

Cleaner Air Oregon
Advisory Committee Meeting Summary
February 2, 2017

Meeting Commencement

Co-Chairs Powers and Dingfelder welcomed advisory committee members and introduced alternates -- Susan Katz for Diana Rohlman, Dana Jones for Huy Ong, and Akash Singh for Jo Ann Hardesty. Facilitator John Donovan reviewed the agenda and logistics.

Phil Allen and Sarah Armitage of DEQ gave an overview of screening and risk assessment. Jill Inahara of DEQ gave an overview of implementation.

Screening and Risk Assessment

Advisory Committee members raised several points and concerns about how Cleaner Air Oregon rulemaking would address screening and risk assessment.

Program Elements 16 and 17: *De minimis* and Significant Emission Rate (SER) Levels

- Is the Significant Emission Rate, referred to as an SER, a movable target based on actual facility and pollutant emitted? *Response: No, an SER would be one fixed number for each individual air toxic, based on the RBC.*
- How is an SER back-calculated from a risk-based concentration (RBC)? *Response: Dispersion modeling looks at emissions from a facility and calculates the downwind concentration. To back-calculate an SER, the RBC is used to determine the emission rate which would produce that concentration. For each SER, the RBCs will be used to back-calculate an emission rate, thus converting a concentration, which is in units of micrograms per cubic meter (ug/m³) to an emission rate in units of pounds per year (lbs/year). If you keep emission rates below the SERs, then that will automatically keep concentrations below RBCs.*
- How will facilities that don't emit at a constant rate 24/7 be dealt with? *Response: An averaging time is considered per an annual basis (this approach averages out day-to-day variations), and then the annual concentration is used to evaluate chronic exposure. For short-term or acute effects, a maximum 24 hour emission rate would be considered. Short-term RBCs can be generated, from which short-term SERs can be back-calculated using reverse dispersion modeling, just as with the chronic SERs.*
- Typically only an annual emission rate is given in a permit, thus, the short-term emissions

wouldn't be known. *Response: Short-term emission rates can be obtained from sources. Some existing air permits have short-term (24-hour) limits and reporting requirements.*

- Washington set its *de minimis* rates at 5% of their SERs. What is the technical basis behind this decision? Multiple pollutants? Because Washington applies their SERs on a per-piece-of-equipment basis, setting the *de minimis* at 5% would not account for nearby sources. *Response: Washington Department of Ecology staff said there was no technical basis for choosing to set the de minimis levels at 5% of the SER, just a desire to add an extra layer of conservatism.*
- Baseline emissions, PSELs and the calculation of emission increases over the SER are confusing. PSELs are often set at one ton below the SER. So how is the SER calculated? Concrete examples are needed to help flesh this issue out. *Response: The SERs for criteria pollutants are back-calculated from the Significant Impact Levels, which are approximately 3% -4% of the National Ambient Air Quality Standards and do not change. EPA sets SERs for criteria pollutant but has no SERs for air toxics. Increases in criteria pollutant emissions (tons/year) are compared to the SERs to see if the source has triggered a major modification and the New Source Review process. There are no criteria pollutant requirements for increases in emissions that are less than the SERs, so DEQ implemented a permitting efficiency measure, the generic Plant Site Emission Limit, set at one ton below the SER. Sources can emit up to the generic Plant Site Emission Limits without further review, but once emissions exceed the SER, then some type of analysis is required. Plant Site Emission Limits, along with baseline emission rates and netting basis, are used for criteria pollutants only and are not currently being considered as part of the air toxics permitting program.*
- Where do startup/shutdown emissions fall in comparison to the SER? *Response: Often, continuous monitoring data is not available for all pollutants, and neither are separate emission factors with which to calculate emissions for the startup/shutdown period, so emissions are assumed to be the same as normal operations. But for a unit that has frequent startups and shutdowns, this approach might not be appropriate. DEQ recently received a Prevention of Significant Deterioration permit application for a natural gas turbine that is being used as a peaker unit rather than a base load unit, and which exceeded the SERs for carbon monoxide and volatile organic compounds. DEQ often relies on startup/shutdown plans that follow manufacturer recommendations and require the permittee to minimize the time spent in startup/shutdown rather than attempt to quantify emissions during this period. Most other emission units either don't go through startup/shutdown frequently enough to make a major difference, or they are able to bring their control equipment (thermal oxidizers and Selective Catalytic Reduction) on-line early enough that startup/shutdown emissions are minimized.*
- Currently, SERs are available for criteria pollutants only, not air toxics, correct? *Response: Yes.*
- Do SERs, which are based on RBCs, take multiple-chemical additivity or synergy into account? *Response: SERs are developed on a chemical-by-chemical basis. However, there are ways to use the SERs to account for the cumulative risk (assuming additivity) from all pollutants emitted by a facility. The science has not progressed to the point where SERs could be used to quantitatively account for synergistic interactions in the cumulative risk*

analysis.

