

TESORO REFINERY MERGER, EXPANSION, CRUDE OIL SWITCH

WEBINAR -- MARCH 23, 2017

COMMUNITIES FOR A BETTER ENVIRONMENT

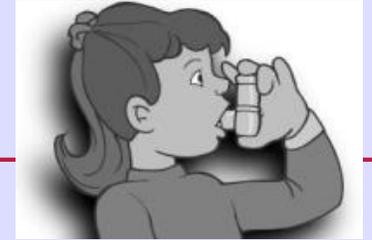


Tesoro would merge BP Carson refinery with Tesoro Wilmington next door, & become the largest W. Coast refinery – Local & International Impacts

- **Close Wilmington FCC (cracking unit)**
- **But use these pollution credits for extensive expansion in the rest of refinery, and further increase emissions:**
 - Expand Carson Cracker
 - Expand 22 heaters, add new LPG rail delivery (Liquefied Petroleum Gas), major new pipelines & port impacts
 - Add a dozen new connections to flares and
 - 3.4 Million Barrels new crude oil storage!
- **Infrastructure to switch to fracked N. Dakota Bakken crude oils (high benzene), and also access Extreme Canadian tar sands crude (high sulfur)–both types with air, water, climate impacts**
- **Increase crude oil processed per day in the refinery**

