



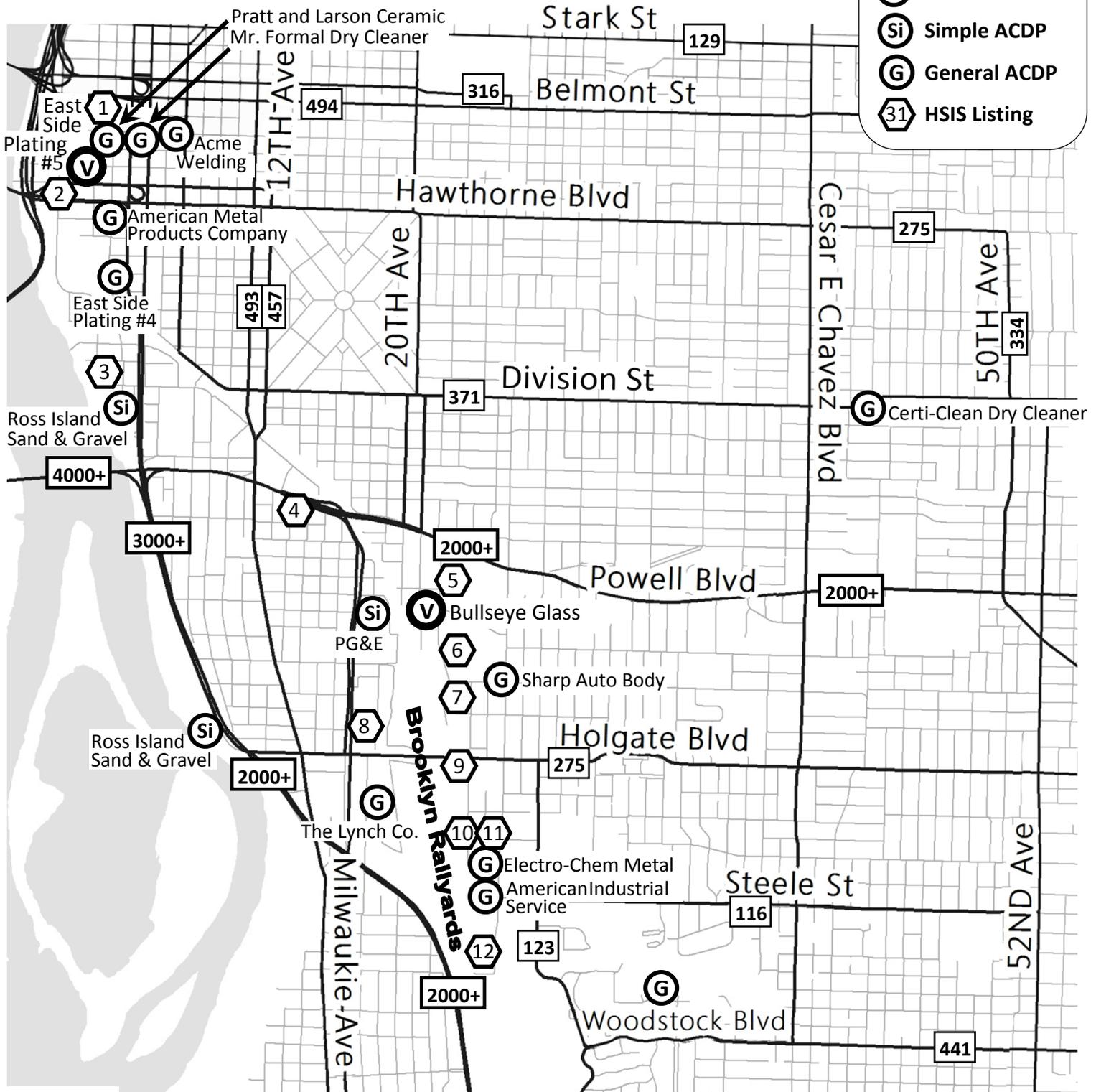
# Portland Clean Air

## Industrial Air Pollution Inner SE Portland

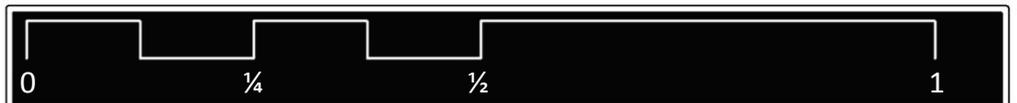
**3000+** Trucks per day  
from ODOT sensor data