Some advisory committee members support the use of *de minimis* levels and SERs, but with some caveats:

- Don't try to permit everything emitted in the state. A program needs to be rolled out that will actually work.
- Technical discussion has been well-served for criteria pollutants, but not for air toxics; recommend looking at this policy shift in order to move forward. Use of *de minimis* levels should not be excluded, but in deference to industry, also consider looking at airsheds across the city and the state.
- The idea of *de minimis* doesn't resonate with the public; telling them that the emissions are *de minimis* doesn't cut it, need to consider Environmental Justice concerns, including related requirements in Title VI .
- Look at airsheds on a case-by-case basis, including those that have inversions, industrial emissions, commercial emissions; perhaps consider applying *de minimis* levels to certain areas. Each source of air toxics within an airshed has to be evaluated.
- Use *de minimis* levels and SERs in a manner that is clear and transparent, so that people understand how they are being used; first focus on areas of greater concern, industrial sources should not be held responsible for mobile source or area source pollution.
- A 1 in 1 million risk for cancer is the basis of our RBCs, thus also the basis of SERs and *de minimis* levels. This risk level should be compared to the 2 in 1 million who die from reactions to a flu shot and the 7 in one million who die in car accidents. In practical terms, there is a level of risk that all of us deal with by simply being human.
- Need program to improve health impacts related to emissions. There has been a 2.2% budget cut for all natural resource programs; so go after the sources where agency efforts can have maximum impact. Could screen out sources of lower concern, but still require those sources to report their use of and emission of chemicals in their operations to make sure that they remain below *de minimis*.
- What will happen if a facility's emission rate falls between the *de minimis* level and the SER? *Response: DEQ and OHA are still evaluating the options for sources in this category. Possibilities include an air toxics permit or just regular reporting.*
- Would be useful to have *de minimis* and SER and also an in-between off-ramp, because it would help with the efficiency of the program.
- If an emission rate is less than the SER, then not harmful to receptors. A *de minimis* emissions level is much more protective than the SER, and so sources emissions below *de minimis* levels shouldn't incur a lot of requirements; but program should require inventory to track these facilities over time.
- No sense requiring TBACT if a source's emissions are between the *de minimis* level and the SER, because the emissions would be below SER and related risk threshold.
- TBACT for sources with emissions that fall between the *de minimis* level and the SER is required by Washington state.
- Risk assessment focuses on most sensitive receptor and the related RBC is used to back-calculate to an SER; but how does risk assessment quantify the risk from multiple

sources? *Response: The SER is applied to a single source, and is back-modeled from an RBC to evaluate emissions for a single source.*

- If there are multiple single sources with emissions below their SERs in a single area, then would the program take a second look to evaluate cumulative effects in that area? *Response: SERs are designed to be protectively conservative, which allows for a buffer to incorporate the effects of nearby sources. The New York program divided each RBC by two for that reason. A limit on the total cumulative impact across multiple facilities is also possible.*
- It is arbitrary to set SERs for generic PSELs, and not take into account air inversions, cumulative impacts, etc.
- Important to assess emissions yearly and ensure accurate reporting, because production levels will change. Need to state clearly that if a source does not meet *de minimis* levels, then health risks exist. Biofilters are a fairly cheap technology to employ if emission levels are above *de minimis* levels; can reduce emissions by up to 60-70%.
- If a source's emissions exceed SER, then require TBACT and cumulative analysis. If Environmental Justice community is involved, perform a community-wide assessment, including evaluation of other sources.

During the discussion of *de minimis* levels and SERs, a number of committee members commented on the types of facilities that should be regulated:

- Need clarification on what constitutes a categorical exemption, because maybe some on the list shouldn't be exempted; including low-concern sources in an area-wide evaluation could result in an additive value that identifies an unacceptable area-wide problem; instead, require initial reporting cycle to identify all emissions; after that a *de minimis* decision could be considered.
- Significant concerns about construction activity exemptions in regard to Environmental Justice communities because construction activities can generate a huge spike in air concentrations and cause high health risk. *Response: DEQ is considering use of the Title V categorically insignificant activities list as a list of potential exemptions under the Cleaner Air Oregon rules. Note that these activities are ancillary compared to the main industrial activity at a permitted source, and are not themselves the main industrial activity. The de minimis levels are, in effect, a type of exemption based on an emission rate.*
- Focus on facilities of highest risk, where program can get largest gains in air toxics reductions.
- When entire framework of Cleaner Air Oregon comes out, it will show how the different pieces will fit together; answers to individual questions won't make sense until the whole framework is developed.
- Innovative programs exist elsewhere which address indirect sources, so no emission type should be off the table in regard to addressing emissions. *Response: Indirect sources include, but are not limited to: (a) Highways and roads; (b) Parking facilities; (c) Retail, commercial and industrial facilities; (d) Recreation, amusement, sports and entertainment facilities; (e) Airports; (f) Office and government buildings; (g) Apartment and condominium buildings; (h) Educational facilities; and (i) Other such property or facilities which will result in increased air contaminant emissions from motor vehicles or other stationary sources.*

Indirect sources are outside the scope of Cleaner Air Oregon.