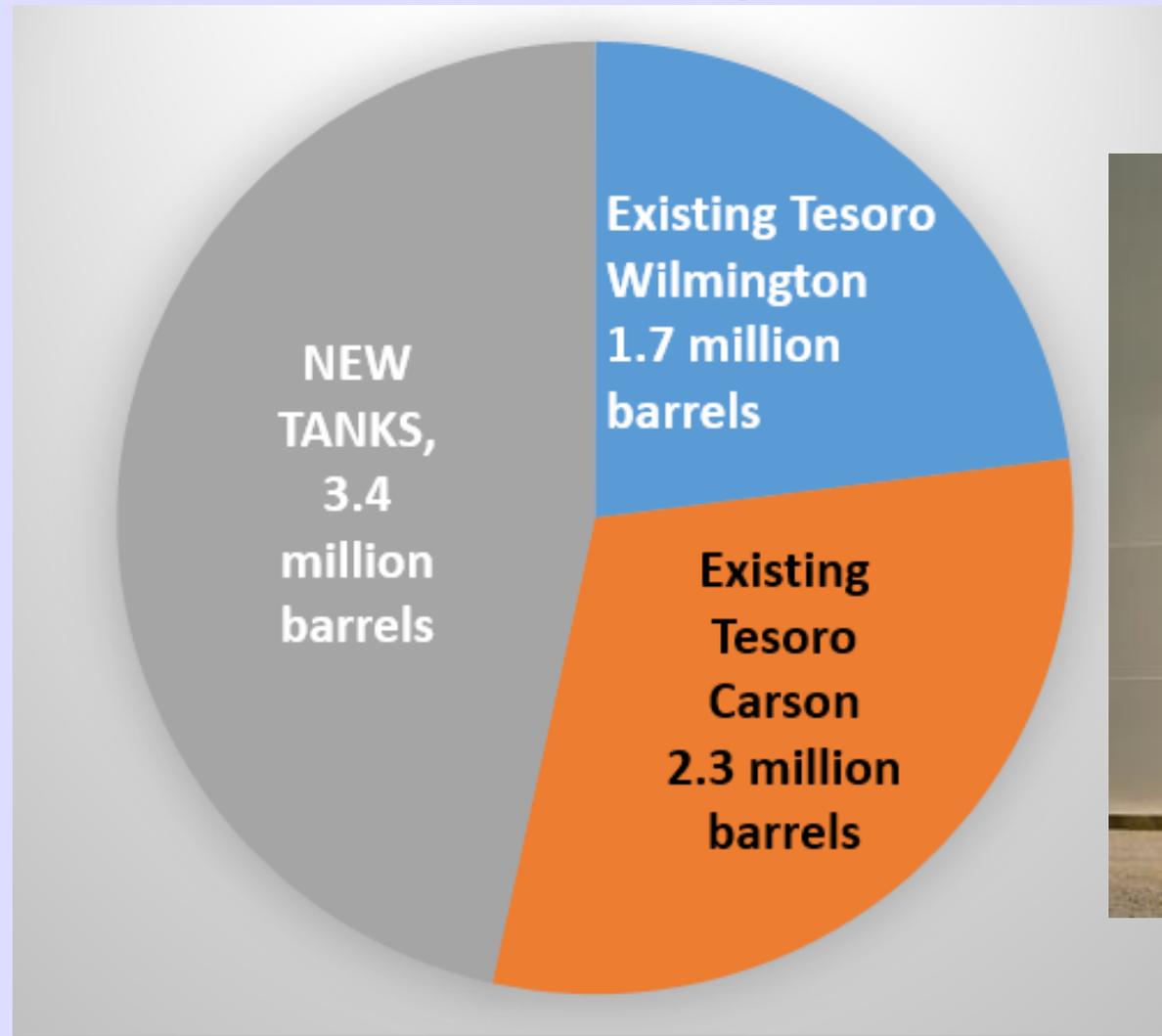


Tesoro misleadingly describes this as a “clean air” project, but even the DEIR says VOCs & hazards *increase*...



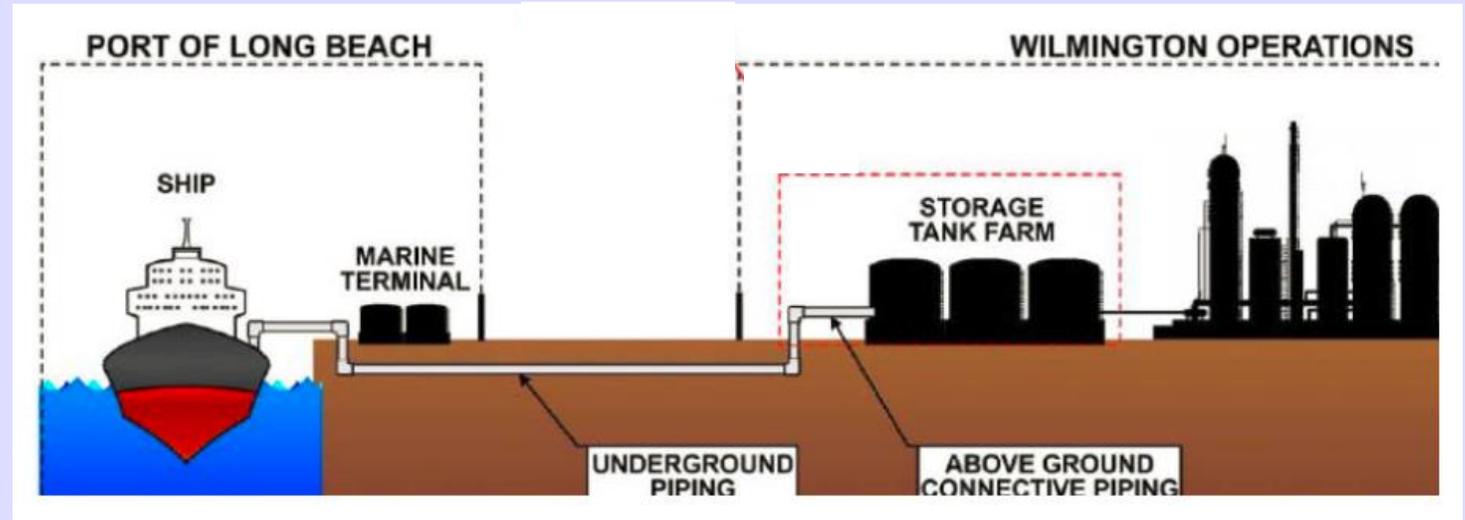
- **The Draft EIR says risk of hazardous material release significantly *increase***
- **The Draft EIR says the Project will increase VOCs**
(Volatile Organic Compounds)
- **But Draft EIR leaves out extensive additional air pollution & accident risks, needs to be sent back to the Draft Stage**

Tesoro wants to add 3.4 million barrels of new Crude Oil Storage Tanks which almost doubles its crude storage!



Port impacts underestimated – Tesoro claims would benefit air quality to build giant tanks, to allow faster ship offloading of crude oil, but expert evaluation instead *increases* emissions

- **Ship electrification is the way to clean up Port pollution, not adding giant storage tanks & even bigger ships.**
- California is in the process of requiring Port Electrification.



