

Cleaner Air Oregon

# Comments from Cleaner Air Oregon Advisory Committee Members on July, 2017 Meeting Topics



<b>Commenters</b>	<b>Date Submitted</b>
Jay Bozievich	July 28, 2017
Steven Anderson	August 03, 2017
Huy Ong, Jo Ann Hardesty, Mark Riskedahl and Mary Peveto	August 04, 2017
Lee Fortier	August 04, 2017
Susan Anderson	August 09, 2017
Paul Lewis and Jae Douglas	August 10, 2017
Tom Wood	August 10, 2017
Lisa Arkin and Jessica Applegate	August 15, 2017

**From:** BOZIEVICH Jay K  
**To:** [joe.westersund@state.or.us](mailto:joe.westersund@state.or.us)  
**Subject:** Comments on Meeting 6  
**Date:** Friday, July 28, 2017 4:11:43 PM

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There were some questions as to what the health considerations were for changing the Risk Action Levels and there was feeling that they were arbitrary. I would like staff to note that the original "allowable risk levels" appeared to be arbitrary and not clearly tied to balanced health considerations also.

The change was basically from an upper limit of 0.8 in 10,000 increase in lifetime cancer risk to a 1.0 in 10,000 increase in lifetime cancer risk which does not seem to be a significant change.

There was also discussion of personally chosen risk versus risk "forced" upon people. I would like to note that industry is needed to have the post-industrial society we now enjoy that has increased life expectancy (79.68 years for the United States 2015 est. see note 1) and quality of life far beyond the 1 in 10,000 increase in risk from industries that have created a society that supports the high quality of life we enjoy. The risk is a societal chosen risk to support that post-industrial life style.

The current risk of dying in a pedestrian related accident in the next year is 1 in 47,273 (note 2) and over a lifetime is 1 in 647 (note 3) but no one suggests not walking due to the health benefits outweighing the risks of being a pedestrian. The current risk of dying from a fall at home in the next year is 1 in 7,875 (note 2) and the lifetime risk of dying from a fall on or from a stairway or steps is 1 in 1,771, (note 3) We as a society assume the risk of stairs in order to avoid the sprawl that single story life would entail.

1 in 10,000 is approximately the same lifetime risk of dying during air travel (1 in 9,821, note 3) and we have not shut down the airlines over that risk.

We can decide as individuals to assume risks like white water rafting because we believe the benefit outweighs the risk on a personal level, but we also decide as a society to take on risks based on benefits.

We have built multiple levels of safety (conservative assumptions) in the process for determining the increased cancer risks like assuming the highest level of emission rate from a facility year round and using sensitive populations as the receptors. A 1 in 10,000 increase in cancer incidence is not a statically measurable increase in the exposed populations from an industrial facility.

I support the June proposal Risk Action Level upper limits as balancing protecting public health with supporting economic development.

The World Health Organization uses 1 in 100,000 increase cancer risk (note 4) for setting the limits on disinfection by-products in drinking water which is reflected in the limits set by EPA for municipal drinking water systems. They assume an increased cancer risk of less than 10 in 1,000,000 is not significant and not worth regulating. Therefore, the proposed lower limits of risk action levels for air toxics at 10 in million is also a reasonable limit that balances protecting public health with economic development.

I also want to remind the committee that economic development is also a public health issue as poverty is a greater indicator of poor health outcomes than obesity and tobacco use. (Note 5)

The proposed Risk Action Levels from June and reiterated in meeting #6 will provide for both greater protection of the public from air toxics while allowing economic growth needed to support local governments.

Sincerely,

Jay Bozievich

Notes:

1. <https://www.infoplease.com/world/health-and-social-statistics/life-expectancy-countries-0>

2. <http://www.riskcomm.com/visualaids/riskscale/datasources.php>

3. <http://www.iii.org/fact-statistic/mortality-risk>

4. <https://www.cdc.gov/safewater/chlorination-byproducts.html>

5. <http://www.mailman.columbia.edu/academic-departments/health-policy/news-events/poor-face-greater-health-burden-smokers-or-obese>

<http://www.dailymail.co.uk/news/article-4178222/Low-social-rank-bigger-health-risk-obesity-study.html>

Sent from my iPad

Sent from my iPad

**TO:** Joe Westersund  
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**CC:** Jacqueline Dingfelder Co-Chair, Cleaner Air Oregon, Rulemaking Advisory Committee  
Claudia Powers Co-Chair, Cleaner Air Oregon, Rulemaking Advisory Committee

**FR:** Steven A. Anderson (Committee Member)

**RE:** Proposed Changes to Risk Actions Levels Table

**DT:** August 3, 2017

First, thank you to Jackie, Claudia, and John for your leadership throughout this undertaking. It is appreciated. As to the Risk Action Levels presentation and discussed at our last meeting, I have included my suggestions in the attached table (an Excel file). I ask that this be forwarded to the Rules Committee for their consideration. The logic here builds upon the DEQ/OHA Staff's work to-date. Underlying this is the recognition of the valuable work done so far by staff. What is reflected here is all the work that went into surveying and evaluating what other State Air Toxics programs have developed (this reflected in the several documents and presentations to the Clean Air Advisory Committee). A key principle is that the Risk Actions Levels I suggest are health-based and consistent with other State Air Toxic programs. It recognizes that toxicologic and risk modeling uncertainty is inherent in this process, and includes this in the ranges shown in the Proposed Risk Actions Levels (attached). It includes provisions (room for professional judgement by experts and policy makers) in the implementation of these Risk Actions Levels. It allows for economic considerations within the range of values proposed with a "not to exceed" cap that both ensures health protection to the citizens of Oregon as well as moving predictably towards reducing the impacts of Air Toxics in our environment and to Oregonians. Additionally, along this path there is still room for industrial activity that affords jobs and economic development within a well-constructed, health-based Industrial Point Source Air Toxics Program. As I shared at our last meeting, we must recognize that Oregon has "good" air to breathe currently; our desires and efforts to maintain the status quo while moving predictably to improve upon this is a valuable contribution to our community now, and into the future

Simply:

These proposed Risk Action Levels are:

- Consistent with other State Air Toxic programs
- Health-Based
- Achievable
- Set upper limits (a "not to exceed" level) for industrial point sources in Oregon
- Allows room to handle uncertainty and incorporation of policy considerations
- Maintains current "good" air quality in Oregon as well as moving to improve it over time
- Innovative

Stating again my professional and personal risk levels (shown in the attached Risk Action Levels table) there is a "not to exceed" level as well as a target level for which we should be working to achieve over time. This difference between the target level and the "not to exceed" cap opens a question for which I have commented on before (***What should happen if a facility is above***

**allowable risk limits?**) This range (50 to 100 for cancer and 3 to 4 for a hazard index) is where we have the Director's Review and Decision process. This is important as it allows for the reality that there is uncertainty in these numbers and the models used therein. As such, there should be room for engagement as to where to allow the number to be on a case-by-case basis within these ranges. This as long there is a hard upper "not to exceed" limit. The goal is 50 and 3. The "not to exceed" limit is 100 and 4. In between these two goal posts is room for consideration given that Environmental Justice, community health (biologically and economically), and the whole surrounding policy framework are investigated in the decision-making process. My point of view.

- A "not to exceed" excess lifetime cancer risk of 100 in a million
- A "not to exceed" hazard index of 4 (target organ specific)

I have made a sound case here and previously for setting the upper allowable risk limit for carcinogens at 100 in a million excess lifetime cancer risk, and a hazard index level of less than or equal to 4 for each body system affected. The hazard index level should be an upper limit and should not be exceeded. The 100 in a million cancer limit could be looked at as follows. (Please review my previous verbal discussion and written comments.)

What is clear is that the choice of this upper limit is a matter of science and policy. How I have arrived at this is based upon over 25 years of experience in the field and finding that this number should not significantly increase the current cancer rates in the population. It is achievable. It is not onerous. It both allows for health protection and responsible industrial activities in our communities.

**When all is said and done, this becomes a policy choice of where we draw the line. I draw the line at 100 for cancer and 4 for the hazard index. I believe strongly that this should be reflected in the Air Toxics rules for the Clean Air Program. It is scientifically and regulatory defensible. It is what I present in the attached Risk Action Levels table.**

With inclusion of the points (as presented herein), a strong case can be made for a health-based air toxics program that is health protective for Oregonians, addresses environmental justice communities throughout Oregon, and allows for business activities in Oregon that encourages economic grow all within responsible stewardship and use of the air we all breath.

Your consideration of my comments and suggestions are appreciated. I am available for further discussion and/or clarification. Please let me know if you what to further discuss the framework in the attached table.

Thank you.