- Are oil re-refineries included in Cleaner Air Oregon? *Response: Yes. Oregon Administrative Rule 340-216-8010 addresses this item. Table 1 – Activities and Sources includes Category 64: Petroleum refining and re-refining of lubricating oils and greases including asphalt production by distillation and the reprocessing of oils and/or solvents for fuels. Since oil re-refineries are currently permitted, their air toxics emissions will be evaluated under the Cleaner Air Oregon program.*
- Evaluate industrial sources for diesel PM emissions in order to evaluate the contributing effect to the local airshed.
- Only two or three full-blown health risk assessments a year are conducted under California program, and they've got a much larger staff and more funding than Oregon does. Cleaner Air Oregon should focus on low-hanging fruit to get work done earlier in the cycle. Lower more recent numbers of Health Risk Assessments approved may not be due to overburden but due to the fact that there aren't many sources left that pose high risk.
- Clarify whether a facility is more like a South Coast Air Quality Management District rule 1401 or rule 1402 facility. Rule 1402 deals with evaluation of area-wide cumulative risk; typically a two-to-three-year process to get through a full health risk assessment.
- Frustrated about getting to this point in Cleaner Air Oregon discussion and then having concerns about diesel emissions brought up, which are not typically related to facility emissions. If diesel particulate matter emissions are going to be discussed, then additional organizations other than the ones currently at the table need to be included. Emissions from everywhere are part of what is considered to be background; people's health is affected by all pollutants in air, not just those from industrial sources.
- Co-chair acknowledged the confusion about overall scope of Cleaner Air Oregon. Initially, industrial air toxics were identified as the focus, but other kinds of emissions that impact overall field of air toxics would be earmarked; however, this committee has not been charged with doing something about that connection.

CLARIFICATION: The Cleaner Air Oregon rulemaking is a partnership between OHA and DEQ to develop a new regulatory system for managing air toxics emissions from industrial sources. Cleaner Air Oregon does not address mobile source emissions or area source emissions such as woodstoves. Emissions from construction activities are considered secondary emissions which mean emissions that are a result of the construction and/or operation of a source or modification, but that do not come from the source itself. Secondary emissions are outside the scope of Cleaner Air Oregon.

Some committee members asked about evaluation of multiple exposure pathways, accumulation of certain chemicals, and cross-media contamination:

- Will air toxics protocols being discussed take into consideration whether a chemical accumulates and affects exposure pathways other than inhalation? How is wet versus dry deposition of chemicals considered, especially for bioaccumulative aspects? *Response: A multi-pathway risk assessment is beyond the scope of the program, and air dispersion modeling will not address deposition.*

Program Element 18: Initial modeling - Risk assessment and modeling once initial screening

level is triggered (AERSCREEN)

Is emission characterization included in dispersion modeling of individual pollutants, e.g., particulate matter versus volatile organic compounds? *Response: The modeling of a plume doesn't change on based on the type of pollutant that is being evaluated. Plume depletion is not important. EPA guidance does not suggest using plume depletion in the evaluation of PM_{2.5} impacts because we are usually looking at high impacts within 500-1000 meters of facility.*

Are people at DEQ trained extensively in the use of these highly complex modeling tools? *Response: Both models have been used by DEQ for many years and are also used by consultants. The Technical Workgroup said it's important to use models in addition to fence-line monitoring; monitoring is not a replacement for modeling.*

Some advisory committee members support the use of *AERSCREEN* but with some caveats:

- Oregon could compare *AERSCREEN* to *CALSCREEN* and build *ORSCREEN*; opportunity to create web-based screening tool that public can see and provide feedback on. Currently feels like this process happens behind closed doors. Make sure tools are developed in a transparent way so they can be understood by the public.
- Front-load community input early in the process; best modeling in the world cannot quantify all health-related impacts to communities. Always look at cumulative impacts from multiple sources and multiple chemicals, and at background levels, especially in communities with environmental justice concerns.
- Most important question: What are the actual concentrations of air toxics and the related acceptable risk levels in their neighborhoods? Screening obfuscates this information and causes mistrust. Recommend using *AERMOD* right off the bat since doesn't cost much to run.
- What is the probability of screening data and determining whether it will capture the range of possibility that the data point is valid? Is there a 90% level of confidence with the results of a refined model? *Response: Conservatively protective assumptions go into the model, so the results are more protective. It is difficult to assign confidence intervals to these models. EPA looks at monitoring values and runs the model based on emissions, which are based on tracers that could be picked up at a monitor. Acceptable limits are plus or minus 15%. EPA works hard to evaluate models. Emissions are a key part of the model and can have uncertainty associated with them. Additional modeling parameters, such as meteorological data (e.g., stagnant air), also add some uncertainty to modeling results.*
- Multiple levels of screening should be used, such as *de minimis*, *SER*, *AERSCREEN* and *AERMOD*. Because of the costs associated with modeling, a source should only have to do this when truly necessary.
- Concern from neighborhoods about risk screening models: *PATS* has one set of data, *EPA* has *EJSCREEN* and *CFERST*. How will inputs to these models match up with the data that the average citizen is actually able to access and check? *Response: EPA gets much of the facility air toxics data in the EJSCREEN and CFERST models from DEQ. DEQ will be working through how to share with the public information the agencies receive in the course of Cleaner Air Oregon.*
- Computer modeling is advanced and complex, so much so that a Professional Engineer stamp

is required on some models. Is there a requirement for people that do modeling to be certified? *Response: No, licensing or certification is not required. AERMOD requires protocol development by DEQ and consultation prior to running model.*