- **Experts determined Tesoro's storage tanks would allow for larger ships in port, & could increase loading activities at the Port, with significantly increased emissions**
- **Draft EIR failed to analyze increased benzene at the port from Bakken crude oil allowed**

DEIR left out unprecedented increased throughput for new tanks – 420,000 bbls/day
(Larger than the two refineries' existing crude processing of 380,000 bbls/day)



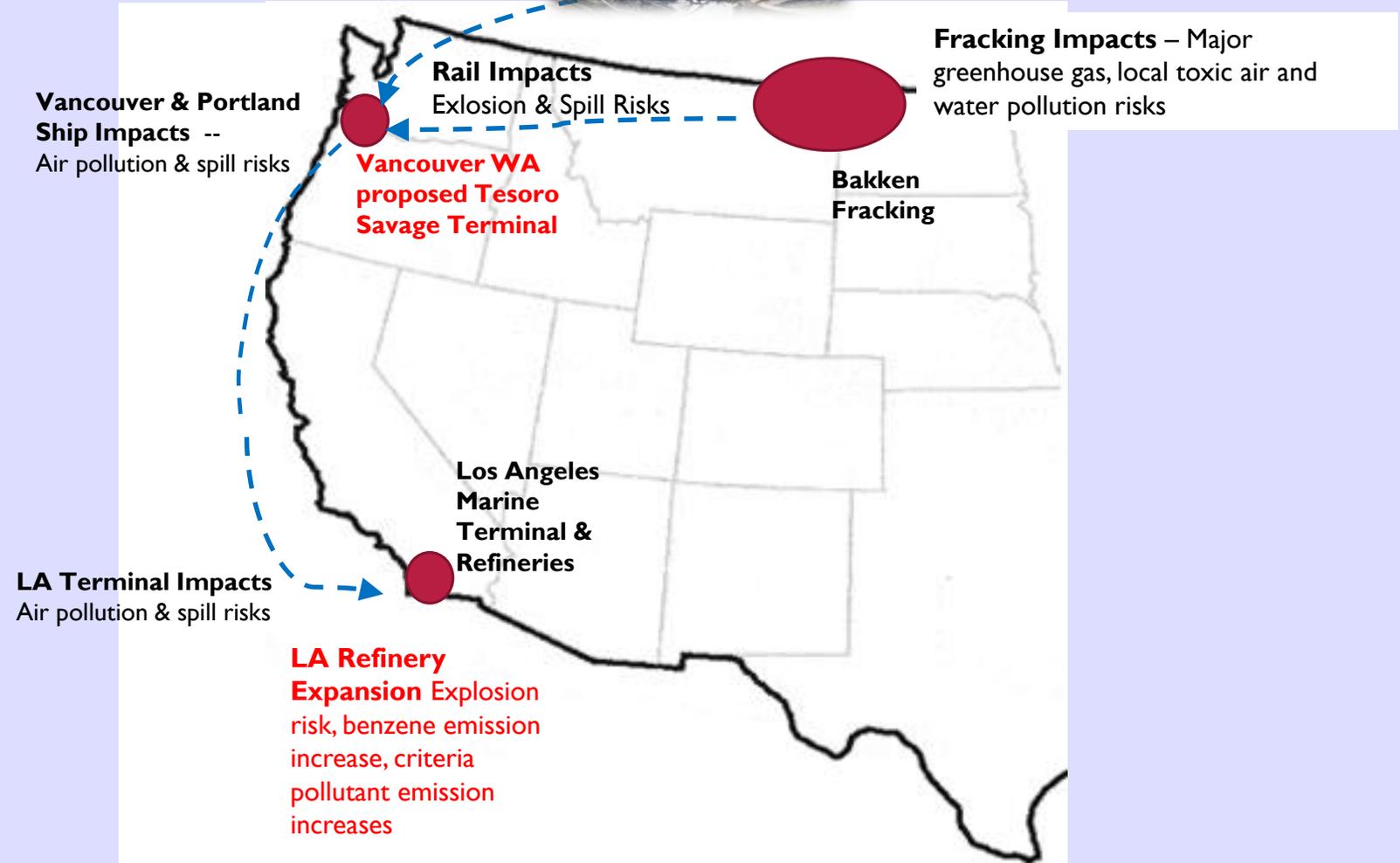
Why does Tesoro need this big crude oil throughput increase for the new tanks?
(far more than Tesoro could claim for faster ships offloading). It enables:

- Using more crude at the combined refinery
- Selling dirty crude to other local refineries
- Exporting crude overseas

Upstream, would bring dangerous crude from N. Dakota & Canada, first by rail to Vancouver WA, then by ship to LA



Tar Sands Impacts -- Strip mining pristine lands, creation of whole lakes of toxic water, and toxic river run-off, destroying fish, food supply for indigenous people



Devastating Crude Oil Extraction & Greenhouse Emission Impacts in N. Dakota & Canada



