

# Delaware County / Chester City Toxic Tour

DelCo Alliance for Environmental Justice

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[www.ejnet.org/chester/](http://www.ejnet.org/chester/)

## Tinicum

- **Philadelphia International Airport**
  - two thirds of the airport is located in DelCo
  - huge source of benzene and other hazardous air pollutants (HAPs)
  - 38% of toxic lead pollution in the U.S. is from airlines since leaded gasoline is still used
  - increase in jets that use more toxic fuels
  - airport expansion flipped the runway around, causing planes to fly over Chester
  - More info at: [www.phl-caw.org](http://www.phl-caw.org)

## Eddystone

- Boeing military helicopter plant / Vertol
- **Liberty Electric: 541 megawatt gas-fired power plant [started in 2002]**
- **Exelon Eddystone: 1,400 megawatt power plant burning coal, oil and gas [started in 1960]**
  - 8 burners; planning to close the two that burn coal in 2013, (42% of plant's capacity)
  - one of the largest polluters in DelCo; largest source of mercury pollution in the county
  - coal comes from mountaintop removal mining in West Virginia
  - More info: [www.ilovemountains.org/my-connection](http://www.ilovemountains.org/my-connection)
- **Proposed Oil Shale and Frack Water Rail-to-Barge Facility (Eddystone Rail Co & Enbridge)**
- Foamex polyurethane foam plant site / **Camden Iron & Metal scrapyards** proposed/defeated
  - More info: Eddystone Residents for Positive Change – [er4pc.webs.com](http://er4pc.webs.com)
- Industrial Park Development Company property
- Petrolite Corp (formerly Monroe Chemical)
- Taylor Oil
- Valley National Gases
- JLN Assoc (formerly Eastern Flame Hardening)
- Penn Terminal

## Chester

- Harrah's Casino
- State Correctional Institute – Chester (prison) [opened in 1998]
  - More info: [www.actionpa.org/prisons/](http://www.actionpa.org/prisons/)
- **Kimberly Clark Tissue Corporation paper mill** (formerly Scott Paper)
  - Since 1986, powered by a 67 megawatt burner that burns waste coal, petroleum coke, sludge waste, natural gas and fuel oil
    - Waste coal is the low-density, half-coal / half-rock left over from coal mining, with 6 times more mercury than normal coal
      - More info: [www.energyjustice.net/coal/wastecoal/](http://www.energyjustice.net/coal/wastecoal/)
    - Petroleum coke is oil refinery waste that has 5 times higher sulfur levels than the waste coal (which is already high)
  - Uses a “circulating fluidized bed” burner, which is known to release higher levels of cancer-causing polycyclic aromatic hydrocarbons (PAHs) as well as higher levels of nitrous oxide, a potent global warming pollutant. More info: [www.energyjustice.net/coal/wastecoal/pah/](http://www.energyjustice.net/coal/wastecoal/pah/)
  - Tried to burn tires in 1999 with a plan to burn 800+ tires per day
    - Tested burning tires for 3 days in 1999; test burn showed 4,140% increase in dioxin emissions when burning 4-8% tires in their fuel mix