- Trained professionals must run models. Very important that model protocols and assumptions are agreed upon by all model users to get consistent and comparable modeled results.
- Where does a health impact assessment occur in this process? Agencies could require health impact assessment for specific situations. *Response: The terms Health Impact Assessment and Risk Assessment are sometimes confused with each other. In Oregon, health impact assessments (HIAs) are typically conducted by the Oregon Health Authority, local health departments, or non-governmental organizations. HIAs, as the term is used in Oregon, refers to a prospective assessment of how a policy or land use decision might affect public health. The intent of HIAs is to inform decision makers in their decision making process. However, Washington refers to their risk assessment process as a health impact assessment. Health impact assessments (HIAs), as the term is used in Oregon, are not currently part of the plan for the CAO program; however, risk assessment is part of the plan.*

Implementation

Program Element 20: Phasing

Some committee members commented on aspects of phasing the program in:

- Address new and modified sources first; lessons learned can be used to decide how to include other facilities. Provide opportunity for existing sources to volunteer.
- Do not start with new and modified sources, must also include existing sources.
- Emitters of dioxins and metals should be targeted.
- Evaluating and tracking Environmental Justice concerns should be done by DEQ, not by industrial sources.
- How program will be implemented depends on how program is scoped. Doing implementation on new and existing facilities only does not achieve goals of program.
- Prioritizing facilities by emissions, by which facilities affect the most people, or by concern for Environmental Justice issues in each area were all options that some committee members liked.

Public Comment:

- Scott McIntyre (Hexion Inc.) – At age 58, traded his farming life in order to be in timber industry. He warned the Cleaner Air Oregon team to be careful of the unintended consequences of some of their decisions; should be aware and participate at the same level of diligence that is used in the measure itself. Everyone deserves clean air. Timber is incredibly sustainable, and can do it right with emissions, and operate under permits mandated by the state and feds. How will Cleaner Air Oregon go about evaluating the economic impacts of their program? What will the process entail? Trees are the coolest thing ever. One example of

an unintended consequence is what occurred with protection of the spotted owl. The timber industry was marginalized by 89% because of protection requirements for the spotted owl. Fifty percent of the kilowatts come from coal-fired power plants. The school district in Eugene formerly got about \$0.60 from every dollar of forest receipts and BLM. After the spotted owl requirements kicked in, those funds dried up and the school district is broke. So let's be good stewards as we move forward with this program.

- Carroll Johnston – Issue of getting cart before the horse (health = horse, cart = details of program). Use something like the moss studies done around glass manufacturers to identify problems and then use technical skills to find out who is creating the problems. Toxic emissions fluctuate, so should not depend on sporadic spot checks of air quality. Brooks garbage incinerator conducts an annual toxics analysis but the rest of the time, it's a guess. Times of unexpected increases in source emissions occur, but the emissions are only measured during normal operation. In regard to phased implementation of the program: find out where problems are, find out where people are going to get sick, look at that area first.
- Greg Thelen – Thanks for taking regulatory overhaul seriously. I am heartened to see contributions of scientists and engineers accurately presented to community. Whatever process comes out will only be as effective as the effectiveness of its implementation. My family was exposed to cadmium, chromium, and arsenic for 30 years. Art glass companies are not controlled. We have a right to know what we are breathing. Need to know what is emitted and find out quickly without having to set up monitoring and wait for wind to blow that direction. Fugitive emissions are hard to measure, and that's a problem. Stack testing is the gold standard of monitoring, but can be expensive and time consuming to install. How do you know what is coming out of a stack? Is it emitting water? Chromium? Unmanned vehicles and drones are being used around the world for situations like these. DEQ should use drones. During current regulatory overhaul, have DOJ find out if DEQ can fly drones immediately above sources, unannounced, to take air samples. Staff should take steps to see that legal foundations are implemented for DEQ to use this valuable resource. *De minimis* and SER are appropriate. Go after largest sources of air toxics, and permit largest sources of air toxics first.
- Ellen Porter – Roseburg Forest Products, family-owned business operating in many Oregon counties. Several components of Cleaner Air Oregon are detrimental or fatal, such as holding industry accountable for emissions from mobile sources or woodstoves. Industry cannot control these sources, so industry cannot be accountable for them. Industry is an easy target but focusing only on industry is unfair, unwise and disingenuous. Need to recognize that in the past few years, most industrial sources have complied with rigorous HAP standards that mandate pollution control equipment. Federal rules address issues of greatest concern, with industry spending billions of dollars. Roseburg has installed many biofilters for \$3 million; so biofilters they are not cheap to install. Continuing to add layers of conservatism to industry requirements will have a devastating effect on industry and related economies. Account for differences between new/modified and existing sources. Existing sources built many decades ago cannot be controlled, and perhaps should be shut down if their emissions cannot be controlled. Facilities are the lifeblood of a community. When jobs go away, poverty, drug use, and crime increase. More than 2,500 people are employed by Roseburg

Forest Products with \$128 million in annual payroll directly employed. The company made \$1.5 million in charitable contributions. The continued vitality of communities is not being considered. An expensive, elaborate program threatens communities; it is in no one's best interest.