**493** Trucks per day  
from PBOT sensor data

- (V)** Title V ACDP
- (St)** Standard ACDP
- (Si)** Simple ACDP
- (G)** General ACDP
- (31)** HSIS Listing



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## Key for Map on Front Cover

### Industry with DEQ Air Contaminant Discharge Permits (ACDP)

Acme Welding	637 SE Salmon St
American Industrial Service	5225 SE 26th Ave
American Metal Products	1532 SE 3rd Ave
Bullseye Glass Co	3722 SE 21st St
Bullseye GLass Co	3743 SE 21st St
Cert-Clean Dry Cleaners	4118 SE Division St
Darigold Inc	2720 SE 6th Ave
Electro-Chem Metal Finish	4849 SE 26th Ave
East Side Plating #4	310 SE Stephens St
East Side Plating #5	1300 SE 2nd Ave
Mr. Formal, Inc.	1205 SE Grand Ave
PG&E	3700 SE 17th Ave
Pratt & Larson Tile	1201 SE 3rd Ave
Ross Island Sand & Gravel	2611 SE 4th Ave
Sharp Auto Body And Paint Works, Inc.	4031 SE 26th Ave
The Lynch Company, Inc.	4706 SE 18th Ave

### Industries with State Fire Marshal Hazardous Substance Information System (HSIS) listings

1 School Specialty Co Of Oregon	1035 SE 3rd Ave
2 Multnomah County Transport Div	1403 SE Water Ave
3 Gamblin Artists Colors	323 SE Division Pl
4 Art Craft Silversmith	3111 SE 13th Ave Ste 500
5 Pardue Restoration	3427 SE 22nd
6 Fred Meyer Stores Inc	3800 SE 22nd
7 Billings & Cronn Co	2340 SE Gladstone St Ste 100
8 Trimet	4400 SE 17th Ave
9 Mcquiggins Inc	4505 SE 23rd
10 Architectural Castings	4701 SE 24th Ave
11 Portland Powder Coating Inc	4740 SE 25th Ave
12 Overhead Door Corp	5511 SE 26th

Portland currently ranks as the worst city in the US for respiratory distress from air pollution according to the last three-year 2015 national assessment of the Environmental Protection Agency (EPA). During the Bullseye scandal Oregon Department of Environmental Quality (DEQ) announced in public hearings that it doesn't use human health to regulate industrial air pollution. The worst airborne cancer threat for inner Southeast Portland is currently diesel particulate. Industry should be using filtered diesel trucks in residential neighborhoods. Unfiltered trucks are illegal in California. In contrast, 75% of Portland's industrial short haul

in-city trucks are currently unfiltered. According to the EPA's 2015 report, Multnomah ranks in the worst 1% of US counties for airborne diesel particulate nationwide.

While diesel powered vehicles total 6% of vehicles on the road, they emit 60-70% of particulate emissions from all vehicles, according to the DEQ. A 2008 study by Irina Krivoshto et al in Journal of the American Board of Family Medicine found that diesel exhaust is 100 times more toxic than gasoline engine exhaust. In 2015 DEQ reported that 80-95% of diesel exhaust is ultra-fine particulates "easily inhaled and left in the lower area of the lungs... capable of entering the bloodstream, allowing them to be circulated to all parts of the body." Clean Air Task Force in Boston calculated diesel exposure using EPA data and State of California risk modeling and found diesel emissions in Portland cause more than five times as many cancers as all other inhaled carcinogens combined.