Proposed Changes to Risk Action Levels  
 Comments from Steven Anderson, Committee Member

		Risk Action Levels			
		3/21 Framework Proposal		6/13 Draft Proposal	
		cancer	HI	cancer	HI
<b>Facility</b>	De minimis	0.5	0.5	0.5	0.5
<b>New Emissions Unit</b>	Emissions Unit	1	1	none	none
	Emissions Unit with TBACT	5	1	none	none
<b>New Facility</b>	Facility	10	1	10	1
	Accelerated Schedule	25	1	none	none
	Can only exceed with approval from DEQ Director after consultation with OHA and local/elected officials	none	none	10	1
	No permit issued	none	none	100	3
<b>Existing Facility</b>	Facility	10	1	25	1
	Accelerated Schedule	25	3	50	3*
	Can only exceed with approval from DEQ Director after consultation with OHA and local/elected officials	none	none	100	3
<b>Area Cap</b>	If emissions from one or more facilities impact the same receptor at or above this value, then no new facilities or modifications are allowed that would increase impact at that receptor	considering a value between 20 and 80	2-4	considering a value between 50 and 100	3*

\*Hazard Index of 3 or HI approved by DEQ/OHA by target organ (matrix that depends on uncertainty factor and severity of health effect)

Risk Action Levels	
Proposed Changes after 7/28 Meeting	
cancer	HI
0.5	0.5
none	none
none	none
10	1
none	none
10	1
<del>100</del> 50	3*
25	± 3*
≤50	3*
>50 - 100 <sup>†</sup>	>3* - 4** <sup>‡‡</sup>
>50 - 100 <sup>†</sup>	>3* - 4** <sup>‡‡</sup>

\*Hazard Index of 3 or HI approved by DEQ/OHA by target organ (matrix that depends on uncertainty factor and severity of health effect)

\*\*Hazard Index of 4 or HI approved by DEQ/OHA by target organ (matrix that depends on uncertainty factor and severity of health effect)

† From greater than 50 to 100, Director's Review and Decision Process. Never [Not to Exceed] 100 (e.g., no permit issued above 100).

‡‡ From greater than 3\* to 4\*\*, Director's Review and Decision Process. Never [Not to Exceed] 4\*\* (e.g., no permit issued above 4\*\*).

**NAACP Portland Branch • Neighbors for Clean Air  
Northwest Environmental Defense Center • OPAL Environmental Justice Oregon**

August 4, 2017

**VIA ELECTRONIC MAIL to [cleanerair@deq.state.or.us](mailto: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: Follow-up Comments Regarding July 28, 2017 Cleaner Air Oregon Advisory  
Committee Meeting**

Dear Co-Chairs Dingfelder and Powers,

These comments are provided as follow-up to the July 28, 2017 meeting of the Rulemaking Advisory Committee. This rulemaking process was instigated by Governor Brown with a very clear mandate: to “prioritize the health and well-being” of Oregonians with a “major overhaul in how Oregon addresses air quality.” This is a reflection of a sea change in how we regulate air quality in the United States, starting with the rejection of economic feasibility as a primary consideration in setting health standards for the NAAQS in the 1990 amendments to the Clean Air Act. The technical workgroup illustrated how various local regulatory frameworks have taken this concept further, with SCAQMD being the golden standard in many regards. We were encouraged to see some of the concepts from SCAQMD being incorporated into Cleaner Air Oregon’s regulatory framework at its early stages.

At the July 28 Advisory Committee Meeting, however, members of the Advisory Committee again expressed serious concerns about Agency backsliding on Risk Action Levels (“RALs”), concrete upper limits on risk, and regulation of existing sources on the grounds that Cleaner Air Oregon is beginning to look less and less like a program that truly prioritizes human health. To deflect this criticism, Cleaner Air Oregon coordinator Joe Westersund responded, “we define this as a health-based program because it measures the health impact of emissions.”

**A program truly focused on human health must not merely track health impacts, but actively control emissions from stationary sources and reduce toxic hot spots in a meaningful way.** Prioritizing human health means making conscious policy choices to value human health over what is economically feasible for the facilities posing the greatest risks to human receptors. The drastic shift from the original proposed framework—which treated existing and new facilities the same—to one that gives significant latitude to existing facilities on the grounds that it is less burdensome to install controls up front than it is to retrofit is a serious blow to Cleaner Air Oregon as a health-based program. A program in which there is no concrete upper limit to the risk facilities can pose—and in which the Director alone is empowered to

decide on regulatory action—is not one that prioritizes the health of the people around them. Communities are expecting this program to be a forcing agent for reductions in industrial air toxics. They are expecting renewed confidence in clean, safe air after that confidence was shattered in the wake of the publicized failure of our air quality regulations last year. This is precisely why Governor Brown has called for such an extensive overhaul in how we deal with air quality in Oregon. We will not be satisfied with a program that continues to justify the status quo of trading the cost of toxic pollution in our neighborhoods for economic benefit of a small group of industrial polluters. Health-based language does not negate our concerns about the policy choices being made in this rulemaking process.

In addition to our concerns about the Agencies' overall approach to creating a "health-based program," our specific concerns and follow-up questions from the July 28 Meeting are as follows:

### **1. Director Consultation**

The Director Consultation process would provide the Director with an unprecedented amount of discretion in permitting facilities, and without substantive sideboards and limitations on this discretion, we strongly advise against including this process in the CAO Program. If the Agencies are going to include a "Director Consultation" process, they must (a) appropriately classify the facilities and the process; (b) lower the level at which this process is triggered for existing facilities; (c) include a cap above which no existing facility can operate; (d) in the CAO regulations, establish clear criteria for the Director to consider and binding processes for the Director to follow during consultation; and (e) in the CAO regulations, establish community engagement requirements for facilities that receive a permit through this process.

- (a) The "Director Consultation" process should be classified with an accurately descriptive, non value-neutral term, such as "High Risk Source Review." Likewise, sources subject to the Director Consultation process should be classified with an accurately descriptive, non value-neutral term, such as "High Risk Sources." To provide a value-neutral term, such as a numeric designation, misleads the public and surrounding communities of the risks these sources pose.
- (b) Based on data provided by facilities, we recommend the Agencies lower the level at which the Director Consultation process for existing facilities is triggered. According to data provided by facilities in South Coast that have performed full risk assessments, few facilities operate in excess of a 100 in a million risk level. For the Cleaner Air Oregon program to have any meaningful impact to human health, the program must reduce risk, not simply continue the status quo for most or all facilities.
- (c) There must be a limit to allowable risk from existing sources, such that the Director cannot issue a permit beyond an RAL. The revised RAL table from the June 20 meeting provides that facilities reaching the highest RAL for existing facilities "[c]an only exceed with approval from DEQ Director[.]" Without some upper limit or set of clear circumstances warranting permit denial, the standard reads: "*will* exceed with approval from DEQ Director." Director Consultation must be more than a process;

communities, the Agencies, and industry must have a clear picture of how much risk is too much risk.

Prior to the June 20 proposed Framework changes, the Agencies acknowledged that there is no health-based or scientific justification for treating new and existing facilities differently because “[h]ealth impacts can occur regardless of whether harmful emissions are from an existing, a new, or a modified source.”<sup>1</sup> With that in mind, we understand the Agencies are making a policy-based decision to treat new and existing facilities differently, and we accept some variation in RALs between new and existing facilities, such as the threshold for the Director Consultation process. However, Oregonians can only bear the burden of the Agencies’ policy decision to favor industry and pollution over health and science up to a point, beyond which a facility simply should not be able to operate. Based on data provided by facilities in South Coast, we recommend that the Agencies set the threshold at 100 in a million. This level allows almost all existing facilities to operate, while protecting communities from those facilities that pose an extreme risk to health.

(d) The CAO regulations must lay out a required process and clear criteria for the Director to follow during consultation, including but not limited to the following:

- Process:
  - Transparency—every step of the Director Consultation process, such as discussions between the source and the agency, the High Risk Source’s alternatives analysis, and the High Risk Source’s monitoring and modeling data, should be publicly available on DEQ’s website in an easily accessible format and at local community gathering places
  - Toolkit for the Source—upon beginning the Director Consultation process, the Agencies should provide the High Risk Source with a community engagement toolkit and checklist, placing a majority of the community engagement responsibilities on a High Risk Source, rather than on the Agencies
  - Source Meeting with the Public—after the Agencies’ provide a High Risk Source with the community engagement toolkit, the High Risk Source must hold a public workshop to clearly communicate the risks that the High Risk Source poses to the community, explain the steps in the Director Consultation process, and begin the opportunities for public input throughout the process.
  - Continued Meetings with the Public—at every stage of the Director Consultation process, the High Risk Source must hold community meetings so that the community can make recommendations for improvements and remain an active part of the feedback loop that drives further innovation and risk reduction.
  - Alternatives Analysis—if a High Risk Source has triggered the Director Consultation process, it must conduct a comprehensive survey of other sources, including sources from other states and countries and sources from

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<sup>1</sup> Memorandum from DEQ and OHA on Setting and Administering Allowable Risk Levels to Cleaner Air Oregon Regulatory Reform Advisory Committee 10 (Oct. 12, 2016).

other fields and industries, to determine what other sources are doing to reduce emissions.