- Bill Kluting (Oregon Forest Resources Institute) – One of the shortcomings of DEQ is that it refuses to acknowledge what a California forest fire does to air quality in Southern Oregon. People wrongly think the impacts to air quality are due to field burning. DEQ does not discuss emissions that drift across the Pacific Ocean from China. These are major unmentioned problems that impact our air quality. Millions of tons of pollution is produced from a single major fire. The science says the major problem for air in Oregon is related to emissions from transportation. Industries have already spent millions to comply with DEQ and EPA standards. DEQ should let people know how much of a problem forest fires cause in comparison to industry.
- Brenda Scotland (International VP of Glass Molders Plastics [GMP]) --Working to support glass container manufacturers. Proud of work in facilities and role played in communities. People deserve to breathe clean air and drink clean water, but develop regulations that balance a clean environment with jobs and health. Oregon manufacturers provide high-caliber jobs for Oregon's working families. Not having jobs impacts health as well. She urged the agencies to work with business and trade unions, as jobs are an important component of good health.
- Mike Sullivan (Western pulp and paper workers) -- Judas goat leads lambs to slaughter. Nice to work on regional level but this is a massive problem. Applaud local union efforts; Local 13 in Toledo meet twice yearly with neighbors to discuss concerns. Employees are concerned about the environment. We cannot afford to lose even one job in Oregon. Need to work with sources to make air more pristine and make it a global issue. We all need to roll up our sleeves and make this a better environment.

Program Element 21: Looking beyond current air permitting program for other sources of air toxics

Some committee members commented on sources of air toxics outside the permitting program:

- Liked six choices presented for deciding how to identify other types of sources: non-permitted businesses that have same NAICS/SIC codes as permitted businesses; DEQ hazardous waste generators; Toxics Release Inventory; State Fire Marshal; industrial NPDES Water Quality Permittees and those covered by NPDES 1200-Z and 1200-COLS stormwater general permits with runoff that could include heavy metals; and information submitted to DEQ complaint line).
- Are other states looking at categories of companies that have met a protective criterion but still had significant emissions of toxics? Oregon should start with unregulated categories that could be causing health risks. *Response: It depends on the types of industries present in each state. Sometimes we can use the approaches that other states use; but Kentucky, for example, has protocols for industries that wouldn't be relevant to Oregon, i.e., Rubbertown.*

- Look first at high-hazard facilities that OHA and EJ communities are interested in, then look at those in the inventory list. Landfills, or rock-crushing facilities located in middle of nowhere probably not of much concern. Narrow the scope of which facilities to evaluate in each geographic region; focus on where highest public health impacts occur and where underrepresented communities are located.
- Start with the emissions inventory to see if can capture facilities of most concern based on that list.
- A facility's emissions could be causing health impacts whether it is permitted or not, so must include consideration of all and any available facilities.

Program Element 22: Community Engagement

Some committee members commented on their concerns about community engagement:

- Concerns with lack of DEQ staff position dedicated to Environmental Justice. DEQ is required to have full-time equivalent of one staff Environmental Justice position. This advocate, and the agency, will need cultural competence and language accessibility to build trust. Need a recognized citizen's advocate to track and update relevant knowledge and involve community advocacy organizations and neighborhood groups.
- Agencies need to better understand the communities that they present technical information to; staff advocate could help with this problem. Currently no sense of connection between the agency and a community during DEQ public meetings.
- Need a robust community engagement process.
- Cleaner Air Oregon needs to not only inform public, but, more importantly, provide them a way to actively engage with the regulatory process.
- Facilities with larger impacts to public health should be required to go through more of the Cleaner Air Oregon process than smaller facilities that have lower emissions.
- Seems to be significant effort provided by DEQ to smaller businesses and nonprofits in terms of getting grants. Should be an equal level of service to communities to obtain similar funding.
- Consider public engagement options in smaller rural areas as well as in urban settings.
- There is discretionary authority at the local agency level to choose which mandates are addressed based on budget. DEQ likely did not have adequate resources to hire an EJ advocate.
- Telling public not to worry doesn't mean anything to communities. People would rather hear that the agencies are not certain, instead of the "don't worry" message. Need independent expertise to make this happen.

Program Element 23: Compliance

Some committee members commented on the compliance aspects of the program:

- Compliance is important and needs to be reasonable, achievable, and reportable, and DEQ needs to have time to do it right. Large facilities are already controlled by MACT and are inspected every 2 years, so maybe should not prioritize for compliance under this new

program.

- The importance of transparency cannot be overstated. With respect to the public having access to reported facility data, there is a huge interest in gaining access to information held by the agency without going through an elaborate and slow public records process.
- Will Cleaner Air Oregon be part of the State Implementation Plan (SIP)? *Response: The SIP is the federally-enforceable plan for each state which identifies how that state will attain and/or maintain the primary and secondary National Ambient Air Quality Standards (NAAQS), which are specific to criteria pollutants. EPA says only rules specific to criteria pollutants go into the SIP. Since Cleaner Air Oregon does not pertain to criteria pollutants regulated with NAAQS, it will not be submitted for incorporation into Oregon's SIP.*

The only time DEQ would submit rules pertaining to air toxics to EPA for review under Section 112(l) of the Clean Air Act is when those rules would replace any delegated federal rules, which will not be the case for Cleaner Air Oregon.