- Chester Residents Concerned for Quality Living and the Laborer’s International Union Local 413 protested this plan, which was ultimately stopped in a permit dispute with the PA Department of Environmental Protection
    - More info: [www.energyjustice.net/tires/](http://www.energyjustice.net/tires/)
  - Chester Water Authority – water fluoridation
    - More info: [www.actionpa.org/fluoride/ej.html](http://www.actionpa.org/fluoride/ej.html) & [www.actionpa.org/fluoride/](http://www.actionpa.org/fluoride/)
  - Riverbridge Industrial Center, formerly Reynolds Metals & others
  - Certainteed (asphalt roofing)
  - Dee Paper
  - PQ Corp Chemicals
    - PQ (Philadelphia Quartz) Corp located here in 1905, makes stuff based on silicate chemistry, zeolite chemistry and magnesium derivative chemistry.
  - Evonik Degussa Chemicals
    - Evonik Degussa chemicals Precipitated Performance Silica Production site, makes Carbon Black, Performance Silica, Matting Agents, Rubber Silane, and Iron Blue Pigments.
    - 2008 TRI releases were 2,980 pounds of sulfuric acid & 480 pounds of ammonia
  - Possible future stadium parking lot: former manufactured gas plant; excavating contaminated soil (4,500 tons) for disposal; groundwater contamination is likely
  - McCusker-Ogborne Trash Removal / Chester Resource Recovery (local waste hauler)
    - proposed construction/demolition waste transfer station defeated in 1998
    - company owner drove truck through a line of protesters, hitting one during a blockade of the trash incinerator by the Chester Residents Concerned for Quality Living
    - does lousy job recycling
  - PECO substation
  - Wade Dump Site
    - 3 million gallons of industrial waste dumped at the Wade lot in the 1970s
    - At least 230 firefighters and other emergency workers were exposed to the Wade dump fire or its aftermath. Serious illnesses – cancer, vascular and neuromuscular disorders, kidney failure - have afflicted at least 45, about one in five. Of those, 28 are dead.
    - More info: [inquirer.philly.com/specials/2000/fire/](http://inquirer.philly.com/specials/2000/fire/)
  - PECO / Chem-Clear toxic waste site
  - PPL Park (Soccer Stadium)
    - small areas of arsenic, PCB & coal tar remediated in the past. Potentially more arsenic, asbestos, coal tar, PAHs.
    - Soccer team bears Philly’s name (Philadelphia Union) [but the prison is named SCI-Chester]
  - Empty area that was going to be the gated community used to be Ugite (experimental petroleum cracking processes to make fuels and hydrocarbon intermediates from crude oil)
    - Highly toxic site. 15 wells suck toxins out of the ground and if they stop, toxins immediately start seeping back into the river.
  - Chester Generating Station – 39 megawatt oil burning power plant (used just for peak power times)
  - The Wharf at Rivertown – old PECO generating station turned into offices
  - DELCORA Combined Sewer Overflow at end of Highland Ave – people fish here, despite warnings
  - **Covanta trash incinerator: 80 megawatts** [started in 1991]
    - Burns 3,348 tons/day [largest in the U.S.; may be largest in the world]
- WHY INCINERATORS ARE BAD:
- Incinerators are worse than landfills. They burn trash, turning it into toxic ash and toxic air pollution (not just steam and electricity). Ash gets landfilled and does more damage leaching toxins into the groundwater than putting a larger amount of unburned trash in a landfill does.

- Incinerators are a waste of energy (not waste-*to*-energy) because they destroy materials that are reusable, recyclable and compostable, requiring that they be recreated from raw materials, which takes far more energy than what is recovered by burning them.
- Not renewable, but benefits from alternative energy policies
- Incineration is one of the most unpopular technologies in the world; communities compete to keep them out; over 90% of incinerators proposed in the U.S. in the last few decades have been stopped before being built, or have been shut down after being built
- “Energy from Waste” is the industry’s preferred term; they avoid calling them incinerators, even though the government calls them incinerators and regulates them as incinerators.
- More info: [www.energyjustice.net/incineration/](http://www.energyjustice.net/incineration/)

**AIR POLLUTION:**

- Of the 6 trash incinerators in PA, this one has the fewest air pollution control devices. This one lacks pollution controls for mercury and nitrogen oxides
- Dioxins – Covanta releases many times more than all facilities in the county combined
  - most toxic chemicals known to science
  - cause cancer, birth defects, endometriosis, immune system damage, reproductive and developmental problems, low sperm counts and much more
  - More info: [www.ejnet.org/dioxin/](http://www.ejnet.org/dioxin/)
- Mercury – second only to Eddystone coal plant; will be #1 source once coal burning ends
- Other air pollutants – acid gases, soot, heavy metals, nitrogen oxides, sulfur oxides

**WASTE FLOW:**

- 93% of the county’s trash is burned at Covanta
- the county’s landfill is in Berks County
- Waste comes from: Sources 2009:
  - 30% Delaware County
  - 27.5% Philadelphia
  - 42% Out-of-state (41% NY/NJ; NY = 29%; NJ = 12%)
  - Total: 12 PA counties, 8 states (DE, GA, MD, NC, NJ, NY, TN & VA) & Puerto Rico

**INDUSTRIAL WASTE:**

- 2.5% of their waste is industrial waste; increased over the years
- 1999 permit change allowed more toxic forms of industrial waste
- accepts and burns tires from NJ

**VIOLATIONS and MISHAPS:**

- Since Covanta took over in 2005, they received at least 68 violations totaling \$261,126 in fines

**HEALTH:**

- In other communities, where trash incinerator workers were tested for dioxin levels in blood, they were found to have elevated levels
- Studies have found health problems in residents who live near incinerators, such as increased risk of babies being born with heart defects and spina bifida (baby born with split spine).

