

NEIGHBORS FOR CLEAN AIR

A Coalition of Urban Residents

"Most of the cases [of pollutants chronicled in Late Lessons] involved costly impacts on both public health and the environment, two fields of science and policy-making that have become specialized and somewhat polarized during the last 100 years.

Individuals experience their health and their environment as one, interconnected reality. Science, regulatory appraisal and policy-making need to be similarly integrated."

-Late Lessons From Early Warnings: The Precautionary Principle 1896-2000

Mary Peveto
Neighbors for Clean Air
Senate Interim Committee on Health Care
September 30, 2009

The Oregon Department of Environmental Quality's current regulatory policy does not adequately protect public health from the hazardous emissions of the more than 71 industrial facilities in Portland, including 19 Title V permitted facilities.



34 Portland City Schools ranked in the top 5% of schools across the nation with the worst air due to toxic industrial emissions.¹



15 Portland Schools ranked in the top 2%, making them nearly equivalent to the modeled conditions of a school in Marietta OH that was closed down, because the ambient conditions matched the modeled profile.



In July 2009, the EPA released its National Air Toxics Assessment (NATA) report based on 2002 data, showing Multnomah County to be in the top 2% of counties in the country with the largest populations at increased risk of developing cancer due to toxic air pollution (exceeding 100 cases per million).²

1. DEQ has failed Oregon communities by allowing air toxics standards to be **voluntary benchmarks**, not legally mandated restrictions. This makes our air toxic standards among the weakest in the country.
 - CA, CT, MA, RI have led the way to use the discretion afforded states by the Clean Air Act to **set stricter ambient air quality standards**. **Oregon sits at the bottom of state programs, with Louisiana**. Both lacking clear measurements of toxic air standards and being the state with the worst record in reduction of air toxins since 1988³.
 - **Benzene** levels in gasoline are nearly 3x greater in this region than anywhere else in the country.
 - 586 gasoline storage tanks are located along the Willamette River in NW Portland operated by 7 different companies (some tanks are nearly 100 years old). Together, these tanks in NW Portland, which hold about 200 million gallons, **annually emit ~1,394 tons of volatile organic compounds (VOCs)**, including the known carcinogen benzene.⁴
 - Oregon law allows for leakage rates at these tanks of up to 10,000 parts per million (ppm).
 - In San Francisco, CA the law allows only up to 100 ppm or facilities risk being shut down.
2. For Title V permit holders, those polluters who meet the standards of highest volume of **toxic emissions**, Oregon relies on Plant-Site Emissions Limits (PSEL) that **are specifically unenforceable** as there are no coinciding operating limits in place.
 - For example, ESCO Corp. operates two steel foundry/metals casting facilities in NW Portland within 1000 ft of several schools. DEQ describes the plants as such:

"The ESCO plants emit particulate matter and fine particulate matter, carbon monoxide, oxides of nitrogen, volatile organic compounds (VOCs), lead and sulfur dioxide. The ESCO plants are considered a major source of VOCs some of which are classified by the Environmental Protection Agency as hazardous air pollutants."

Without enforceable operating limits in place, the two plants **ESCO** operates have been able to increase their reported toxic air emissions (Toxic Release Inventory TRI) by over 4800% from 2003-2007, including nearly **doubling the release of heavy metals** (from 425 lbs to over 1000) and increasing the release of **Glycol Ether** to nearly 20,000lbs.⁵ By the company's own admission⁶, these included significant increases in Manganese and Lead, known neurotoxins, and key components of the health assessment risk drivers in the neighborhood. ESCO, as I am sure their representative will tell you when he has the floor, can still maintain that **they are fully compliant with their Oregon DEQ-issued air permit**, even though the company has possibly even exceeded the emissions that allowed it to be classified 5 years ago as a synthetic minor source⁷.