N. Dakota Bakken Fracked Crude – Major Methane Emissions, Water Pollution, Air Toxics, High Benzene, Highly Explosive, harms to Indigenous People

Canadian Tar Sands strip mining pristine land to get at solid tar sands bitumen, also requires very large water volumes, and produces whole toxic lakes, river & fish contamination, harms to indigenous people

Crude through Tesoro Vancouver terminal to LA would be: -- About 75% Bakken
-- About 25% Canadian Tar Sands

More pipelines on the way to Dakota Access Pipeline, Sidney Herald, 2016:

“**Meanwhile, Tesoro has also laid groundwork to tie into Dakota Access.** During a recent Williams County hearing on a pipeline that is less than a mile long, they received permission for a line that also ties into Dakota Access. Since it was less than a mile, they don’t have to take the matter to the Public Service Commission.

“**Tesoro will actually be tying into Dakota Access at two points,** the first at Ramberg from the Tesoro High Plains Pipeline and the second at Johnson’s Corner from the Tesoro Great Plains Pipeline, formerly known as BakkenLink.

“The connections are in the construction phase and are being built to drive additional volumes through Tesoro’s High Plains Pipeline system in the Bakken. **A company representative says they still anticipate finishing construction of the two lines around the end of 2016.**”

”**Tesoro has more than 1,000 miles of crude oil gathering and trunklines in the Bakken.** Its High Plains Pipeline has a capacity of 250 million barrels per day, and it’s Bakken Area Storage Hub can hold more than 1 million barrels of oil.”

http://www.sidneyherald.com/news/more-pipelines-on-the-way-to-dakota-access-pipeline/article_36b57c3a-87fc-11e6-9574-8fbfb9898a5e.html

After many explosions and spills, the US Department of Transportation found N. Dakota Bakken crude is more explosive & issued a Safety Alert:



A Bakken crude by rail accident also killed 47 people after a crude train exploded



June 3, 2016 – Latest Bakken crude by rail explosion on Columbia River in Oregon, next to elementary school along the route where Tesoro would send its crude oil on the way to Los Angeles

The AQMD has refused to acknowledge **CHEAP DIRTY CRUDE OIL SWITCH**,
but Tesoro repeatedly describes the N. Dakota Bakken crude switch to investors:

Supplying Advantaged Crude Oil to the West Coast

Vancouver Energy Project

- Joint venture with Savage Companies
- Up to 360 MBD Rail-to-Marine Terminal
- Most efficient route to West Coast for Bakken crude oil
- Significant infrastructure exists; low development cost

Strategic Crude Supply

- Increases West Coast competitive crude supply
- Relative refining values of \$3 to \$5 per barrel



Tesoro's own
Slide →

Paul Y. Cheng - Barclays Capital, Analyst, (Reuters, 2014): In Carson, I think before being acquired by you guys, that they were running largely you said ANS [Alaska North Slope], maybe 100,000 barrel per day. And then maybe another 100,000 of the Iraqi Basra. Is the crude slate changed now? Or that is essentially secured by the same crude slate as in the past?

Gregory J. Goff – Tesoro Corporation, President & CEO: Basically the same. We are running some different crudes there, but not material differences at this point in time. It is in our plans to do that. Basically what you described, is the bulk of the crude supply ... in the Los Angeles refinery today.

Cheng: Greg, **how quickly that you think you may start to be able to change the crude slate to do that?**