**WATER USE:** uses 62 million gallons of water per month

**WORKERS/JOBS:**

- Exposed to ash dust; no respirators used; scratchy throat after just short exposure
- 10 times fewer jobs than if the waste were recycled

**ZERO WASTE / RECYCLING:**

- Incineration competes with recycling by burning the most burnable materials (paper, plastics)
- Zero waste goal being embraced by communities from New Zealand to Nova Scotia, from New York to San Francisco

Job Creation: Reuse & Recycling Versus Disposal in the United States<sup>100</sup>

Type of Operation	Jobs Per 10,000 Tons per Year
<b>Product Reuse</b>	
Computer Reuse	296
Textile Reclamation	85
Misc. Durables Reuse	62
Wooden Pallet Repair	28
<b>Recycling-Based Manufacturers</b>	25
Paper Mills	18
Glass Product Manufacturers	26
Plastic Product Manufacturers	93
Conventional MRFs <sup>101</sup>	10
Composting	4
Incineration	1
Landfilling	1

- Some communities already keep 50-75% of their waste out of landfills / incinerators
  - Communities are setting goals aiming to divert 100% of their waste from landfills and incinerators, using source reduction, reuse/repair, recycling and composting
  - More info: [www.grrn.org/zerowaste/](http://www.grrn.org/zerowaste/) & [www.zwia.org](http://www.zwia.org) & [www.ilsr.org/recycling/](http://www.ilsr.org/recycling/)
- Bowman's Concrete
  - ThermalPure medical waste autoclave site – was largest in U.S. [operated 1993-1995]
    - workers stuck with needles; waste would fall off trucks into streets; unrefrigerated trucks...
  - Clean Metals ash processing site [operated 2002-2005]
    - took the toxic ash from Covanta, shook off the ash from the metals and sent metals for recycling
    - Laborer's International Union Local 413 protested the DEP meeting, shutting it down
  - Soil Remediation Systems soil burner proposal [defeated in 1996]
  - Abbonizio concrete / aggregate site
  - **DELCORA sewage treatment plant and sewage sludge incinerator**
    - Was largest source of arsenic in Chester's air until sued and forced to "clean up"
    - 2010: tried to take frack (natural gas drilling) wastewater from upstate PA, but protest stopped it
  - Scrapyard

### Trainer

- Trainer Industries
- **Stony Creek Technologies chemical plant [formerly Witco Chemical]**
- **Delta Air Lines oil refinery (172,000 barrels/day) [formerly BP → Tosco → ConocoPhillips → Delta]**
  - 3rd largest oil refinery in PA
  - 78% of their imports are from Africa; 40% just from Nigeria
    - human rights abuses; Nigeria's history of executing environmental activists in Nigeria
    - Bush/Obama Africom program to provide U.S. military coverage of Africa to secure the flow of oil in the name of peacekeeping and "fighting terrorism"; see <http://africahumansecurity.weebly.com>
  - ConocoPhillips closed refinery in late 2011, and was to tear it down in March 2012, but Delta bought it to reopen it in 2012; refinery will meet 80% of Delta's needs
  - Dumps some of their toxic wastes into the sewage system that goes to the DELCORA plant next door, where the sewage sludge is incinerated

### Marcus Hook

- Med-Waste / Safety Disposal Systems of PA, Inc. – medical waste autoclave
- **Sun Oil refinery (175,000 barrels/day) [closed in 2011]**
  - 2<sup>nd</sup> largest refinery in PA
  - 2003-2009: paid over \$1.7 million in fines for air pollution violations
  - 2009: major explosion took almost a full day to put out the blaze
  - Only 13% of their feedstocks are from the U.S. 77% are from Africa; 61% just from Nigeria.
    - [See points on human rights abuses and Africom under ConocoPhillips above]
  - Sunoco closed the refinery in late 2011 and is interested in converting it to process natural gas from shale gas drilling ("fracking") in Pennsylvania to convert ethane to ethylene in a dangerous and polluting "cracking" plant.
- Pure Energy – trash-to-ethanol biorefinery proposed in 1999, but abandoned
- FPL Energy / Marcus Hook Refinery Cogen: 50 megawatt gas-fired power plant [used as backup]
- **FPL Energy Marcus Hook LP: 717 megawatt gas-fired power plant** [started in 2004]
  - also burns some of the Sun oil refinery's waste oils