- Accelerated Risk Reduction Plan—during the Director Consultation process, the High Risk Source must develop, with community input, an accelerated risk reduction plan, including pollutant-specific reduction targets, specific reduction measures, and a risk reduction implementation schedule including milestones.
  - Joint Approval—Cleaner Air Oregon was intended to be, first and foremost, a health-based program. As a health-based program, approval through the Director Consultation process should be a joint determination by both the Director of DEQ and the Director of OHA.
  - Post-Approval Requirements—in addition to an accelerated risk reduction plan, a permitted High Risk Source must continually monitor its emissions at the fence line to supplement modeling data, regularly upload its monitoring and modeling data to its website and at local community gathering places, offset its impact at the affected receptor by funding risk reduction from both industrial and background sources of air toxics, and hire a third-party verifier or certifier to review the accuracy of annual emissions reports.
- Factors for Consideration for Director Approval:
    - Relevant receptors’ risk from other industrial sources;
    - Relevant receptors’ risk from background sources;
    - High Risk Source’s timeline for reducing its risk through the accelerated risk reduction plan;
    - High Risk Source’s potential alternatives for reducing risk;
    - Community’s input regarding the risk posed to them;
    - High Risk Source’s efforts to engage the community in meaningful discussion about the risks it poses;
    - High Risk Source’s efforts to comply with the Director Consultation process;
    - High Risk Source’s history of compliance with its air and water quality permits; and
    - High Risk Source’s capacity to offset risk from toxic air pollution from other industrial and background sources at relevant receptors.

- (e) The CAO regulations must establish community engagement requirements that explain how to effectively and meaningfully engage diverse and unique communities, which a High Risk Source will be required to follow as part of seeking Director approval.

The Oregon Environmental Justice Task Force defines environmental justice as “equal protection from environmental and health hazards, and meaningful public participation in decisions that affect the environment in which people live, work, learn, practice spirituality, and play.” The EJ Task Force notes that communities of color and low-income communities bear disproportionate risk and that applies to public health consequences of air pollution as well.

The EJ Task Force in no uncertain terms identifies meaningful community involvement as a key parameter of its mission. Executive Order 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” clearly notes that communities affected by an environmental action(s) have a right to early and continuous input. That becomes more critical when taking into account that the most impacted communities have the least amount of resources to make their voices heard.

As identified in the June 20th and July 28th meetings, it is the responsibility of the agency to fulfill these directives within the Cleaner Air Oregon process. In practical terms, that means the agency must provide and facilitate opportunities for underrepresented community members to be present, participate in, and influence the overall decision-making process.

## **2. Area Cap**

Based on the Agencies’ June 20 proposed Framework changes, we are concerned that the “Area Cap” for modified and new facilities would have little substantive impact—if any—in terms of reduction in cumulative risk. As proposed on June 20, the Framework allows new facilities that pose a cancer risk up to 100 in a million to receive a permit, and it does not have a comparable threshold for existing sources. Thus, a single facility—new or existing—could hit the “Area Cap” of 50–100 in a million. Based on this understanding, we have the following questions:

- The Agencies’ discussion on implementation indicated that permitting existing facilities could take 20–25 years; when would the Area Cap limitations on modified or new facilities apply? As an example of this issue, during those 25 years of implementation, if an area has one Tier 1 facility at a cancer risk level of 100 in a million, and another existing facility that has not yet received a permit under the CAO program seeks a modification that would increase its cancer risk, would that facility be permitted to modify even though the area has already reached the Area Cap limit?
- Are facilities that contribute to an exceedance of the Area Cap subject to additional requirements, such as emissions reductions? Does this depend on whether the facility contributes only 10 in a million to the Area Cap versus contributing 100 in a million to the Area Cap?

## **3. Continued Monitoring by Sources and Agencies**

For the CAO program to be effective and meaningful, as part of the program the Agencies must develop a continued strategic monitoring plan. The overhaul of Oregon’s air toxics regulations occurred as a result of monitoring from the Forest Service’s moss study, leading to chaos among the Agencies, Oregon government, and Oregon citizens. Without proactive monitoring of permitted and non-permitted sources, the Agencies cannot ensure compliance with the CAO program, and any new monitoring from other organizations could result in a repeat of the panic that resulted in early 2016. Rather than the Agencies spending time and resources on continually responding to outside data on toxic hotspots, the Agencies need to

proactively monitor air quality throughout Oregon to address emissions from non-permitted facilities or facilities operating in exceedance of their permits. Such a monitoring program should identify and prioritize communities that are disproportionately burdened with toxic air pollution.

#### **4. Risk Action Level Rationale**

The Agencies must explain their rationale for changing the RALs for new and existing facilities. At the July 28 Meeting, the Agencies stated that the proposed risk assessment process accounts for more risk than the risk assessment process contemplated under the prior draft framework, which used the NATA risk assessment process. However, that statement simply explains the reasons for increasing the allowable risk to better accommodate facilities in Oregon; it does not provide an explanation for **why the currently proposed RALs are health protective**. Nor does that explanation provide a health-based justification for shifting from a 10 in 1 million to a 25 in 1 million RAL for existing sources. Thus, we request an explanation for each RAL, detailing why that level is health protective.

#### **5. Risk Reduction Plan and Accelerated Risk Reduction Plan**

The risk reduction plan and accelerated risk reduction plan must include a binding obligation on the facilities to reduce risk. For this binding obligation, we recommend that a facility's permitted risk level be reduced over time, so that, eventually, all existing facilities have a risk of less than 10 in a million. As an example, if Facility A, an existing source, poses a cancer risk of 30 in a million, as part of its risk reduction plan it should have a number of years to reduce its risk to less than 10 in a million. After the expiration of that time period, Facility A's permit automatically reduces to an allowable risk level of less than 10 in a million. This binding requirement in the risk reduction plan and the permit to reduce allowable risk will ensure that facilities work to reduce risk and innovate in pollution control.

#### **6. Individual Source Ranking Process**

At the July 28 Meeting, the Agencies sought input on tiered implementation, including the use of an individual source ranking process. We appreciate and encourage the Agencies' transition from a source-based to a receptor-based implementation plan. A health-based phased implementation plan must be receptor-based. As we previously noted, with a receptor-based implementation plan, the Agencies should begin implementation by prioritizing reducing risk to the most vulnerable and most impacted receptors that have borne a disproportionate burden for years. As part of the implementation ranking, we support adding the following factors for inclusion in the demographic index: linguistic isolation; tribal communities; traditionally underrepresented and sensitive communities (youth, elderly, mentally disabled); historic exposure; low income community factors, including individuals with less than a college education, and renters.

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CAO RAC Follow-up Comments  
August 4, 2017

### **Conclusion**

Thank you for the opportunity to provide these comments and questions. We appreciate the work of the Co-Chairs and the Agencies throughout the Advisory Committee process, and we are happy to discuss our letter further at the next Advisory Committee meeting.

Sincerely,

Huy Ong, Executive Director  
OPAL Environmental Justice Oregon

Jo Ann Hardesty, President  
NAACP Portland Branch

Mark Riskedahl, Executive Director  
Northwest Environmental Defense Center

Mary Peveto, President  
Neighbors for Clean Air

**From:** Lee Fortier  
**To:** [WESTERSUND Joe \(joe.westersund@state.or.us\)](mailto:joe.westersund@state.or.us)  
**Cc:** [Laura Leebrick](#)  
**Subject:** CAO RAC Comments  
**Date:** Friday, August 04, 2017 9:33:11 AM  
**Attachments:** [DEQ CAO Request Letter 4 13 17.pdf](#)

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Hello Joe,

These are our thoughts on the last meeting and going forward.

Dear Co-Chairs Dingfelder and Powers,

We would like to thank you for the opportunity to provide comments regarding the July 28th Cleaner Air Oregon Rulemaking Advisory Committee meeting. I am providing comments in my capacity as a Small Business Representative on the Committee, and more specifically as a Landfill Operator in Southern Oregon.

During the recent meeting, there were numerous references made to the DEQ's collection, compilation and analysis of Emissions Inventory data, which was requested of permit holders on November 28, 2016. The first round of reporting on 187 federal hazardous air pollutants was originally due to be submitted by May 1st, and a two week extension was given to landfill permittees because the data request had generated some confusion and concern. As I stated in the comments I submitted following the February 2nd RAC meeting, in an e-mail dated February 4, 2017, landfills are an entirely different animal than a manufacturing facility.

