.

Sec. 2–2. *Federal Agency Responsibilities for Federal Programs.* Each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.

Sec. 3–3. *Research, Data Collection, and Analysis.*

3–301. *Human Health and Environmental Research and Analysis.* (a) Environmental human health research, whenever practicable and appropriate, shall include diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to substantial environmental hazards.

(b) Environmental human health analyses, whenever practicable and appropriate, shall identify multiple and cumulative exposures.

(c) Federal agencies shall provide minority populations and low-income populations the opportunity to comment on the development and design of research strategies undertaken pursuant to this order.

3–302. *Human Health and Environmental Data Collection and Analysis.* To the extent permitted by existing law, including the Privacy Act, as amended (5 U.S.C. section 552a): (a) each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practical and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(b) In connection with the development and implementation of agency strategies in section 1–103 of this order, each Federal agency, whenever practicable and appropriate, shall collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action. Such information shall be made available to the public, unless prohibited by law; and

(c) Each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are: (1) subject to the reporting requirements under the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11001–11050 as mandated in Executive Order No. 12856; and (2) expected to have a substantial environmental, human health, or economic effect on surrounding populations. Such information shall be made available to the public, unless prohibited by law.

(d) In carrying out the responsibilities in this section, each Federal agency, whenever practicable and appropriate, shall share information and eliminate unnecessary duplication of efforts through the use of existing data systems and cooperative agreements among Federal agencies and with State, local, and tribal governments.

Sec. 4–4. *Subsistence Consumption of Fish and Wildlife.*

4–401. *Consumption Patterns.* In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.

4–402. *Guidance.* Federal agencies, whenever practicable and appropriate, shall work in a coordinated manner to publish guidance reflecting the latest scientific information available concerning methods for evaluating the human health risks associated with the consumption of pollutant-bearing fish or

wildlife. Agencies shall consider such guidance in developing their policies and rules.

Sec. 5–5. *Public Participation and Access to Information.* (a) The public may submit recommendations to Federal agencies relating to the incorporation of environmental justice principles into Federal agency programs or policies. Each Federal agency shall convey such recommendations to the Working Group.

(b) Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations.

(c) Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

(d) The Working Group shall hold public meetings, as appropriate, for the purpose of fact-finding, receiving public comments, and conducting inquiries concerning environmental justice. The Working Group shall prepare for public review a summary of the comments and recommendations discussed at the public meetings.

Sec. 6–6. *General Provisions.*

6–601. *Responsibility for Agency Implementation.* The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order.

6–602. *Executive Order No. 12250.* This Executive order is intended to supplement but not supersede Executive Order No. 12250, which requires consistent and effective implementation of various laws prohibiting discriminatory practices in programs receiving Federal financial assistance. Nothing herein shall limit the effect or mandate of Executive Order No. 12250.

6–603. *Executive Order No. 12875.* This Executive order is not intended to limit the effect or mandate of Executive Order No. 12875.

6–604. *Scope.* For purposes of this order, Federal agency means any agency on the Working Group, and such other agencies as may be designated by the President, that conducts any Federal program or activity that substantially affects human health or the environment. Independent agencies are requested to comply with the provisions of this order.

6–605. *Petitions for Exemptions.* The head of a Federal agency may petition the President for an exemption from the requirements of this order on the grounds that all or some of the petitioning agency's programs or activities should not be subject to the requirements of this order.

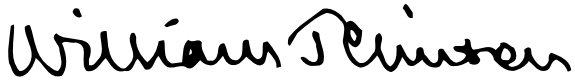
6–606. *Native American Programs.* Each Federal agency responsibility set forth under this order shall apply equally to Native American programs. In addition, the Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps to be taken pursuant to this order that address Federally-recognized Indian Tribes.

6–607. *Costs.* Unless otherwise provided by law, Federal agencies shall assume the financial costs of complying with this order.

6–608. *General.* Federal agencies shall implement this order consistent with, and to the extent permitted by, existing law.

6–609. *Judicial Review.* This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person. This order shall not be construed to create any right to judicial review involving the compliance or noncompliance

of the United States, its agencies, its officers, or any other person with this order.



THE WHITE HOUSE,
February 11, 1994.

[FR Citation 59 FR 7629]