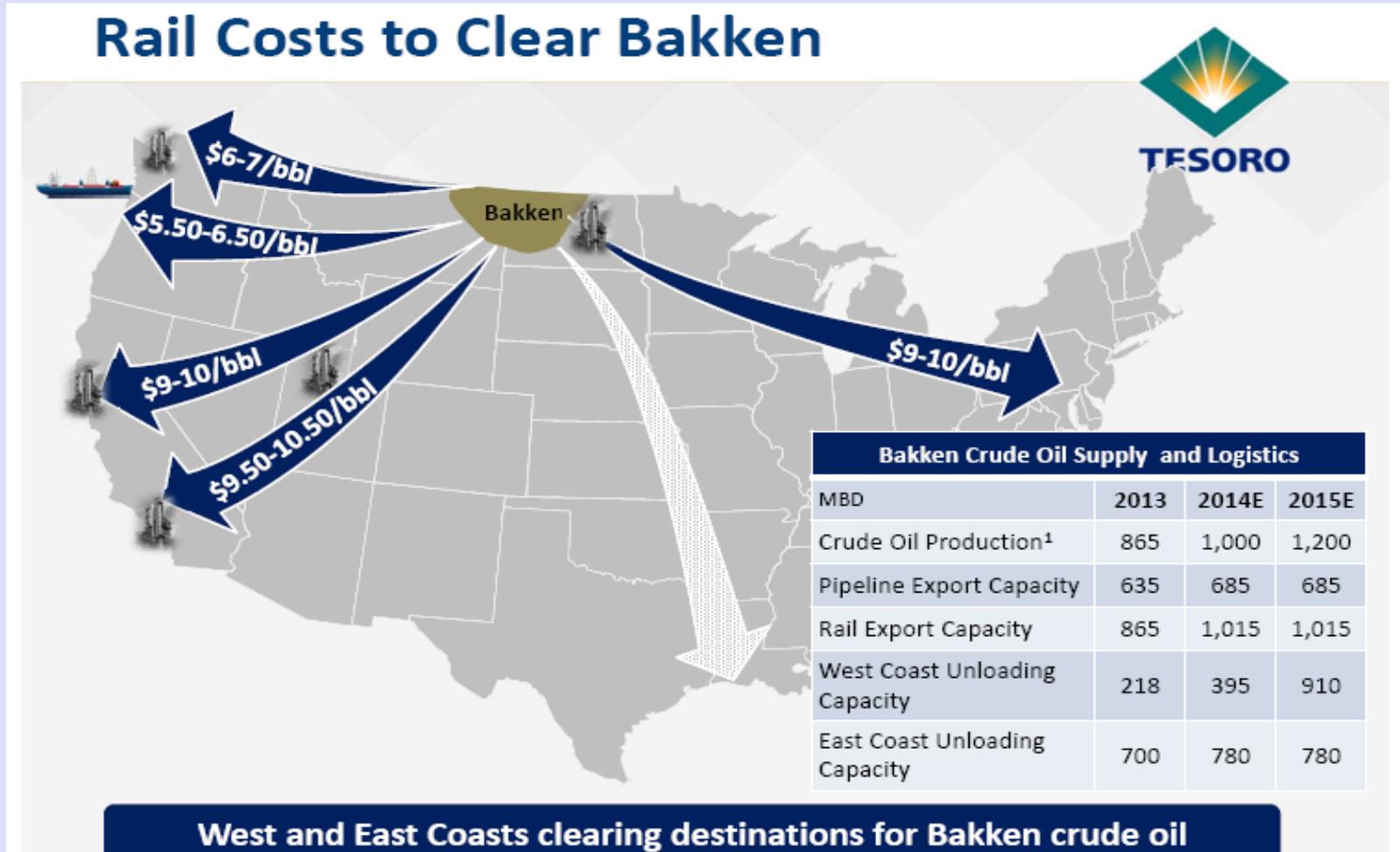
Goff: **The first thing, our intention at the Port of Vancouver to be able to do that.**

Cheng: **You have to wait until the Savage terminal's up and running before you can actually do that?**

Goff: **That would allow us to move the most significant volume right now if we do that...** But we have a number of things that we're looking at, **but that is the primary way that we want to be able to improve crude supply cost at the Los Angeles facility.**

Tesoro confirmed these plans in 2016 – Goff: We have said that once Vancouver Energy is up and operating, we'll use crude oil into the facility to supply our west coast operations ...

Switch to explosive N. Dakota Bakken crude oil causes Explosions, Benzene emissions, extraction greenhouse gases were not evaluated in DEIR



Tesoro again makes the connection from N Dakota crude oil by rail to Vancouver WA, then by ship to the LA refinery absolutely clear, but the AQMD has ignored it!

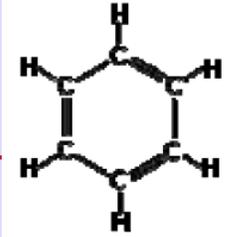
“When you think about formalizing competitive advantage and fully integrating our value chain, that is really what the Los Angeles Integration and Compliance Project is about.

And when we think about creating value, we are not just thinking about advantaged crude oils in front of our refineries, but we're thinking about how that supply to the west coast of advantaged crude oils can change the shape of the crude oil supply/demand dynamics for the west coast. And that's what we are trying to accomplish through Vancouver Energy.”