I feel it worth pointing out that the guidelines for preparing data for submission were not clarified for landfill operators until mid-April, after coordination between DEQ Materials Management staff and DEQ Air Quality staff "to provide guidance on how a landfill may comply with the CAO data request." (Please see attached letter, dated April 13, 2017.) Two representatives from Dry Creek Landfill attended a training session in Medford on January 26th, in the hope of gaining some understanding early on as to how to comply with the request, and walked away from the training with no better understanding. There was no clear instruction offered that was relevant to landfills, and we were told emphatically during the training session that we should not direct any questions to DEQ Air Quality HQ, as they did not have adequate staff to address questions. When, during the training, we asked where to look for information we don't normally track and report on under our Title V permit, we were advised to "look for other resources online." Due to the helpful coordination between DEQ Materials Management and Air Quality staff, we received adequate clarification to submit the first round of data, using our 2016 LandGEM landfill gas model data. However, the second round of data (the remaining 446 pollutants), which is due on September 1st, is not as easy to acquire. We are looking at data specific to landfills presented by the Washington State Department of Ecology, the San Diego County Air Pollution Control District, and the Environmental Protection Agency AP-42 publication. These publications are very similar, but admittedly, in some cases, represent very few data points.

There were statements made by DEQ during the July 28th CAO RAC meeting to the effect that, due to the failure of HB 2269, the agency doesn't have adequate funding to analyze the first round of

data (187 federal HAP's) it received from applicable permit holders in May in a timely fashion. I would like to point out that as a small business, we don't have adequate staff to prepare the submittals requested of us by DEQ, and were only able to do so in round one by using the LandGEM model data. Response to the round two request for the remaining 446 pollutants is proving to be a much more arduous effort. Therefore, with DEQ unable to even review round one submittals, we hereby request a two month delay in the required submittal of the round two data.

We appreciate your consideration of our comments, and the opportunity to participate in this valuable process.

Respectfully,

Lee Fortier, P.E.  
General Manager  
Dry Creek Landfill



# Oregon

Kate Brown, Governor

## Department of Environmental Quality

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April 13, 2017

Lee Fortier  
Dry Creek Landfill, Inc.  
PO Box 3187  
Central Point, OR 97502

**RE: Cleaner Air Oregon Data Request Clarification for Landfills and LFG Engine Plants**

Dear Facility Representative:

As you may be aware, the November 28, 2016 Cleaner Air Oregon (CAO) Data Request has generated some confusion and concern amongst landfill permittees in the state. As a result, DEQ materials management staff have coordinated with DEQ air quality staff to provide guidance on how a landfill may comply with the CAO data request. Additionally, you have been given a two week extension for your May 1, 2017 submittal of the 187 federal hazardous air pollutants. It is now due May 15, 2017.

To estimate air toxic emissions for this DEQ CAO request, first, please use emissions information (i.e. emission factors for emission units/processes identified in permit, etc.) from your air permit and its accompanying documents. Remember to also report emission units and activities that may not be in your air permit, but still might result in air toxic emissions.

It is highly recommended that you contact your air permit writer prior to completing this task. The remainder of this letter provides some clarifications with regards to what is expected of your facility and DEQ staff contact information if you need additional assistance. Please note, there are multiple ways you may comply with the intent of the CAO data request, and if you have already completed your CAO spreadsheet, DEQ is not asking you to take any additional action.

### Instructions

You are required to report the following for the year 2016 and estimated "peak year" in the CAO spreadsheet:

- Estimated pollutants emitted from the landfill
- Estimated pollutants emitted from each piece of equipment (ex: flare, engine, boiler, etc.)
- Any other pollutants emitted from permitted and non-permitted sources requiring to be reported under the CAO data request.

You may do this by running the EPA LandGEM model for the year 2016, and your facility's "peak year" and then, applying the same assumptions used for your air permit submittal, calculate the total lb/year of each compound listed on the "INVENTORY" tab in LandGEM. If you need assistance with LandGEM, please contact Jamie Jones at 541-298-7255 ext. 225. If you have questions regarding how to use the data generated in the LandGEM model, please contact your DEQ air permit writer.



### Clarification

Only those pollutants calculated in LandGEM v. 3.02 are required to be reported for the CAO request for the first two bullets listed above. However, if you have site specific information that includes additional pollutants emitted from the landfill or emitted from your LFG combustion equipment, you must report those as well.

LandGEM v. 3.02 Pollutants				
Compound	CAS Number	187 HAPs List	Remaining 446 Pollutants	Site Specific Pollutants
Methane*				X
Carbon dioxide*				X
1,1,1-Trichloroethane (methyl chloroform)	71-55-6	X		
1,1,2,2-Tetrachloroethane	79-34-5	X		
1,1-Dichloroethane (ethylidene dichloride)	75-34-3	X		
1,1-Dichloroethene (vinylidene chloride)	75-35-4	X		
1,2-Dichloroethane (ethylene dichloride)	107-06-2	X		
1,2-Dichloropropane (propylene dichloride)	78-87-5	X		
2-Propanol (isopropyl alcohol)	67-63-0		X	
Acetone*				X
Acrylonitrile	107-13-1	X		
Benzene	71-43-2	X		
Bromodichloromethane	75-27-4		X	
Butane*				X
Carbon disulfide	75-15-0	X		
Carbon monoxide*				X
Carbon tetrachloride	56-23-5	X		
Carbonyl sulfide	463-58-1	X		
Chlorobenzene	108-90-7	X		
Chlorodifluoromethane	75-45-6		X	
Chloroethane (ethyl chloride)	75-00-3	X		
Chloroform	67-66-3	X		
Chloromethane	74-87-3	X		
Dichlorobenzene	25321-22-6		X	
Dichlorodifluoromethane	75-71-8		X	
Dichlorofluoromethane	75-43-4		X	
Dichloromethane (methylene chloride)	75-09-2	X		
Dimethyl sulfide (methyl sulfide)*				X
Ethane*				X
Ethanol*				X
Ethyl mercaptan (ethanethiol)*				X
Ethylbenzene	100-41-4	X		
Ethylene dibromide	106-93-4	X		
Fluorotrichloromethane	75-69-4		X	
Hexane	110-54-3	X		
Hydrogen sulfide	7783-06-4	X		
Mercury (total)	7439-97-6		X	
Methyl ethyl ketone	78-93-3	X		
Methyl isobutyl ketone	108-10-1	X		

Methyl mercaptan*				X
Pentane*				X
Perchloroethylene (tetrachloroethylene)	127-18-4	X		
Propane*	74-98-6			X
t-1,2-Dichloroethene	156-60-5		X	
Toluene	108-88-3	X		
Trichloroethylene (trichloroethene)	79-01-6	X		
Vinyl chloride	75-01-4	X		
Xylenes	1330-20-7	X		
Site Specific Known Air Toxics				

\*These pollutants are not specifically listed in the CAO report. You should add them at the end of the report along with any site specific pollutants at the facility.

#### Tools and Information Needed:

In addition to the "What you need" list on the "Read Me First" tab of the CAO reporting spreadsheet, you may need the following to complete this exercise:

- EPA LandGEM v 3.02 <https://www.epa.gov/air-emissions-factors-and-quantification/emissions-estimation-tools> (please read LandGEM instructions and ensure necessary macros are enabled)
- Facility DEQ air permit
- Facility DEQ air permit Review Report
- Annual waste acceptance tonnages
- Future estimated waste acceptance tonnages
- 2016 annual flow rate of Landfill Gas (LFG) through site flares, engines, etc.
- Future site specific assumptions about tonnages, flares, engines, etc.

Although you are not required to submit data on the remaining 446 pollutants until September 1 2017, you are welcome to do so in the May 15, 2017 submittal. Be sure to keep a copy of all LandGEM models, spreadsheets and assumptions used to determine the estimated emissions reported in the CAO spreadsheet.

Sincerely,



Jeffery Stocum  
AQ Technical Services Manager

ec: Brandy Albertson, DEQ-CAO, [ALBERTSON.BRANDY@deq.state.or.us](mailto:ALBERTSON.BRANDY@deq.state.or.us)  
Byron Peterson, DEQ-AQ, [PETERSON.Byron@deq.state.or.us](mailto:PETERSON.Byron@deq.state.or.us)  
Jamie Jones, DEQ-MM, [JONES.Jamie@deq.state.or.us](mailto:JONES.Jamie@deq.state.or.us)

Source Name	Name	Contact
Dry Creek Landfill, Inc.	Byron Peterson Permit Writer	<a href="mailto:PETERSON.Byron@deq.state.or.us">PETERSON.Byron@deq.state.or.us</a> (541) 776-6052
	Jamie Jones LandGEM	<a href="mailto:Jones.Jamie@deq.state.or.us">Jones.Jamie@deq.state.or.us</a> (541) 298-7255 Ext. 225



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August 9, 2017

Delivered via electronic mail to: [cleanerair@deq.state.or.us](mailto: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 the July 28, 2017 Cleaner Air Oregon Rulemaking Advisory Committee Meeting**

Dear Co-Chairs Jackie Dingfelder and Claudia Powers,

The purpose of this letter is to follow up on the July 28, 2017 Cleaner Air Oregon (CAO) Rules Advisory Committee Meeting and emphasize ideas critical for creating an air toxics permitting program that protects public health and is based on quality science.