3. Oregonians must rely on modeled data, not actual monitored ambient conditions information, because the **DEQ does not allocate funding for monitoring in industrial neighborhoods**.
 - A risk assessment report developed by researchers and scientists at the U. Mass-Amherst, Johns Hopkins, and the U. of Maryland to analyze exposure to industrial pollution at 127,809 schools across the nation, put Portland area schools in the top risk category due to industrial emissions.
 - A recent EPA report called the National Air Toxics Assessment (NATA), further concluded that toxic air pollution puts residents of Multnomah County among those most at risk of developing cancer in the US.

4. DEQ has significant data sources (e.g. Cooper Environmental Services and a history of neighborhood monitoring) raising cause for specific concern; yet, the agency appears to want to **dismiss all the data sources and ignore potential community health threats**.
 - "Total Airshed"- the model that still informs the DEQ Air Quality regulatory process was developed to confront the six original smog causing pollutants (carbon, lead, nitrogen oxides, ozone, particulate matter, and sulfur dioxide). Unfortunately, a **focus on a total air shed**, in our case a tri-county area, **has created sacrificial zones of toxic industrial pollutant** hotspots across the city. This is because industry is seen to be only 10% of the problem statewide. This belies the experience of many neighborhoods in Portland which are in very close proximity to industrial point sources like the Northwest.

SOLUTIONS TO PROTECT PUBLIC HEALTH FROM TOXIC INDUSTRIAL EMISSIONS

To produce a significant reduction in Air Toxics, a state must have specific standards and specific methods of testing, place the onus on the regulated parties to ensure compliance, and have effective follow-up programs to test for compliance.

—Victor B. Flatt: Conclusion to "Gasping for Breath: The Administrative Flaws of Federal Hazardous Air Pollution Regulation and What We Can Learn From The States"

- 1. Mandatory restrictions/reductions of toxic air emissions by industrial sources in aggregate.**
 - DEQ should revisit a study that set a total cap on industrial emissions in Portland and determined individual appropriations to facilities. In turn, enforceable total limits need to be assigned to Title V industrial facilities.
- 2. Mandatory Pollution Prevention (P2) program of independent audits every 5 years that aims at the reduction of overall emissions.**
- 3. Fund adequate ambient air quality monitoring in order to protect concerned citizens' right to know what is in the air they breathe.**

The state comparisons suggest that enforcement of mandatory risk standards may be less effective when it depends on the state agency to make the risk determinations and do the monitoring. Instead, if the source is required to self-report and do their own risk analysis, the state would only have to occasionally audit work that had already been done, requiring far fewer resources and probably producing better data.
- 4. Adoption of the "Precautionary Principle" by the EQC to inform regulatory rule making.**
 - The Precautionary Principle would inform the regulatory process in a way that better safeguards public health by immediately reducing benchmarks to their lowest known safe levels, and then proceeding with caution in incremental increases that prove there is no harm to public health.

E.g. Manganese: The current available knowledge says, that like nickel and lead, there are no known safe levels of exposure to children. And with recent court cases being won, proving the connection of exposure of manganese in workers causing Parkinsons-like neurological damage⁸, it would be prudent to limit manganese emissions until we can assess the safety of the cumulative loads.

Reference Notes

¹ USA Today: The Smokestack Effect, Toxic Air and America's Schools

<http://content.usatoday.com/news/nation/environment/smokestack/index>

² 2002 National-Scale Air Toxics Assessment: <http://www.epa.gov/nata2002/>

³ Flatt, Victor B. "Gasping for Breath: The Administrative Flaws of Federal Hazardous Air Pollution Regulation And What We Can Learn From The Staes"; 2007 Ecology Law Quarterly; Copyright © 2007 The Regents of the University of California, Victor B. Flatt

⁴ Koberstein, P. Portland's Toxic Cloud *Cascadia Times*, 2009

⁵ Koberstein, P. Portland's Toxic Cloud *Cascadia Times*, 2009

⁶ Webb, Carter J. Letter to DEQ, George Davis, RE: ESCO Corporation's Toxic Release Inventory Program Reports, Aug. 26, 2009

⁷ Koberstein, P: "Examining ESCO's 'no harm' claims; *NW Examiner*, September 2009

⁸ Brodsky, Matthew, MD; Ass't Professor of Neurology, Oregon Health & Science University; August 7, 2009