N. Dakota crudes contain more Benzene (causes leukemia)

Crude switch increases other hazards in the refinery, Ports, by transport, in oil fields

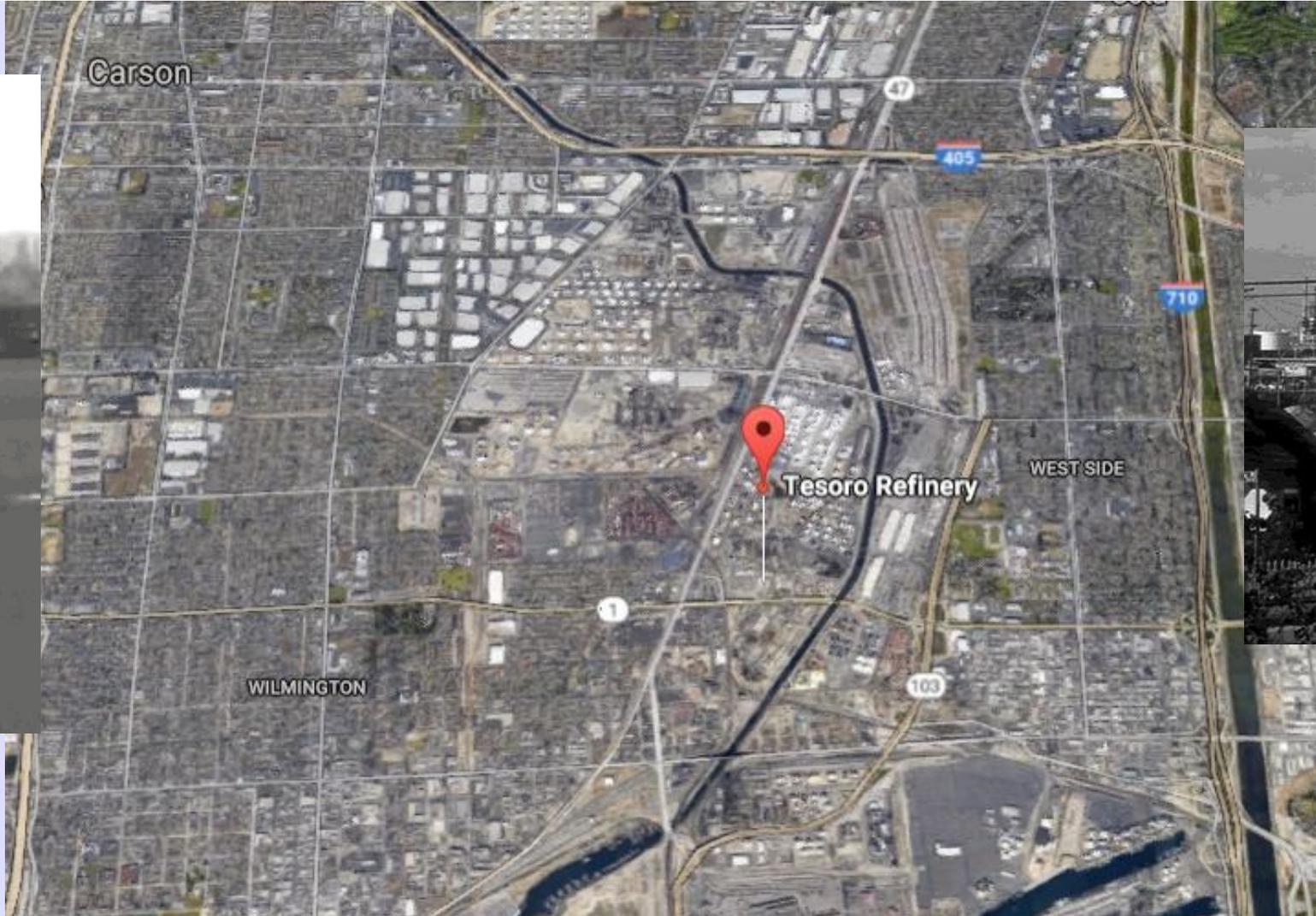
Benzene



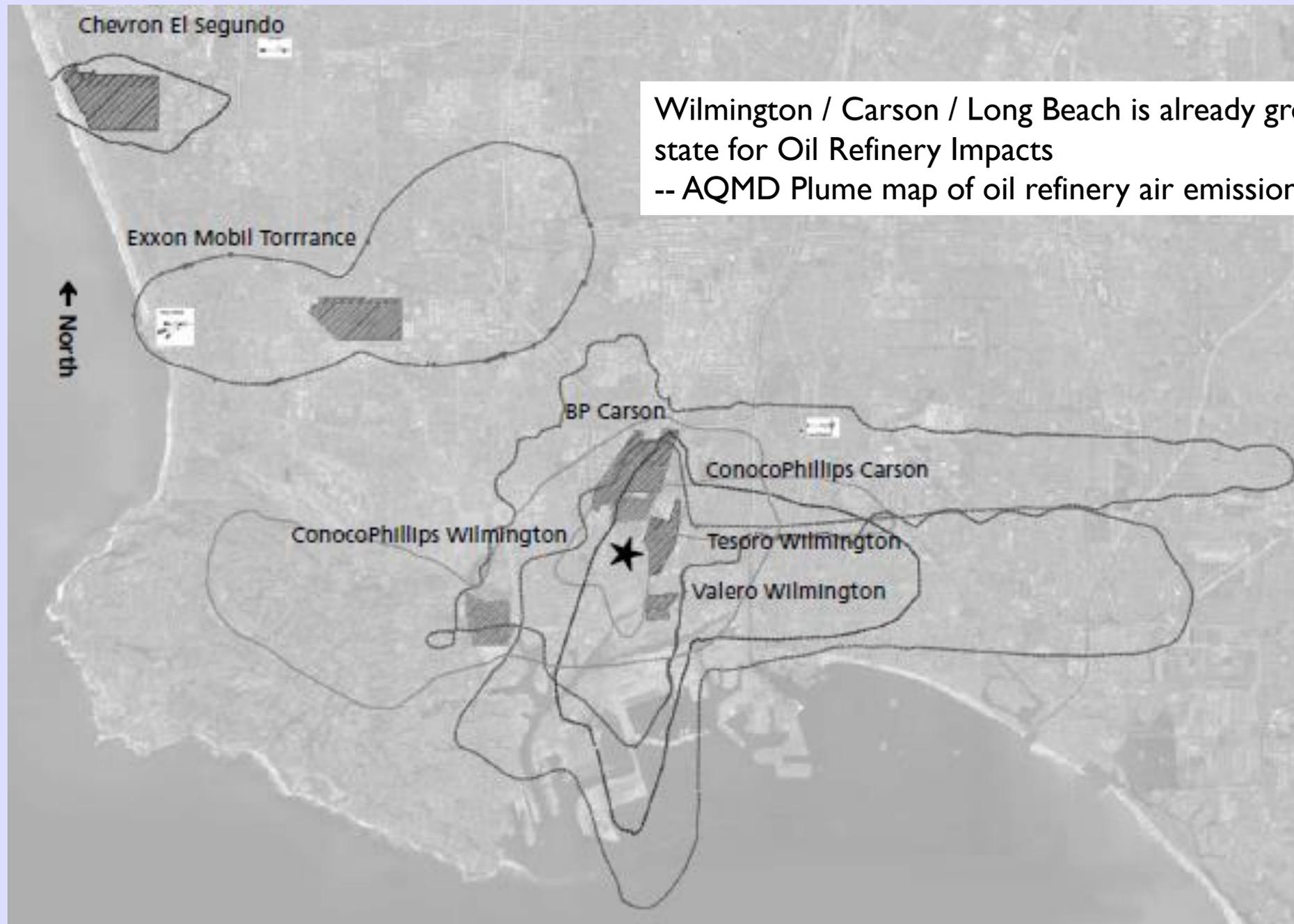
- **Air District EIR did not include the known higher Benzene content in N. Dakota crude oil, & increased benzene emissions in new Storage Tanks, ships, transport, and refinery**
- **Air District EIR also failed to evaluate the switch to dirtier crude oils, and the many impacts inside and outside the refinery and Port, including impacts of N. Dakota & Canadian Tar Sands crude imports.**
- **These causes many refining impacts, including increased sulfur decontamination, and increased cracking and coking due to heavy tar sands, and added toxic and explosive diluents, to allow the solid crude oil to flow.**
- Bakken crudes were also found in Hydrocarbon Processing Journal as having high wax content, causing refinery fouling, corrosion, and unintended coking.



How does the big Tesoro Expansion and Crude Oil Switch fit into existing pollution?