The July 28th meeting provided much needed information, however more transparency is needed to explain the changes in the proposed risk action levels.

- How are the new higher risk action levels still protective of public health?
- Will they prevent air toxics emission issues that occurred with the past permitting program?

In addition, the current proposal provides too much discretion to the DEQ director. Again, the process calls for more transparency:

- What specific consultation process will be used to make the decision, and how will it be evaluated?
- What criteria will be used for the decision?
- How will the public be engaged?
- If the OHA director disagrees with the DEQ director, will there be a public process to allow for a dissenting opinion?



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I think an upper limit for existing facilities is needed to protect public health. Unlimited discretion by the DEQ director is inappropriate, especially with limited resources for community engagement and DEQ staffing.

EQC annual reports should include an evaluation of DEQ director decisions to document the number of existing facilities that exceed the 25/1 risk action level and move through the discretionary consultation process to get permits that exceed 100/3. If a significant number are exceeding the limits through the DEQ director special process, then the 25/1 risk action level for existing facilities does nothing to protect and improve public health.

I strongly support the upper risk action level for new facilities over which no permit would be issued. This element shows strong support for prioritizing public health.

Another important issue relates to modeling receptor locations. It is essential that either current zoning or comprehensive plan designations be used, since the purpose is to protect current and future residents in nearby locations. In most cases, the zoning code and comprehensive plan are the same, but definitely not always.

The area cap is also a very important element of this health-risk based program to protect communities with environmental justice concerns. I encourage DEQ and OHA to make the draft rule clear in how the area cap will be implemented and enforced, if there is a conflict with a facility moving through the director consultation process for a permit to exceed the 100/3 risk action level, which would be greater than the maximum area cap.

Thank you for co-chairing this important committee. Your leadership and facilitation skills have encouraged constructive conversations and made an enormous difference in allowing all opinions to be heard.

Sincerely,  
Susan



Susan Anderson  
Director



August 10, 2017

**Delivered via electronic mail to: [cleanerair@deq.state.or.us](mailto:cleanerair@deq.state.or.us)**

Jackie Dingfelder  
Co-Chair Cleaner Air Oregon Rulemaking Advisory Committee  
Claudia Powers  
Co-Chair Cleaner Air Oregon Rulemaking Advisory Committee

Re: Comments on June 2017 Cleaner Air Oregon Advisory Committee Meeting

Dear Co-Chairs Dingfelder and Powers

On behalf of the Conference of Local Health Officials Large Counties, please accept the following comments on the July 28, 2017 Cleaner Air Oregon Rulemaking Advisory Committee meeting.

#### **Total facility Risk Action Level (RAL) versus individual emissions unit RAL**

We support the proposal to eliminate RALs at the individual Toxics Emissions Units, as it will reduce administrative burden while remaining protective of public health by focusing on entire facilities. One area of ambiguity remains; the agency states that the addition or modification of Toxics Emissions Units *can* trigger review of facility RALs. This point should be clarified so that industry and stakeholders know specifically what level of addition or modification would trigger facility RAL review.

#### **New Facility RALs**

We support the proposed RAL of 10 in a million and HI of 1 for new facilities. However, the potential allowance of emissions with cancer risk of up to 100 in a million and a HI of up to 3 seems excessive for new facilities. New industrial facilities have the ability to conduct extensive planning and research prior to applying for a permit and breaking ground. New facilities should have available the latest advances in pollution control and process technology that will allow for minimal risk. Therefore, we believe the new facility cap should be set substantially lower than that for existing facilities, i.e. 50/2, with the CRL remaining applicable at total facility risk greater than 10/1.

We remain uncomfortable with the level of detail provided re: the Director Consultation Process. We do not think that consultation by the Director with only other state agencies and local elected officials is adequate. If DEQ were to allow a cancer risk level for new facilities up to ten-times higher than the base limit, the public deserves more input and transparency in how those decisions are made. Clear and detailed steps that include more public input will also serve the agency well and help avoiding distrust in the decision-making process.

We agree that exceptions to the 10/1 new facility RAL may be necessary in the course of permitting decisions. However, the proposed magnitude of the potential exceptions is too large and the process too poorly defined for these to be included in the draft rules at this point.

## Existing Facility RALs

We appreciate that OHA and DEQ are researching air quality policies from other jurisdictions to help inform aspects of an enhanced program in Oregon. At the July 2017 meeting the justification for increasing the RALs for existing facilities, “it conforms with South Coast”, is not an adequate rationale by itself. California’s South Coast Air Basin and Air Quality Management District differ from Oregon in many ways, including but not limited to regularly experiencing some of the most unhealthy air in the country. OHA and DEQ should provide a clear rationale for using South Coast regulatory program thresholds and other permitting requirements (i.e. number and complexity of facilities regulated, average risk of facilities in operation, and how this compares to Oregon’s industrial landscape) that demonstrates the applicability of that program’s criteria; otherwise it appears that these elements are arbitrary and not grounded in local conditions. As Steven Anderson pointed out at the end of the July 2017 meeting, we need to be careful that the new rules do not allow any deterioration in current air conditions by making the new rules unintentionally more lax. We should not simply apply South Coast RALs without considering the impact on Oregon conditions.

Another major concern with the existing facility RALs proposed in June 2017 is the magnitude of the RALs which, with Director approval, do not appear to have any upper limit on cancer or non-cancer risk. We suggest that a ‘no permit issued’ category be proposed as you have done in the new facility proposal; regardless of the amount of consultation, there needs to be an upper limit on the risk forced upon the public.

## Director Approval Process

The Director Consultation process remains unclear to us and lacks an explanation of the type of information that would justify an exception to the RALs. As outlined above, we urge the agencies to make this process completely transparent, with a clear decision making framework, to be accountable and fair to both the public and regulated industries.

If the DEQ Director Process is to be included in Draft Rules at this time, we suggest the following potential components of a fair, transparent and protective framework:

- Criteria
  - Amount of time needed to come into compliance
  - Magnitude of gap between emissions and threshold
  - Proximity of receptors
  - Vulnerability of receptors (i.e. childcare facility, assisted living facility)
  - Acute vs. chronic exposure risk (in light of proximity of receptors)
- Oversight
  - EQC annual review of exceptions

## Area Risk

If the area cap is proposed/expected to be a number between 50 and 100 for cancer risk, there is a logical inconsistency with allowing existing facilities to have a risk of 100, or even greater. This flaw in the current area risk proposal was identified in the July 28th meeting by a RAC member. Because new and existing facilities could be allowed up to, and in excess of 100/3 through the director consultation process, the proposed area cap could be violated by a single source operating at that emissions capacity. The agency should closely analyze and model emissions data from existing sources to determine if the New Facility, Existing Facility and Multi-facility Area Risk proposals are appropriate and attainable.



### **Tiered Implementation**

We agree with the proposal to prioritize emissions reductions from the highest polluting facilities affecting the most people, as they pose the greatest risk to human health. We concur that using the components of (risk) x (demographics) x (population), as this method accounts both for population density and presence of sensitive populations.

### **Emissions Inventory**

In our opinion, the effectiveness and appropriateness of RALs should be based in part on a thorough emissions inventory of existing facilities. We were told that preliminary risk assessment was conducted using National Air Toxics Assessment (NATA) data, which assisted in determining the first set of proposed RALs presented in the June 20th meeting. From our understanding, the agency decided to raise RALs following a review of enhanced EI data submitted by regulated facilities. Why did the enhanced data affect the changes to RALs? What did it show? Was the disparity related to chemicals that haven't been previously analyzed pollutants (in addition to 187 federally recognized HAPs)? We are certain this information could be provided to the RAC in a way that does not identify or expose any one facility or industry. We urge the agency to make explicit the relationship between the emissions inventory data received and the RALs.

Secondly, we ask that the agency provide greater detail on how EI data is evaluated by the agency for quality assurance and quality control. Specifically please provide information about how the agency ensures the completeness and accuracy of self-reported emissions data.

Thank you for the opportunity to submit comments. We greatly value the ability to participate in the Rulemaking Advisory Committee and will continue to support DEQ and OHA in achieving fair, robust and health protective rules for industrial air permitting in Oregon.

Paul Lewis, MD, MPH  
Multnomah County Health Officer  
Cleaner Air Oregon Advisory Committee Member

Jae Douglas, PhD  
Multnomah County Environmental Health Director  
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THOMAS R. WOOD

August 10, 2017

**VIA EMAIL**

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**Re: Comments on Cleaner Air Oregon Rulemaking**

Dear Joe:

I am writing in my role as a business representative on the Cleaner Air Oregon (“CAO”) Advisory Committee as well as the spokesperson for a coalition of business and manufacturing associations representing over 1,700 businesses in Oregon and approximately 250,000 employees, including nearly 75,000 manufacturing jobs. This broad Coalition of Oregon businesses remains keenly interested in the CAO rulemaking process and dedicated to the development of a successful regulatory program for all Oregonians. This letter presents the Coalition’s comments on and concerns with the process to date, particularly the topics discussed at the Advisory Committee meeting on July 28, 2017.

