Commerce City Refinery

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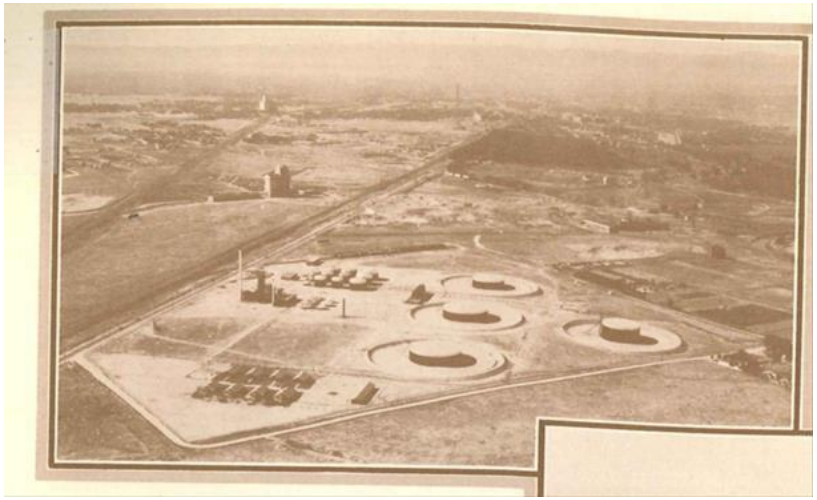
Commerce City Refinery history

Plants 1 & 3

- Original refinery started in **1931** in what was then called “Commerce Town”
- Owned by Continental Oil Company, which later became Conoco and ConocoPhillips
- Suncor acquired legacy ConocoPhillips assets in 2003



Plant 2

- Originally built by Bay Petroleum in **1937**
- Many owners since, including Tenneco, King Resources, Asamera Oil, Total, Ultramar, Diamond Shamrock and Valero
- Suncor acquired from Valero in 2005

Commerce City Refinery today

Commerce City Refinery: Our business at-a-glance

Colorado's **only fuels refinery** boosting economy by **~$2.5 billion** per year

Supports **local communities**

More than **$1 Billion** in refinery improvement investments since 2005

Supports **~500 direct** and **~5000 indirect jobs**

Local producer/supplier of:

- Gasoline
- Diesel
- Propane
- Jet fuel for DIA
- Asphalt for Colorado's roads
- Fuel for Western Slope

Supply **Colorado's fuel needs** through:

- Truck
- Pipeline
- Rail

Access **local crude**, Colorado's DJ Basin

Suncor wants to be part of Colorado's energy future, while making sound investments and driving environmental improvements.

Data presented at Regional Air Quality Council meeting 5/22/2019

Nearly $1B in refinery improvement investments since 2005

2005 – Purchase of Valero Refinery (Plant 2) - 38,000 bpd sweet crude refining capacity

2006 – Completed $450+ million “Project Odyssey” reducing sulfur in diesel fuel to ultra-low standard

2007 – Wastewater treatment capacity and reliability improvements

2009 – Improvements to #2 FCC unit to comply with opacity regulations

2011 – Replaced waste water APIs

2012 – Gasoline Benzene Reduction (GBR) Unit completed to reduce benzene in gasoline

2012 – Built new $25 million “LEEDs Silver” Refinery Business Center in Commerce City

2013 – Replaced Plant 2 boilers to reduce NOx

2017 – Built new $65 million wastewater treatment plant to achieve mercury, arsenic reductions

2018 – Built new wastewater treatment unit to reduce selenium and installed improvements to comply with Refinery Sector Rule

2019 – Hydro-treater project to reduce sulfur in gasoline meeting new federal standards (Tier III)

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HCN Update

Commerce City refinery and HCN

- Hydrogen cyanide (HCN) is naturally occurring, found in foods, including spinach, almonds, lima beans, soy, apple cores
- HCN is generated by refineries with fluidized catalytic cracking (FCC) units
- EPA already regulates HCN and does not require a permit limit for HCN
- To increase transparency/efficiency, Suncor requested that Colorado Department of Public Health & Environment (CDPHE) include an HCN limit in its air permit
  - CDPHE approved its inclusion in 2018
  - Per CDPHE's current process, HCN levels are measured by a one-time, annual stack test
  - Data from the 2018 one-time test indicated higher result and Suncor applied to modify the permit (given the 2018 test result)
  - Suncor conducted 30 days of additional testing that showed there is HCN variability associated with normal plant operations and that data *average* was less than the permit value
  - Suncor met w/ CDPHE to share additional data
  - CDPHE have stated publicly that there is no health concern associated with HCN from refinery stack results

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HCN Update

Commerce City refinery and HCN (cont.)

- EPA reviewed the issue (2015) and determined that no specific control limit for HCN was required and existing combustion controls addressed HCN
- U.S. House Representative Diana DeGette (D-CO) introduced *federal* legislation this year re: HCN for U.S. refineries
- Suncor is working with many stakeholders to provide facts on HCN
- Suncor's goal: use actual refinery operations data to determine the complete emissions picture and establish proper HCN permit limit

Ozone Non-attainment

- Denver metro area is “non-attainment” for federal ozone standard
- Regional Air Quality Council (RAQC) considering potential strategies for reducing ozone
  - RAQC evaluating four potential, new fuel specifications (all require refinery capital investment)
  - Suncor and other stakeholders presented data to RAQC on May 22
- Suncor supports ozone reduction
- Suncor continues to be active participant in process and resource for RAQC committees, board
- Important to take wide view as RAQC gathers data, evaluates potential strategies, makes decisions
- Ozone reduction strategies should deliver meaningful benefit to air quality

Thank you!

Questions?