It would expand the massive refinery complex which is surrounded by homes and schools in Wilmington, Carson, and Long Beach

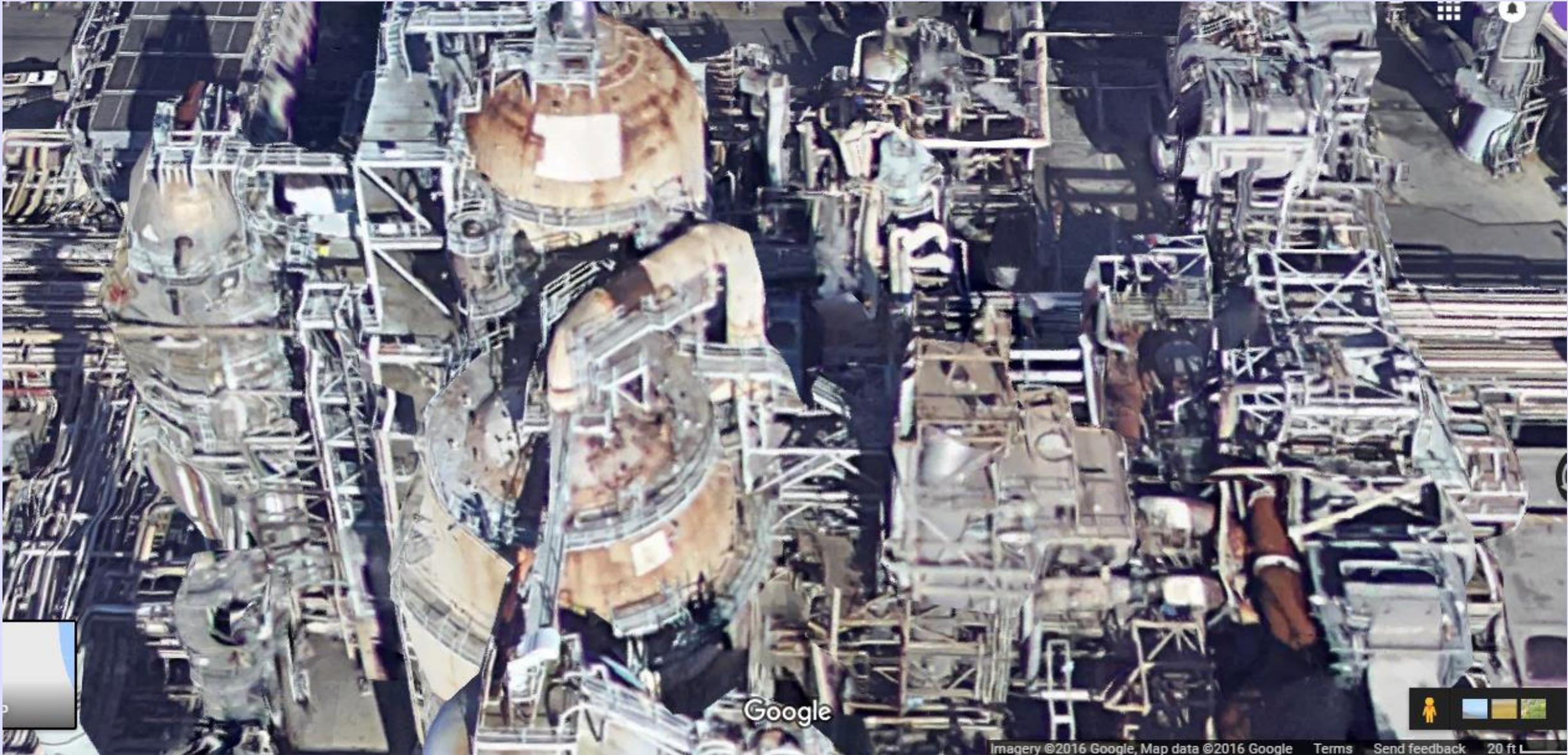


Wilmington / Carson / Long Beach is already ground-zero in the state for Oil Refinery Impacts
-- AQMD Plume map of oil refinery air emissions





Tesoro Carson
Lab Parking Lot



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Last August 2016, a Tesoro sulfur tank blew up, but the AQMD could not explain to the public how this happened. A Shelter-in-Place was ordered. Now Tesoro wants to expand hazardous sulfur processing.

Who gets the worst **Cumulative Impacts** of these heavy **Fossil Fuel** burdens?



- **Over 90% of the population of Wilmington, Carson, and West Long Beach near the refineries are People of Color** (Latino, Asian, Black, Pacific Islander, Native America)
- **This area has an extreme concentration of pollution including 5 oil refineries, the Ports of LA & Long Beach, the 710 & 110 freeways, heavy diesel truck traffic, and many other pollution sources**

ACTION ACTION ACTION



- **The Project's grossly deficient Draft EIR & Title V permit must not be finalized!**
– We just want a fair evaluation, and protections for EJ communities!
- **Call & write the AQMD, Mayor of LA, State of CA (we'll send you followup emails), more ...**
- **Join the Climate March April 29th**