This letter also reiterates and incorporates by reference the points raised in the Coalition’s December 2, 2016, February 13, 2017, April 21, 2017 and July 7, 2017 comment letters. Since we have received no response to those letters, we ask that you consider and address all of the Coalition’s comments set forth in those letters as part of the forthcoming CAO rule proposal.

Overall, the Coalition supports the Governor’s policy objective for the Oregon Department of Environmental Quality (“DEQ” or the “Department”) and Oregon Health Authority (“OHA”) to develop and implement the CAO program without jeopardizing Oregon’s ability to “grow a thriving and competitive economy.”<sup>1</sup> This objective has translated to the agencies’ public statements about the CAO program. Notably, in testimony before the Oregon state legislature,

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<sup>1</sup><http://cleanerair.oregon.gov/about/>

DEQ Director Whitman emphasized the need for a program “that is not going to result in other health risks by driving businesses out of the state of Oregon.”<sup>2</sup> Unfortunately, DEQ’s working draft framework for the CAO program strays from this essential objective. On the cusp of DEQ’s public release of the proposed CAO rule, the Coalition remains terribly concerned that the proposed rule, if based on the draft framework, will drive businesses away from Oregon, costing Oregonians jobs and creating unintended health risks in our most vulnerable communities. Over 15 percent of Oregon’s population lives in poverty, including more than 167,000 children (an increase over the past 10 years).<sup>3</sup> 25 percent of the population in Malheur County lives in poverty and the unemployment rate in rural counties such as Grant County remains over 7 percent.<sup>4</sup> DEQ should not be implementing a program that exacerbates these conditions.

This overarching concern frames the following comments, which reflect the Coalition’s collective input.

### **The September 1, 2017 Emission Inventory Submittal Deadline Should be Postponed**

As you read this, Coalition businesses and all air permit holders statewide are hard at work to meet DEQ’s September 1, 2017 deadline to provide information on their potential emissions of over 400 substances not regulated as federal hazardous air pollutants. Most of these substances have never previously been subject to emissions inventory efforts in Oregon and lack reliable emissions rate data. Accordingly, preparing the requested inventories is a burdensome, time-consuming and costly process.

Given the level of the investment necessary to prepare the requested information, from the outset, we asked DEQ to delay requesting specialized emissions information from Oregon businesses until the CAO program was developed and the agencies knew what information would be used in the program’s implementation.

DEQ responded that the requested information was required upfront, so the agencies’ could “complete this comprehensive update” to Oregon’s air toxics program.<sup>5</sup> In particular, as DEQ explained in its November 28, 2016 letter to facilities, the requested information would “allow DEQ and OHA to ... [d]efine the scope of Cleaner Air Oregon in terms of the number and type

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<sup>2</sup> Whitman Testimony, Joint Committee on Ways and Means, Subcommittee on Natural Resources, May 11, 2017 (emphasis added).

<sup>3</sup> State Financial Condition Report (July 2017).

<sup>4</sup> *Id.*

<sup>5</sup> DEQ Cleaner Air Oregon Data Request Letter, November 28, 2016, available at <http://www.oregon.gov/deq/air-toxics/Pages/Air-Toxics-Emissions-Inventory.aspx>.

of facilities and air toxics that may be subject to new reporting, permitting, or other regulatory requirements.”<sup>6</sup>

As it turns out, that is not the case. At the July 28, 2017 Advisory Committee meeting, DEQ’s representatives explained that the Department no longer plans to analyze the facility-specific emissions inventories to inform the CAO rule’s development or promulgation. If that is accurate, the Coalition respectfully requests that DEQ suspend its standing request for emissions information about the substances that are not federal hazardous air pollutants. The Coalition also asks that DEQ reconsider the breadth of its information request after the CAO rule is promulgated and its scope and requirements are more clear.

### **The Ambient Benchmark Concentration Review Rulemaking Should Occur As Part of the CAO Rulemaking, Not Separately**

On July 14, 2017, DEQ issued a Notice of Proposed Rulemaking to adopt revisions to 23 standing Ambient Benchmark Concentrations (“ABCs”) and adding new benchmarks (the “NOPR”). DEQ has requested that all public comments on the proposed rule be submitted by August 21, 2017. That is an insufficient level of public involvement.

During the CAO rulemaking process, DEQ has stated that the adopted ABCs will become or form the basis of the regulatory standards (such as the proposed “Reference Emission Rates” or “RERs”) that will apply directly to individual facilities under the CAO rule. The proposed ABC rule is thus a critical component of the forthcoming CAO program.

Moreover, to date, there has been insufficient opportunity for RAC member involvement in the discussions regarding the proposed updated and new benchmarks and their potential significance to the CAO program. It is not clear that the Air Toxics Science Advisory Committee (“ATSAC”) (1) had an adequate opportunity to review the available toxicity information supporting the proposed updated and new benchmarks, or (2) was provided any explanation of how its decisions would be employed in the context of the policy-driven CAO rulemaking. It is likewise disappointing that the Department did not specifically notify the potentially interested parties actively participating in the CAO rulemaking process of its ongoing efforts to revise the state’s ABCs.

The Department appears to have foreseen concerns like these. In the Notice of Proposed Rulemaking (“NOPR”), DEQ specifically “requests public comment on whether to consider other options for achieving the rules’ substantive goals while reducing any identified negative economic impact on business.”<sup>7</sup>

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<sup>6</sup> Id.

<sup>7</sup> NOPR, at 8 and 13.

In response to DEQ's request, the Coalition urges DEQ to run the proposed ABC rulemaking concurrently with the CAO rulemaking. More specifically, we ask DEQ to (1) allow the comment period on the proposed ABC rule to remain open through the close of the public comment period on the forthcoming CAO rule and (2) otherwise seek to promulgate the two rules concurrently. Granting this request will help Oregon's business community gauge the potential negative economic impact that will result from the proposed ABC rule as a component of the larger CAO program. Moreover, since DEQ intends to complete the CAO program rulemaking over the next several months, our request will not undermine the stated goal of the proposed ABC rule to ensure that the state's ABCs are based on up-to-date and scientifically defensible information.

**The CAO Rule's Tiered Implementation Strategy Must Be Reassessed to Avoid Needless Delay or Cancellation of Economically and Environmentally Beneficial Projects at Existing Facilities**

We have serious concerns about the tiered implementation strategy for the CAO rule presented at the July 28, 2017 Advisory Committee meeting.

Most significantly, for those businesses later identified by DEQ as a "Tier 1" facility, the strategy will delay or cease expansion of those facilities across the state. That will be the unfortunate result if DEQ requires all Tier 1 facilities to complete the full regulatory process under the CAO rule before proceeding to construct a modification of any type (i.e., modifications requiring a Type 1, 2, 3 or 4 Notice of Construction or "NOC"). At the recent Advisory Committee meeting, DEQ noted that, last year, it received approximately 250 Type 1 NOCs from facilities operating in DEQ's Northwest Region alone. Obviously then, DEQ lacks the resources to process on any timeline (let alone one that will enable Oregon's manufacturing economy to thrive or remain competitive) the myriad facility-specific air toxics assessments that will need to be completed if all NOC applications of any type trigger that requirement.

As presented, the implementation strategy would also discourage businesses from completing beneficial projects. For example, since a facility would have to submit a Type 1 NOC before installing an air pollution control device, the decision to install that control device would necessarily need to account for the time and expense of bringing the entire facility through the complete CAO rule regulatory process. As a result, beneficial projects for classified Tier 1 sources -- like the installation of air pollution control devices -- will be delayed or worse, rendered infeasible.

The CAO program's implementation must be better crafted so it does not encourage businesses to operate less efficient, higher emitting equipment or entirely avoid making new investments in Oregon. Toward that objective, we specifically request that DEQ, at a minimum, exclude existing source modifications requiring a Type 1 or Type 2 NOC from the set of actions that would trigger a facility-level review under CAO rule.

### **The Proposed Risk Action Levels Remain Too Conservative**

The most critical issue with the draft CAO rule framework is that the risk action levels (“RALs”) discussed to date (e.g., the cancer RAL of 10 in 1 million for new sources and 25 in 1 million for existing sources; the non-cancer RAL of a Hazard Index of 1) are far too conservative. To ensure that the CAO program is effectively prioritized, viable and realistic, and for all of the reasons detailed in our prior comment letters, we again request that DEQ change the existing source RALs to 100 in 1 million excess lifetime cancer risk and a Hazard Index of 10.

