

Pasadena Citizens' Advisory Council

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Summary of Tuesday, October 23, 2018 Meeting

PCAC Hears Two Air Reports at October Meeting

Annual Report of Air Emissions from PCAC Plants

Jeff Nickl of Chevron Phillips Chemical presented the annual report on PCAC plant emissions. (PCAC plants rotate serving as the presenter.) The annual report derives its data from two annual inventories: the Air Emissions Inventory (EI), which plants submit to the TCEQ, and the Toxics Release Inventory (TRI), which plants submit to the EPA. Highlights of the 2017 data on emissions follow this article. Reductions were seen in all categories in the report but two.

The TCEQ Emissions Inventory data show a reduction from 2016 to 2017 volatile organic compounds (VOCs); the portion of VOCs that are highly reactive and contribute to ozone formation; sulfur oxides; carbon monoxide and both total suspended particulates (TSP) and PM 2.5, the very fine portion of TSP. There was a 4% increase in nitrogen oxides (NOx). The EPA Toxics Release Inventory (TRI) Releases to Air declined 9% from 2016 to 2017. Emissions from fugitive sources like valves and flanges compensated for a 7% increase from point sources, like flares. Commonly referred to as "air toxics," these releases have declined 82% since 1995. See the attached *Highlights* file for more information.

The report compared NOx and VOC emissions at PCAC plants to those reported in the Air Emissions Inventory by facilities in Harris County and in Texas overall. Data from 2016 are the most current for these comparisons. In 2016, less than 1% of the state's NOx emissions came from PCAC plants; and 10% of the county's NOx emissions in this inventory did so. In 2016, 3% of the state's VOC emissions came from PCAC plants, and 20% of the county's VOC emissions inventory did so.

The data in the PCAC are publically available, though members may see them sooner than they appear on regulatory agency websites. TRI data may be viewed at www.epa.gov/triexplorer. Readers may filter the data by geographic region, company name, chemical, and so on. Air emissions inventory may be found on the Texas Commission on Environmental Quality website at <https://www.tceq.texas.gov/airquality/point-source-ei/psei.html>

2018 Outdoor Air Quality Report

Brad Flowers of Houston Regional Monitoring (HRM) reported on air quality trends for ozone; particulate matter; highly reactive volatile organic compounds (HRVOCs); a group of 4 compounds referred to as BTEX (benzene, toluene, ethylbenzene, and xylenes); and benzene. Whereas the

emissions report focused on air emissions just from PCAC plants, the air quality report looks at the concentrations of certain pollutants in the outdoor air in the greater Houston area, no matter whether they come from industry, vehicles, construction equipment, small business, or natural causes. The downward trend in plant emissions is also seen in the overall downward trend in air pollutants.

Flowers said HRM is a voluntary, industry-funded technical resource that performs ambient (outdoor) air monitoring and related special studies to better understand air quality in the Houston area. His report to PCAC included information from HRM monitors as well as those of the Texas Commission on Environmental Quality (TCEQ). The concentrations from the pollutants detected by air monitoring equipment are compared to the National Ambient Air Quality Standards set by EPA to protect health and welfare. The attached slide presentation shows air quality improving as pollutants detected in the air samples decrease in concentration over time.