- Recommend compliance inspections to make sure industry is meeting obligations.
- Use the appropriate and most relevant tools to determine compliance.
- Transparency is needed for compliance issues. Materials balance data in addition to emissions inventory data will help inform the relevant placement of air monitors.
- Sharing materials balance information about their products would cause some businesses to lose competitive advantage. DEQ could use surrogate chemicals to provide sufficient materials balance information, and still protect company's proprietary chemical data.

Program Element 24: Capacity - regulatory costs and fee structure

Many committee members had concerns and questions about costs and fee structure related to the Cleaner Air Oregon program:

- DEQ has fee proposals in the governor's requested budget. DEQ should consider an interim fee that facilities can plan for that would tide DEQ over into program start-up.
- Fee structure should cover the cost of regulation overall, and not just the costs related to the permitting of facilities. Ultimate fee structure should be sufficient for all program needs.
- Agencies should consider how proposed fee structure will mesh with other parts of air fees required by the air program. Need to decide who will pay the cost of Cleaner Air Oregon.
- Co-chair Powers asked if DEQ has a placeholder in as a budget request? *Response: CAO plans to give a legislative update during the April 4th advisory committee meeting.*
- Associated Oregon Industries (AOI) members do not want to pay for the whole program.
- The Lane Regional Air Pollution Authority (LRAPA) will need to match requirements in the Cleaner Air Oregon rules, likely including application fees and user fees. LRAPA cannot implement a new program without fee funding, so fee structure for the new program must be totally industry-based. People become concerned when an agency depends wholly on fees of the industry that it regulates. This is not an optimal situation.
- There is discomfort around facilities paying fees that fund the program that is overseeing them, but understand the necessity of fees.
- Use of the general fund may make sense for funding of ambient monitoring. But costs related to permitting, modeling, and reviews should be paid by industry because the public bears the

externality of related health risks.

- The LRAPA Board has discussed having the enforcement penalties come back to the agency rather than going to the county general fund entirely.
- Fines don't go back to DEQ because it's prohibited by state law.
- Much of the work to demonstrate that sources are already doing the right thing, so the public should pay for that work when no health impacts are identified.
- Industry, and not the public, should pay to demonstrate that industry emissions are safe. People have been disproportionately impacted by unsafe emissions already, and have paid large amounts already because of that (e.g. missing work, paying for doctors).
- How much manpower will be needed to do this work, e.g., calculating emission rates, modeling, calculating concentrations? Other states have complex spreadsheets that sources use to calculate emissions. Oregon could consider a similar tool.
- Increased funding for ambient air monitoring is critical. Only ambient monitoring provides real-world data. especially in regard to unpermitted emissions.
- Are more resources needed to support these program elements? Information on what DEQ plans to produce for the legislature for its budget process would be helpful, even though it may not yet be complete.

Program Element 25: Evaluation

Some committee members suggested ways to evaluate the success of the Cleaner Air Oregon program:

- Perhaps DEQ could tie measurement of program success into the TUR (toxic use reduction) program?
- Criteria pollutant program monitoring results over time are a good way to show success. To this end, DEQ should target specific pollutants for ambient monitoring for the air toxics program.
- Revisit accurate modeling results over time to show emission reductions. Monitoring results and an annual emissions inventory could also be used.
- Air monitoring is key to measuring the success of the program, because results are real-world.
- Costs related to pollution control and cleanup creates an incentive for facilities to focus on emissions reduction, and is a good metric for measurement of program success.

General Comments from some committee members:

- Concern about tightness of Rules Advisory Committee timeline for review of agency issue papers and other information, particularly in regard to having only two weeks to review draft rules. Committee does not want to have to try to read through the rules as they're presented for the first time at a meeting. Instead, committee wants sufficient time before meeting, with draft rules already provided, to read through them. Then committee members will be able to give substantive comments on the rules during the meeting. Otherwise, the meeting time will be wasted.

- A committee member asked, and DEQ staff confirmed, that offsets are still being considered.
- If there is a lack of general funds to pay for program implementation in Lane County, then consider whether a portion of general fund money for the rest of the state should go to Lane County.
- Screening tools using RBC, SER, *de minimis*, and modeling are all derived from RBCs, which are health-protective standards. But there are different kinds of health impacts in different parts of the state. *Response: Program intent is to be protective of the most vulnerable population overall, so various health impacts across the state are addressed as a result.*
- Cleaner Air Oregon website was not functioning. *Response: DEQ has a new website and is working on broken links.*
- Are comments submitted after this meeting afforded equal weight with comments made during the meeting? *Response: Comments submitted both during and after the meeting are afforded equal weight.*
- Would be helpful to know which person made which comments in meeting notes. *Response: DEQ's practice has been not to include the names of the commenter because of the additional work needed to do this, especially in light of the compressed CAO timeline. If people are interested in what other advisory committee members said, they can listen to the recording.*
- What are DEQ's plans in regard to creating greater data equity? Will DEQ post permits and facility annual reports? *Response: Posting information on the website has been a resource issue in the past that DEQ is hoping to resolve.*

Roundtable:

Paul Lewis: We do need to start somewhere, whether it's with 52 or 187 air toxics, but need measurable enforceable standards. Ongoing ambient monitoring is most important, and is related to overall impact to the community.