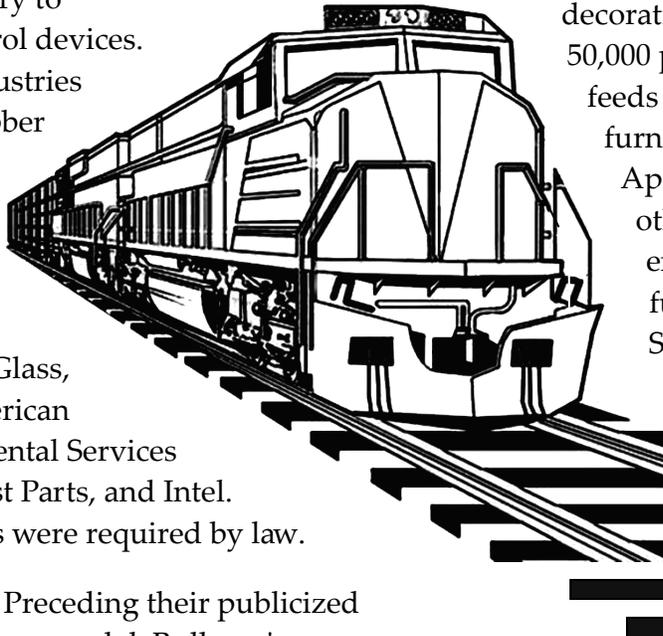
Union Pacific's Brooklyn rail yard is the largest contributor of unfiltered diesel emissions in Inner SE. This is mostly a result of the high volume of container trucks delivering their loads to trains. The primary truck route to the yard runs starts at the Ross Island Bridge and feeds into SE Powell Blvd, McLoughlin Blvd., SE 17th Ave. and Holgate St. Trucks then move empty shipping containers from the main entrance of the rail yard to the storage area on the other side of the rails along SE 26th Ave between Holgate and Powell. Areas adjacent to this truck route are heavily residential.

Other top emissions concerns for Inner SE are releases of cancer-causing perchlorethylene, also called perc, from dry cleaners as well as hexavalent chromium from chrome plating. Dry cleaners using perc should switch to computer-controlled wet cleaning or CO2 cleaning. East Side Plating, a major user of hexavalent chromium, should switch to trivalent chromium, a safer alternative recommended by the State of California for its chrome platers.

Portland Clean Air thinks citizen action is the solution to industrial air pollution here. We work closely with 35 Portland Neighborhood Associations and over 2,500 local members. The Oregon State legislature is controlled by industry lobbyists. Oregon is one of only five states where unlimited corporate donations are legal. Portland and Multnomah County are largely preempted by the Oregon legislature from regulating industrial stack and truck emissions. So instead of relying on lobbying and hoping media exposure will solve the problem, we assist neighbors to directly negotiate with industry to install pollution control devices.

Six Portland area industries have installed a scrubber in the past two years at a cost of \$70,000 to \$25 million each, due to citizen action. These companies are Porter Yett, Bullseye Glass, Northstar Glass, American Petroleum Environmental Services (APES), Precision Cast Parts, and Intel. None of these devices were required by law.

Citizen action works. Preceding their publicized heavy metals emissions scandal, Bullseye's official DEQ Air Contaminant Discharge Permit would have allowed tripling annual production without a scrubber. Only neighborhood citizen action made Bullseye install a scrubber. Bullseye is a local company, but they are not little. With over \$19 million in sales annually, Bullseye can afford the \$70,000 scrubber now on their smokestacks and the cost of safely disposing of the lead and other chemical wastes it collects. A smokestack scrubber, such as a baghouse or an electrostatic precipitator, can remove up to 97 - 99% of the pollution from the smokestack.



Bullseye already owned the scrubber they now use but previously hadn't plugged it in because it wasn't required by DEQ.