To date, DEQ has not acknowledged the profound problems with its proposed Hazard Index of 1 for all sources. We reiterate those problems below for the Department’s consideration. We begin by summarizing what we anticipate is our common understanding of the Hazard Index concept and its utility.

The Hazard Index is a metric for estimating non-carcinogenic effects of a given set of substances. It represents the sum of the individual Hazard Quotients for the substances being considered. Oregon’s existing air toxics rules define the Hazard Quotient as the ratio of the potential exposure of a substance to the “reference concentration” for that substance.<sup>8</sup> Thus, a Hazard Quotient equal to 1 signifies that the exposure level of the substance is equal to the substance’s reference concentration.

Oregon’s rules define “reference concentration” as:

“an estimate of a continuous exposure or a daily exposure to the human population (including sensitive populations) that is likely to be without an appreciable risk of adverse non-cancer effects during a lifetime. The reference concentration can be applied from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.”<sup>9</sup>

Reference concentrations are often based on the most sensitive adverse health effect reported in medical and toxicological literature, and are designed to protect the most sensitive individuals in the entire population. It is well understood that a given substance’s reference concentration is merely a conservative estimate that “does not solely reflect the toxicity of the substance but is derived using uncertainty factors which are not fully data based but may incorporate significant

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<sup>8</sup> OAR-246-0030(5).

<sup>9</sup> Id. at -0030(8).

policy-driven assumptions.”<sup>10</sup> The use of uncertainty factors can drive the substance’s reference concentration lower by an order of magnitude or more to extrapolate from reported experimental results in studies.<sup>11</sup> Thus, the reference concentration for a substance is not an absolute measure of a substance’s toxicity and may overestimate risk.

Likewise, the total Hazard Index -- which is the sum of individual Hazard Quotients -- is not an absolute measure of toxicity. The total Hazard Index approach assumes that the multiple exposures to substances with Hazard Quotients of less than 1 could, in combination, result in an adverse health effect. However, as the United States Environmental Protection Agency (“EPA”) has repeatedly explained:

“[a Hazard Index] HI greater than 1.0 does not necessarily suggest a likelihood of adverse effects. Furthermore, the HI cannot be translated to a probability that adverse effects will occur, and it is not likely to be proportional to risk. A respiratory HI greater than 1.0 can best be described as indicating that a potential may exist for adverse irritation to the respiratory system.”<sup>12</sup>

Against this description of the Hazard Index concept and its utility, we trust you understand our concern with setting the non-cancer RAL at a proposed Hazard Index of 1. By making that policy choice, DEQ would be regulating all stationary sources by reference to a level that carries compounding layers of conservative assumptions, including:

- applying uncertainty factors to calculate an individual substance’s reference concentration (e.g., to account for possible differences in responsiveness between humans and animals);
- calculation of an individual substance’s reference concentration by reference to the most especially susceptible people in the population; and
- assuming that all subthreshold doses of a substance, or set of substances, will eventually aggregate to cause an adverse effect.

In short, DEQ is proposing to set the non-cancer RAL at the level beyond which it is possible that some sort of adverse effect will occur at some unknown probability. Setting the RAL at that extreme level is not justified by the science or sound public policy. We do not have, and cannot realistically create, an environment without risk. Moreover, while setting the non-cancer RAL at a Hazard Index of 1 may not address any non-cancer health impacts from air toxics, it is

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<sup>10</sup> Sarigiannis and Hansen, “Considering the cumulative risk of mixtures of chemicals - A challenge for policy makers,” *Environ Health* (2012), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3388441/>.

<sup>11</sup> <https://www.epa.gov/iris/reference-dose-rfd-description-and-use-health-risk-assessments>.

<sup>12</sup> <https://archive.epa.gov/airtoxics/nata/web/html/gloss.html>.

guaranteed to cause the CAO rule to adversely affect Oregon's economy, increasing unemployment and the risk of associated adverse health impacts. Accordingly, we urge DEQ to set the non-cancer RAL at a Hazard Index of 10, which is consistent with the levels of comparable California air toxics programs that have operated for decades to balance the various public policy and public health goals at stake.

Equally as significant, DEQ must clarify that a different Hazard Index will apply to each set of substances that affect the same target organ or organ system. While it may be reasonable for screening purposes to combine hazard quotients for multiple substances that could have similar adverse health effects, there is no sound scientific or policy basis to lump all hazard quotients together, irrespective of the target organ or organ system considered. That sort of compounding of wholly unrelated non-cancer health effect risks would make Oregon's program uniquely stringent and uniquely flawed as a matter of science.

Finally, as we've stressed previously, exceeding whatever Hazard Index level is established as the non-cancer RAL should not automatically trigger a regulatory action beyond a further discussion with DEQ. That is because, simply put, the RAL level will not identify actual risk. Therefore, if a source's emissions are calculated to exceed the Hazard Index level established as the non-cancer RAL, that should open a dialog with DEQ to consider the important factors (e.g., the relevant substance dose-response curves), enabling a more refined assessment of whether the source emissions actually present unacceptable risk to anyone.

### **The CAO Rule Requires Other Significant Revisions**

The Coalition reiterates the following comments about the proposed draft CAO framework from its prior letters to DEQ to ensure the forthcoming CAO rule preserves Oregon's overall economic and public health:

- ***The CAO program must assess actual source emissions, not hypothetical (i.e., potential) source emissions:*** Setting the CAO program up to assess potential emissions would overestimate emissions and actual risks from Oregon's industrial facilities, setting the facilities up for the false choice between accepting production limits and even more costly regulatory alternatives, and leaving Oregonians with a distorted impression of the risk that they are actually exposed to;
- ***The receptors selected for modeling risk should reflect current land use, not some hypothetical land use scenario (i.e. zoning):*** The CAO program should model risk at the locations where people actually live and work for meaningful periods of time. It should not seek to estimate risk by reference to transient, intermittent uses at particular locations or assumptions about the sort of theoretically permissible uses allowed at a given location by currently applicable land use laws;

- ***The cumulative area program should be developed, if at all, in a separate rulemaking:*** DEQ is nowhere near ready to propose a regulatory program that could, as conceived, create economic dead zones across the state in which no new sources or expansion of existing sources could occur. Oregon land use laws have required businesses to locate in certain areas. Creating a new, regulatory penalty for following Oregon law is bad public policy. DEQ should defer this part of the CAO program to a different rulemaking process; and
- ***Facilities should always be able to perform ambient monitoring to demonstrate actual risk at actual receptors and in lieu of other forms of assessment under the CAO program.***

### **Conclusion**

Although there are other elements of the CAO program that we will comment on, the draft proposed CAO program framework is still insufficiently clear to allow for that. While we look forward to having a meaningful opportunity to review the CAO rule once it is proposed, we continue to question the tremendous speed at which this rulemaking is progressing. In addition, we strenuously object to DEQ moving forward with the proposed ABC rule as if that rule was something other than an integral component of the CAO rulemaking. Neither the proposed ABC rule nor the CAO rule should be rushed. Sound science and good public policy dictate that these collective rulemaking processes be slowed down so they avoid becoming the product of speculative, tabloid policymaking.

We look forward to an ongoing dialog to establish a practical and effective program.

Sincerely,

  
Thomas R. Wood *by ksw*

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Eastside Portland Air Coalition

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

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

DATE: August 15, 2017

**Re: Comments on Cleaner Air Oregon RAC Meeting 7/28/2017**

*"For every increment that you improve air quality, there is a corresponding improvement in public health."* David Farrer, OHA, July 28, 2017

Co-Chairs Dingfelder and Powers,

Environmental health crises should be seized on as an opportunity to evaluate the past, identify what has and has not worked, acknowledge the general and specific problems and enact solutions that meet goals. With Cleaner Air Oregon, we have the opportunity to create air quality standards that will protect the health of communities and the environment, while also providing clear compliance expectations for businesses that encourage them to innovate, to become cleaner, and more competitive.

The central goal of CAO is creating rules that protect human health. We are dismayed that we must reiterate and re-center this goal in our comments yet again. The July 28th RAC meeting exposed a lack of commitment to reducing the disparate impacts of air pollution by establishing **true health-based standards**, *not standards adjusted to the needs of polluting facilities or agency anxieties about feasibility and workload. **Either the standards are health-protective, or they are not.***

We feel that the Agency Director and staff must address the following concerns:

**Oregon's Protective Land Use Laws:**

The mandate for Cleaner Air Oregon is not to overhaul Oregon's land use laws. We decry the fallacy that blames Oregon's land use laws for the disparate impacts of air pollution. Oregon's land use laws are not the reason industries pollute more in certain areas. This claim is a smokescreen for efforts to undermine the CAO process. The CAO mandate is to create air quality regulations that prioritize and protect public health, and we object to attempts to subvert the CAO process with claims that Oregon land use laws are at fault for Oregon's failure to regulate air pollution and protect public health.