Jay Bozievich: Lane County just adopted a community health plan, including a health needs assessment with public meetings. Their number one goal was economic development, and demonstrates how much economic health impacts health outcomes. Economic stability impacts people more than if that people smoke or are obese. There are health risks tied to economic harm. Therefore, should frame whole program in regard to how it fits in with economic development in the state. Don't go too far too fast. Determine first where we can have the biggest immediate health impact via the program, and then execute it well. We can always expand it in the future. Focus on where the biggest bang for the buck is and be careful about impacting economic development.

Dayna Jones: Regulations need to consciously abide by Title VI mandates and not impact peoples of color. Breathing is an involuntary act that affects the public, so it's the polluter that should pay. Communities are already paying other costs related to adverse health impacts in their airsheds. EPA estimated that there will be a \$2 trillion health benefit nationwide by 2020 due to the regulation of and related decrease in air pollution.

Gordon Zimmerman: How to simplify what we are trying to do:

1. Need to identify air toxics that we are talking about, because Pareto's Law states that 20% of the toxics cause 80% of the problem.
2. Monitor by neighborhood those 20% of toxics and identify sources of those toxics.
3. Industry should pay for permits that help identify where toxics come from and pay for mitigation.
4. DEQ should measure what happens, monitors air quality, and make sure progress is being made.
5. Do it all over again. Attack problem areas.

Mark Riskedahl: "Balanced" conversation occurred today. Conversation should remain fact-based and not fear-based. This regulatory program will not be the death knell of Oregon's economy. Statements must be grounded in facts. Environmental regulation can create jobs every step of the way. California is a great example of controlling air quality and providing economic benefit for the past three decades; air toxics have been reduced by 75% and economic growth has increased by 83%. The thing we should be afraid of is knowing air toxics are present but not doing anything about them.

Mary Peveto: The Clean Air Act was one of the biggest public health initiatives ever undertaken, and it returned \$20 for every \$1 invested and coincided with massive economic growth in our country. In terms of regulation and related fiscal impacts, 13 states are better than Oregon's and seven are states that function with healthy economies. Economic vitality can co-exist with air toxics regulations. Must use an objective way to analyze fiscal impact statements that is based on historical data, and not allow air regulation to be rejected based on unfounded fear of economic losses. The Cleaner Air Act initiated successful enforceable limits, deadlines and citizen suit provisions.

Tom Wood: The Clean Air Act has been a huge success, but the manufacturing sector has shrunk and gotten us into the political situation we are in now. It is the role of DEQ to evaluate community-wide concerns, and not the role of individual sources. As an example, if 83% of the air quality impact is due to woodstoves, how can we expect industry to address non-industrial emissions source, and fix it? DEQ's role is to fix community issues and if the problem is attributable to industry, then industry will fix it. We need to make sure that Cleaner Air Oregon has enough resources to effectively implement the program so that we don't end up where we did with the geographic program.

Kathryn Van Natta: We need to understand that air monitoring should be a key part of the program approach when evaluating areas of concern. A DEQ budgets hearing is scheduled for March 7, before our April 4 meeting timeframe. A request for infrastructure funding is in the budget, but this request needs to be reviewed to make sure that enough funding is being asked for. Committee member is concerned about tight time frame of committee responsibilities in relation to the DEQ budget hearings, and feels that the timeline for the Rules Advisory Committee needs to be rearranged to be successful. The committee needs to see relevant information related to the May 23rd committee meeting before May 23rd in order to have an efficient and productive meeting.

Linda George: Process model is based on impacts to sources, but should instead should focus on

impacts to receptors, perhaps using a lung-based approach. Look at cumulative impacts and prioritize EJ areas. She has studied air quality for 30 years and observed that no one cared for the first 29 years. A community needs to know what is in the air, monitoring is important. People will be able to buy their own air monitors in the near term, to actually measure what people are interested in. Whatever program is developed must reassure people that they are breathing clean air.

Laura Seyler: How are we going to measure progress that is achieved through the use of *de minimis* levels and SERs? We should measure progress by tracking the reduction in toxic pollutants over time. Based on SERs, which are based on RBCs, we need to keep toxic pollutants below the SER in order to protect the health of people in an area. We may not see significant decreases in air toxics emissions; when you do see a big reduction, it's usually because a facility has shut down. If we can show by the use of ambient monitoring and modeling that we have concentrations of air toxics that do not exceed RBCs, then we will have done our job. Ambient monitoring and modeling will tell us that, more so than how many tons of pollutants are in our air. Keep people safe by keeping emissions down.

Akash Singh: It is onerous to be a person of color. This is a largely white panel addressing EJ concerns, which is not optimal, because people from EJ communities are not represented. Don't shut out the voices of low-income people or people of color because they are working-class; their input still needs to be included. Meaningful improvement can only come from prioritizing EJ communities. In the current national public climate, Oregon now has the opportunity to be a national leader. You don't want to look back later and realize that your decisions caused needless suffering in EJ communities. You have taken a significant step forward; you have the right tools available now, so use them to their fullest extent.

