



Date: October 14, 2016

To: Cleaner Air Oregon Regulatory Reform Advisory Committee

From: League of Women Voters of Oregon

Subject: Comments on Applicability and Pollutant Scope and Setting Concentration Levels

October 18, 2016 Comments—Application

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

LWVOR believes that existing sources should be included in the program. Washington State air quality experts regret that they did not include existing sources in their new program. Existing sources emit many tons of pollutants that should come under new regulations with better reporting and enforcement.

Potential Element C: Regulate new/modified/existing sources and provide incentives to reduce air toxic emissions, is the most protective and progressive element. Otherwise, Potential Element B: Regulate new, modified and existing sources, is acceptable.

You could include a provision to examine existing businesses through an Environmental Justice (EJ) lens. If that lens shows an EJ concern, it would trigger prompt review of existing permits. Otherwise, existing facilities would come under the new regulations as their permits come up for renewal. Including them in the program addresses the mission of this program: to protect the public's health.

Program Element 2: Regulating pieces of equipment in a facility versus regulating the whole facility.

LWVOR believes Potential Element D: Any combination of the above elements should be included in the program.

The Technical Advisory Workgroup input is excellent. It shows that existing and new facilities are best regulated as a whole unit. Facilities should be regulated with Pollution Prevention programs such as the one advocated by Marjorie MartzEmerson, CAO Technical Advisory Workgroup member, of Pacific Northwest Pollution Prevention Resource Center. Another program is Oregon's Toxics Use and Hazardous Waste Reduction Act of 1989.

Both programs can recommend substitution of less toxic substances and different ways to treat fugitive emissions. This includes fugitive emissions that are not controlled by pollution reduction equipment, emissions to ground, surface and Point of the Waste (POTW) systems and on-site transportation (e.g., delivery trucks, loading and unloading, generators, etc.). One simple method to reduce fugitives is good housekeeping. The end result must be no adverse health effects from existing or new sources.



The regulation must also use pollution control equipment to lessen emissions for both existing and new sources. Placement and configuration of stacks on site is also very important to lessen ambient impacts on surrounding properties.

Regulating the whole facility should focus attention on and take into account the cumulative and synergistic effects of facility-wide pollutants.

Program Element 3: Categorical exemptions

LWVOR believes the program should adopt Potential Element B: Categorical exemptions with on ramps back into the regulatory program for extenuating or significant circumstances.

DEQ and OHA should examine the current categorical exemptions for criteria pollutants to see if levels are set to avoid cumulative risk, and examine potential risks for categorical exemptions for air toxics as well.

October 18, 2016 Comments—Pollutant Scope and Setting Concentration Levels

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

LWVOR believes the Regulatory Advisory Committee should use the most conservative approach to regulating emissions. Rather than developing your own standards, the most cost effective, efficient and health protective action would be to adopt air toxics lists from other states you have studied. Potential Element D recommends New York State with the most comprehensive list. Potential Element G recommends the South Coast CA program as also inclusive.

Once established, the manner of inclusions should be flexible so that new compounds can easily be added as they are developed by the chemical industry.

Currently, DEQ does not verify the annual emissions reports of permitted facilities, so there are gaps in the Oregon point source air toxics emissions inventory.

The program should give special consideration to criteria pollutants because they can be harmful to health. The CAO Memo for the questions to be answered in this section, in the Clean Air Act box on page 3 talks about criteria pollutants: “. . . presumably, criteria pollutants are more ubiquitous, pose a risk to a larger fraction of the general population, and have more widespread impacts on ecosystems and natural resources than HAPs.”

Literature from the Environmental Protection Agency (EPA), the American Lung Association (ALA), and the World Health Organization (WHO) all states that criteria pollutant PM^{2.5} is dangerous to health. From WHO, “Small particulate pollution has health impacts even at very low concentrations—indeed no threshold has been identified below which no damage to health is observed.”