Land use laws that designate industrial zones are beneficial in keeping polluting industries from proliferating anywhere in the State, particularly near sensitive health receptor and environmental sites. Land use laws ensure that high value farm soils, wetlands, greenways or native forests are not cemented over for industrial construction sites without a legal process for weighing the benefits or losses associated

with zoning decisions. Oregon's land use laws provide strict criteria, guidelines and Goal One opportunities (public participation) so that communities can play a role in protecting their most important assets, namely their homes, schools, parks and natural areas. Without Oregon's land use laws, industries could engage in a free-for-all to build polluting facilities anywhere and everywhere.

### **Quantifying and qualifying Oregon's pollution sources:**

The RAC has been told repeatedly, and we agree, that requiring comprehensive emissions reporting and inventories is critical to understanding the toxic chemicals facilities are actually emitting into the air. It is cheaper than source testing or monitoring and for many facilities may provide an off-ramp to further regulation.

We suggest DEQ include a fee to complete a full analysis of the current emissions inventory as part of the CAO rules. Facilities must document a comprehensive and verifiable inventory of ALL emissions and pay a fee for DEQ analysis. Failure to document emissions must be subject to a fine and, after a designated time period, a stop-work order for non-compliance will be issued.

A comprehensive, fully analyzed inventory will be critical for making this rule-making sensible, fair, appropriately tiered, and substantive. The DEQ has repeatedly said as much and we agree. It will also begin to close the gap in DEQ's understanding of the facilities it regulates. DEQ's ignorance of the processes and emissions it regulates allowed the art glass factory and petroleum refinery facility crises to occur. In both of these cases, the industries knew they were polluting highly toxic chemicals and should have installed pollution control equipment. Yet, they successfully hid this information from the DEQ by taking advantage of the lack of a requirement to report an emissions inventory. Only when DEQ knows what facilities are actually emitting will they be able to protect the public from harmful industrial toxins.

Industry representatives on the CAO RAC have argued that the DEQ doesn't have the capacity to implement new analysis and regulations. If that is true, then certainly an ear-marked fee is not unreasonable, supports the mandate of CAO for a health-based and science-based analyses, and is based in a Polluter Pays model, which we believe is the only just and ethical approach to defray the decades of industry externalizing their costs onto the general public.

### **The Director approval process for exemptions:**

We do not support exemptions from health-based standards. Therefore, we think a Director's approval process is not necessary. Industries should be required to comply with air regulations that are clearly defined, standardized and consistent. And communities must be assured that their health is being protected from harmful pollutants by air regulations that are clearly defined, standardized and consistent.

### **De-politicizing decision-making and community engagement:**

The DEQ must acknowledge and alleviate the obvious power imbalance between resource-rich industry lobbyists and the limited resources of impacted communities. We believe Oregon's Environmental Justice Task Force serves to alleviate this power imbalance and must be consulted routinely during DEQ decision-making and any community engagement process.

### **Risk reduction levels seem arbitrary:**

The DEQ is proposing a RAL of 100 cancers /1 million per existing facility with an area-wide, cumulative risk range of 50-100. This is inconsistent. One older facility could use up the limit for an airshed, thus preventing investments in newer and cleaner facilities. This proposal must have an upper numerical limit, a hard-stop number that applies equally to all communities. We strongly recommend that Oregon adopt California's RAL of 25/million. There isn't a valid reason why our two states should have different "acceptable" risk levels: Don't Oregon residents equally deserve healthy air and fewer health risks?

### **Reducing air pollution as a non-negotiable requirement:**

Oregon cannot claim to be instituting a health-based air regulatory system without including a requirement that facilities ratchet down their emissions over a designated time period. We would like pollution reduction requirements written into the rules.

DEQ must require existing facilities to reduce pollution risk by improving pollution controls in addition to requiring new facilities to install TBAC, etc. CAO must require a Toxics Use and Risk Reduction Plan of each facility, reviewed every 5-years and, if progress isn't made, there must be significant fines leading to suspended production for failure to comply.

In keeping with the environmental justice principles upon which CAO is predicated, the public needs full access to TURR plans and regular community engagement opportunities during the 5-year review window. Without pollution reduction written into the rules, CAO would be driving Oregon towards continually worsening air quality.

We like the idea of an annual fund, administered by the state, based on reported income, whereby high-earning facilities pay to assist smaller companies with meeting CAO goals, essentially a "Toxics Use and Risk Reduction Plan" fund.

During CAO RAC meetings, regulated facilities insist they need "regulatory certainty" so that facilities can "grow, expand and add jobs." The public also needs "regulatory certainty" that industries are installing innovative, state-of-the-art pollution control equipment, implementing toxics use reduction plans and that the rules will protect families from a paradigm whereby industries export the burden and costs of pollution onto nearby communities.

### **Measuring health risks:**

So far, DEQ has not proposed a process to "measure health risks." How will the DEQ do Community Health Assessments? In fact, DEQ staff stated that only the top 80 facilities will initially have to run through the CAO assessment, including doing an AirMod or HIA assessment while the "other facilities go on their merry way." (That is the direct quote made during the CAO meeting by DEQ staff). What are the public health implications of this and how will DEQ know?

Currently many polluters have escaped any kind of assessment and pollution control requirements; instead they've gone on "their merry way" to pour chromium, lead, arsenic, PCB's, particulate matter and much more into communities with very few consequences. It is for precisely this reason that Toxics Emissions Reporting, the TURR plans, pollution reduction tracking and the "Toxics Use and Risk Reduction Plan" fund are essential components of any successful Cleaner Air Oregon regulatory program.

## **Enforcement**

We understand that implementing new health-based regulations will substantially change the traditional relationship between the regulatory agencies and industry. We think that change is at the core of the Cleaner Air Oregon process. That said, we would like to repeat that enforcement of the new rules will be critical. DEQ must have clear authority to intervene in cases of non-compliance.

A schedule of fines and consequences for non-compliance must be written into the rules. We request these fines be substantial enough that they cannot be written off as the “cost of doing business.” The DEQ/OHA must have the authority to revoke permits and issue cease & desist orders when public health is threatened or facilities are out of compliance. We are pretty sure DEQ already has this authority under Oregon Administrative Rule 340-216-0082 but, just to make it clear, we request this authority be written into the CAO rules.

We would also like a citizen enforcement provision written into the rules in the event that DEQ is unable or unwilling to enforce compliance with the law.

## **Reconvene the RAC**

We would like to reconvene the CAO RAC as soon as the first Tier 1 industries are chosen. The public deserves to know how the system is working to protect public health and the DEQ needs additional feedback. Public assessment will help deconstruct the false narrative that jobs are lost at the expense of protecting health.

## **Summary:**

- The CAO mandate is to create air quality regulations that prioritize and protect public health.
- Cleaner Air Oregon does not include a mandate to overhaul Oregon's land use laws.
- DEQ should include a one-time fee to complete a full analysis of the current emissions inventory *as part of the CAO rules*.
- We do not support exemptions from health-based standards. A Director's approval process is not necessary.
- Oregon's Environmental Justice Task Force must be consulted routinely during DEQ decision-making and any community engagement process.
- The proposed RALs must have an upper numerical limit, a hard-stop number that applies equally to all communities. We suggest California's RAL of 25/million.
- CAO rules must require a Toxics Use and Risk Reduction Plan of each existing facility, publicly accessible, and reviewed every 5-years with public involvement opportunities and, if progress isn't made, there must be significant fines leading to suspended production for failure to comply.

- We propose an annual fund, administered by the state, based on reported income, whereby high-earning facilities pay to assist smaller companies with meeting CAO goals, essentially a "Toxics Use and Risk Reduction Plan" fund.
- Create a process by which the DEQ will carry out Community Health Assessments?
- We request a schedule of fines and consequences for non-compliance be written into the rules.
- Reconvene the CAO RAC as soon as the first Tier 1 industries are chosen.

We have grown frustrated and pessimistic about this process. We have not seen sufficient leadership from DEQ's Administrator supporting the mandate for true health-based air quality regulations nor an acknowledgment of the culture shift that will be required to make this program a success. Community advocates and health experts have repeatedly had to refocus the RAC discussion back to human health. We have seen the proposed Risk Action Levels raised without notice or explanation. We have witnessed active undermining of the process from members of the CAO who represent industries. We are concerned our leaders will fail us and a narrow and unnecessary antagonism toward environmental protections will continue to hold sway. We realize that this rule-making is a monumental challenge for the agency and industry stakeholders, yet we remain resolute - our health is non-negotiable. When the moss study exposed gaping loopholes in the DEQ's air permitting process, every agency staff member should be working whole-heartedly to protect our children's and grandchildren's health.

Sincerely,

Lisa Arkin, CAO Member for Environmental Protection Representation

*Beyond Toxics*

Jessica Applegate, CAO Member for Community and Neighborhoods Representation

*Eastside Portland Air Coalition*