Josh Hall: Came into this meeting with information to address specific topics, but now need to take back additional information obtained today to his constituents and get more of their input. So it is good to know that input provided to the agencies after this meeting has same weight as information presented during this meeting. The agencies should consider moving comment period farther out than a week after a meeting.

Mike Freese: The labor sector makes up an important part of his organization's constituents, so important to hear their voices. He reiterated that we are here trying to be a constructive voice and to develop rules that will work. We need to make sure that no one is going out of business while continuing to make improvements in air quality; this is important to economy and workers and businesses. Many businesses have chosen to locate in Oregon because Oregon has one of the largest manufacturing sectors as compared to the GDP, second only to Indiana, so manufacturing is an important part of the economy in Oregon. Leaders understand that. Don't feel threatened because this group is not interested in putting companies out of business. Don't give too much weight to rhetoric when specific issues are being discussed, and pay attention to what constituents are saying.

Lisa Arkin: We all want our economy to thrive in Oregon, but yet we still aren't talking about workers. Workers are a valuable resource to industry and their own family members. We don't want workers to miss work or get sick because of exposure to air toxics in their workplaces. She gets calls from workers who have concerns about their workplace exposure, but are afraid to complain due to expected retribution from employers. So, an ombudsman would provide a safe place for these

workers to go. SERs and *de minimis* emission levels... regulatory process is really outdated. The agencies need to think out of the box more. SERs are not a great tool for us. Emissions from facilities are typically measured in tons/year and many pollutants are hazardous in pounds/year. These levels are tied to PSEs which are pretty much meaningless in Oregon. Oregon rewards a permittee with a generic PSEL, but that rate doesn't measure cumulative impacts or new information available from public health agencies, such as impacts on public health, mixing that occurs in the atmosphere, the particular vulnerabilities of the public, EJ concerns, and fugitive emissions. It should be emphasized that air monitoring doesn't identify the source of the air pollution; therefore it is not a good method with which to measure effectiveness. Monitoring is very expensive and difficult to implement, so we need to be able to rely on accurate emissions reporting that is accurate and verifiable in the public domain to determine where to place monitors. Tracking actual reductions in emissions is a reliable tool for measuring effectiveness.

Jessica Applegate: The public has a lot of trust in government; regulatory bodies are there to protect. Given that DEQ has the discretionary authority to not fund certain regulations. Wants to see community enforcement piece so that community can hold polluters accountable. This is an extra security measure that is absolutely necessary considering the effects of funding and discretionary authority by the agency on enforcing the program. Concerned about lack of representation of tribal members on committee. *Response: tribal government representatives were invited to participate on the rules advisory committee. DEQ and OHA will be contacting the nine federally-recognized tribes in Oregon once the draft framework is available.*

Susan Katz: Reminder that there are so many increases in the prevalence of diseases that are known to be affected or caused by chemical exposure. For, example, 50% of the adult population and 30% of children are obese. Autism, neurodevelopmental disorders, and autoimmune diseases all have plausible cause mechanisms in which chemical exposure can play a part.

Patrick Luedtke: Air monitoring and ensuring relevant safety margins. He taught industrial toxicology and became familiar with the regulatory systems in other countries. Western Europe only uses 10-15,000 chemicals and regulates them to insure human safety, while the U.S. uses 80-90,000 chemicals and does not vet them for health impacts. Also, because of uncertainty around air quality evaluation tools, we don't know what's out there all the time. We need air monitoring, not just air modeling, and could consider personal monitoring as well. But protecting people through the use of personal monitoring is a hypersensitive issue, because being able to say that a particular chemical detected through personal monitoring is causing a particular kind of system or organ damage is not feasible.

Co-Chair Jackie Dingfelder: More air data is needed. Oregon has a fairly anemic budget for natural resources in comparison to other states. In Oregon, 1.2% of all general funds are distributed among 145 natural resource agencies. This situation is unlikely to improve any time soon, and we will see cuts from the federal government, so we will have to be creative and come up with innovative solutions even though many don't agree on exactly what those will be. The challenge is that everyone wants jobs and a robust economy, but also healthy communities. How do we get there in a fair way that protects public health and is feasible to do? DEQ has been understaffed for over 25 years. We need to create a program that is effective, sustainable and deals with EJ issues, including

figuring out a way to prioritize areas that are in the greatest need and have the most vulnerable populations. Starting a new program is not easy; need to think out of the box to get this program off the ground.

Co-chair Claudia Powers summarized the discussion by saying that there is not a big consensus on the details, but people are learning and sharing and talking to each other now. What we do here will inform how the rules will be written. Oregonians have solved many environmental problems in the past and still supported economic development. It's very important to hear from all communities, large and small. Transparency is really important right now, also. We don't need to be frightened, but we do need to understand what is in the air. The agencies need to be upfront with people about what we know, and what we don't know. Try to identify the economic impacts that may result from the implementation of Cleaner Air Oregon. This program is focused on industrial air toxics and the use of protective benchmarks to inform DEQ and the state on what we have to do to protect health, but other air toxics and land use that will affect the quality of life in Oregon are also things to consider.