According to the DEQ, Bullseye Glass burned up to 6,000 pounds a year of lead, arsenic, cadmium, selenium, and chromium in its unfiltered furnace for 42 years. A 2013 Forest Service Study

measuring heavy metals in Portland moss samples drew attention to this problem. A 2016 article in The Mercury by Daniel Forbes alerted the public.

Until recently, Bullseye Glass was the largest industrial air polluter in Inner SE Portland. According

to the Oregon State Fire Marshal, this decorative glass manufacturer stores 10-50,000 pounds of lead on site. Bullseye feeds 100 pounds of lead a day into their furnace when making white glass.

Approximately 85% of the lead and other dangerous heavy metals entering Bullseye's unfiltered furnace went airborne daily at 3722 SE 21st Avenue, located 1,000 feet from a 100-child day care,

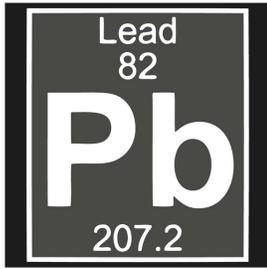
KinderCare Learning Center, and a large residential area.

Low levels of lead cause major health problems. The Center for Disease Control (CDC) Adult Blood Lead

Epidemiology and Surveillance published laboratory-reported Blood Lead Levels from Americans in 41 states from 1987 to 2013. The CDC publicized that

"evidence indicates that lead exposure at low doses can lead to adverse cardiovascular and kidney effects, cognitive dysfunction, and adverse reproductive outcomes."

The CDC includes decreased renal function and increased risk of hypertension as health problems associated with low levels of exposure.



The CDC warns that "Children are more vulnerable to lead poisoning than adults... Even at much lower levels of exposure, lead can affect a child's mental and

physical growth... Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children."

The DEQ announced in 2016 that arsenic levels around Bullseye were 149 times over state safety benchmarks, the worst airborne arsenic hotspot in the city; Cadmium levels were 59 times over; chromium emissions were 450 times over. DEQ eventually reported what the EPA has known for some time, that "nearly all chromium Bullseye emitted during the melting process converts to hexavalent chromium." If you have seen the movie *Erin Brockovich*, this is the dangerous carcinogen Pacific Gas and Electric settled by paying \$333 million in 1996 for spilling the chemical into groundwater.

In March 2016, DEQ – in response to public outcry – designed a set of half-baked temporary art glass regulations. The good news is that the new rules required Bullseye to obtain the permit with the most reporting, to install a scrubber, and to clean their stacks. The bad news is that these rules neglect all other Portland industries, their unfiltered diesel trucks, and even other glass plants. The Owens-Brockway glass plant in the Cully neighborhood still emits 220 pounds of lead, 11 pounds of arsenic, 11 pounds of cadmium, 41 pounds of formaldehyde, almost a half pound of mercury, and dozens of other hazardous chemicals into the air annually 4,000 feet from three elementary and middle schools: Helensview, Prescott, and Parkrose.

## What You Can Do

This report identifies the current problems with hazardous industrial air pollution in Inner SE. For Inner SE, help is needed with the following tasks:



1. Assist in completing the analysis of all Inner SE industries' emissions. We have obtained the data from nine government agencies for the area depicted on the front cover of this report. No experience is required. Our staff will instruct you and answer any questions.
2. Assist the Brooklyn Neighborhood Association, the lead for eight other Associations, in researching and publicizing the Brooklyn rail yard unfiltered diesel truck problem.
3. Expand air monitoring by building an inexpensive air monitor as part of a coordinated project through the Brooklyn Neighborhood Association. Contact us for instructions. You can also help write grants to purchase a \$45,000 state-of-the-art optical diesel particulate monitor.
4. Join the East Portland Air Coalition's Facebook [facebook.com/eastsideportlandair](https://facebook.com/eastsideportlandair)

To volunteer please contact:  
[greg@portlandcleanair.org](mailto:greg@portlandcleanair.org)  
 For complete citations and more information on Inner SE industry go to:  
[portlandcleanair.org/InnerSE](http://portlandcleanair.org/InnerSE)