California has set the ambient air standard for respirable particulate matter (PM¹⁰) at 50 µg/m³ for a 24-hour averaging time, while Oregon’s standard is 150 µg/m³ for the same time period. Oregon should be concerned about all PM, not just diesel particulate, and follow California’s lead for a more protective standard. Many of California’s ambient air quality standards are more



restrictive than Oregon's, which are based on national standards. Carbon monoxide, nitrogen dioxide, and sulfur dioxide are significantly more restricted in California. These are emitted by most major facilities in Oregon. According to the California Air Resources Board's Ambient Air Quality Standards, dated 5/4/16, visibility-reducing particles have no national standards, but are regulated by California. The Willamette Valley has the potential for serious inversions, like the Los Angeles basin. Oregon should regulate the visibility reducing particles in both urban and Class 1 air sheds.

Program Element 5: Method for setting health risk-based concentrations (RBC's)

LWVOR believes rather than developing your own standards, the most cost effective, efficient and health protective action would be to adopt RBC's from other states you have studied. New York State has the most comprehensive list.

LWVOR agrees with comments from the Technical Advisory Workgroup that, "Toxicity values should be based on the best science available from a well-respected authoritative body. Several agencies are listed." Some of them are: "the International Agency for Research on Cancer, the California Office of Environmental Health Hazard Assessment, and the California Department of Toxic Substances Control." The Technical Advisory Workgroup also recommended using several resources such as "flexibility, consideration of the latest science, a hybrid approach for new chemicals, surrogate analysis, and don't limit yourself to peer reviewed literature, as it is written by the industry."

Four Potential Elements are effective: D: Use of other program's values. If you choose not to use another program's values, then the following are good Elements: E: Establish hybrid approach that can use combinations of methods listed above depending on the situation for individual air toxics. F: Incorporate cross-media impact potential into the risk based air concentration goal itself, and G: Account for cumulative risk from multiple air toxics by setting very low acceptable risk level for individual air toxics to leave estimated buffer for cumulative effect.

Program Element 6: Default toxicity values

LWVOR believes this is another case where adoption of another state's toxicity values could be the most cost effective, efficient and health-protective action. California has a very strong default toxicity program. If you choose not to do so then we offer the following discussion.

LWVOR believes the Technical Workgroup input should be the basis of setting default toxicity values. Oregon should use a combination of methods to determine toxicity value before using a default RBC. One is to use surrogates for structurally similar air toxics or extrapolating an RBC from ingestion toxicity, or if possible put the burden on the industry to determine a risk level for that chemical.

"Technical workgroup members favored programs that have more than one default RBC that can be applied depending on whether there is basic information about whether a toxic air pollutant has "high," "medium," or "low" toxicity or whether or not an air toxic is likely to be carcinogenic. Only if these methods fail should a default RBC be set."



Potential Element A: Do not use default toxicity values—should be used only after the other choices including surrogates have been exhausted. Potential Elements B and C should be used with E, which should contain the suggestion, “read-across,” or surrogate. Potential Element E could also contain Use of other program’s values.

Program Element 7: Risk based concentration averaging times

LWVOR believes that the most effective and useful numbers to use may be Potential Elements A: chronic-annual, B: chronic 8-hour and D: acute 24-hour. The acute 24-hour averaging time reflects a more unhealthy exposure than shorter acute choices.

The Ambient Air Quality Standards of the California Air Resources Board, dated 5/4/16, has varying averaging times, depending on the pollutant. These times are 1,8, 24-hour and annual arithmetic mean. The listed pollutants are ozone, respirable PM10, fine PM2.5, carbon monoxide, nitrogen dioxide, sulfur dioxide, visibility reducing particles, sulfates, hydrogen sulfide and vinyl chloride. Some of these standards are the same as federal standards, and some are significantly lower. The California standard for lead is different: a 30-day average. California standards should be considered for those ambient air pollutants that are most present in Oregon.