



Environmental Planning and Policy Update / Oil and Gas Update

City Council Meeting July 18, 2022

Environmental Updates

- **EPA** has revised PFAS health advisory limits from 70 ppt combined to separate limits of 0.004 for PFAS and 0.02 for PFOS.
- **SACWSD** averages are 4.6 for PFOA and 13 ppt for PFOS, which exceeds the limits so **SACWSD** is purchasing additional water from Denver to lower averages.



EPAC: Set draft AQ, water conservation, GHG, waste diversion, tree canopy, community gardens.

August 8: Lotus/Pinyon Low Impact Development (LID) Manual

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LOW IMPACT DEVELOPMENT (LID)

- **KEY PRINCIPLES:**

- Conserve natural resources
- Work with site hydrology
- Protect water quality
- Reduce impervious and minimize directly connected areas (MCDIA)
- Apply small-scale controls at the source

- **TRIPLE BOTTOM LINE BENEFITS:**

- Environmental
- Socioeconomic
- Economic



Suncor



Improvement Plan

As part of Suncor Energy (U.S.A.) Inc.'s 2020 settlement agreement with the CDPHE, Suncor engaged Kearney to investigate the root cause of past emission exceedances and identify refinery improvement opportunities. Using the recommendations and findings, Suncor developed an Improvement Plan that includes both required and voluntary measures.

REQUIRED

Enhancing safeguards by investing in automatic shutdown systems for our gasoline-making units (FCCs), to reduce the potential and severity of future catalyst releases

- Upgrade the automatic shutdown system of the Plant 1 and 2 FCC



VOLUNTARY MEASURES

Education: strengthening the capabilities of our employees and continuing to expand and reinforce the right culture

- Review key procedures to reflect industry best practice
- Plans to design, build and operate a training simulator
- Continue to build a culture of operational discipline
- Enhance training

Increasing the Safety and Reliability of Gasoline-Making Units

MARCH
2020

Settlement agreement reached between Suncor and state regulator

AUGUST
2020

Completed installation of an automatic shutdown system within the DCS of the Plant 2 FCC

JUNE
2021

Completed all upgrades to the Plant 1 FCC automated shutdown system

MARCH
2022

Completed the installation of a PLC and critical automatic shutdown hardware in the Plant 2 FCC

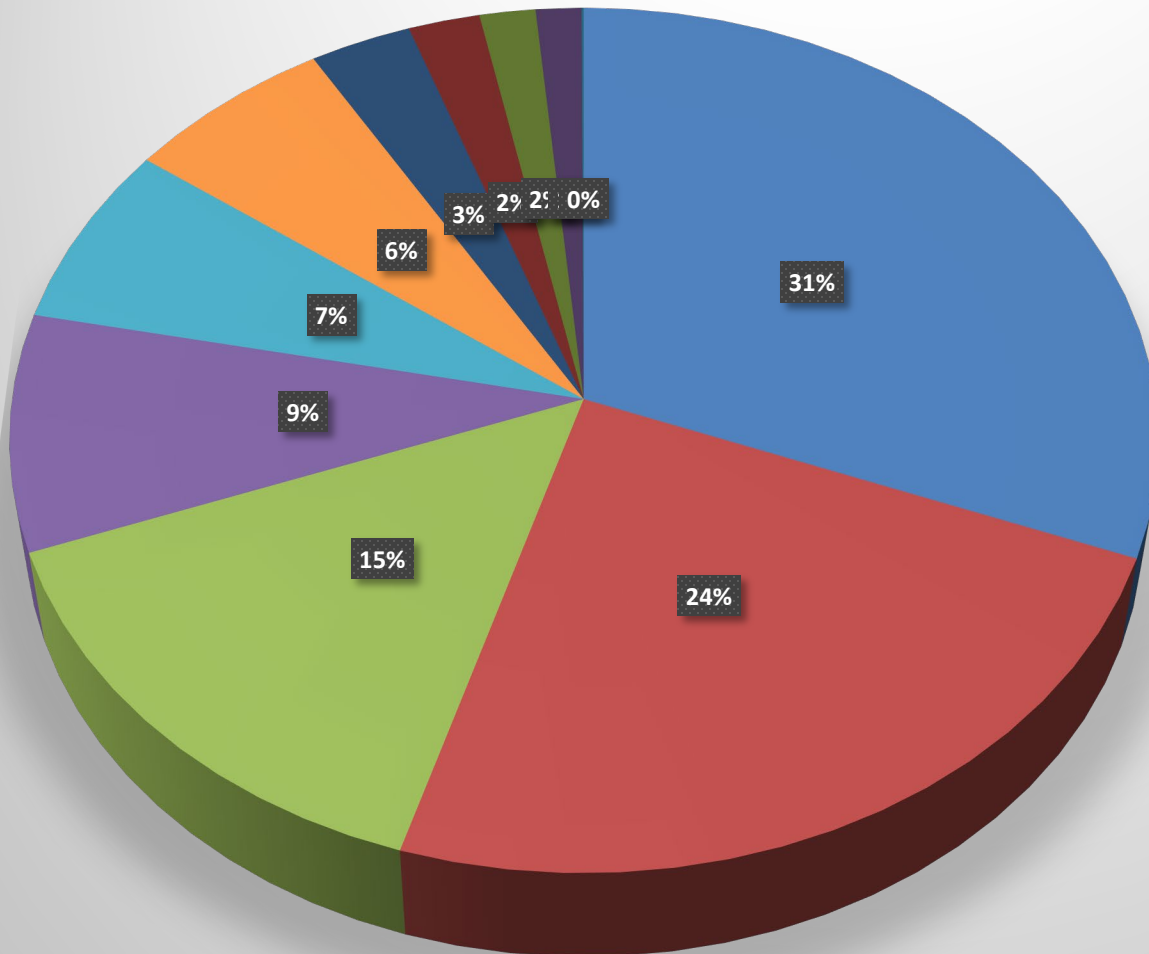
APRIL
2022

Plant 1 and Plant 2 FCCs are operating with upgraded automatic shutdown systems



Suncor Compliance Databases & Analysis

Excess Emission Hours by Source



- Plant 1 H-25
- Plant 1 Flare
- Plant 1 FCCU
- Plant 1 B-8
- Plant 1 B-6
- Plant 2 FCCU
- Plant 2 Flare
- Plant 1 Fuel Gas H2S Content
- Plant 3 Flare
- Plant 2 Fuel Gas H2S Content

Equipment Upgrades to the FCC

1

Suncor upgraded and installed critical computer systems used in the automatic shutdown process, the **DCS** and **PLC**.

2

Suncor also installed new critical hardware including **automated shutdown valves** and **hydraulic pressure units**.

4

FCC Refining Process

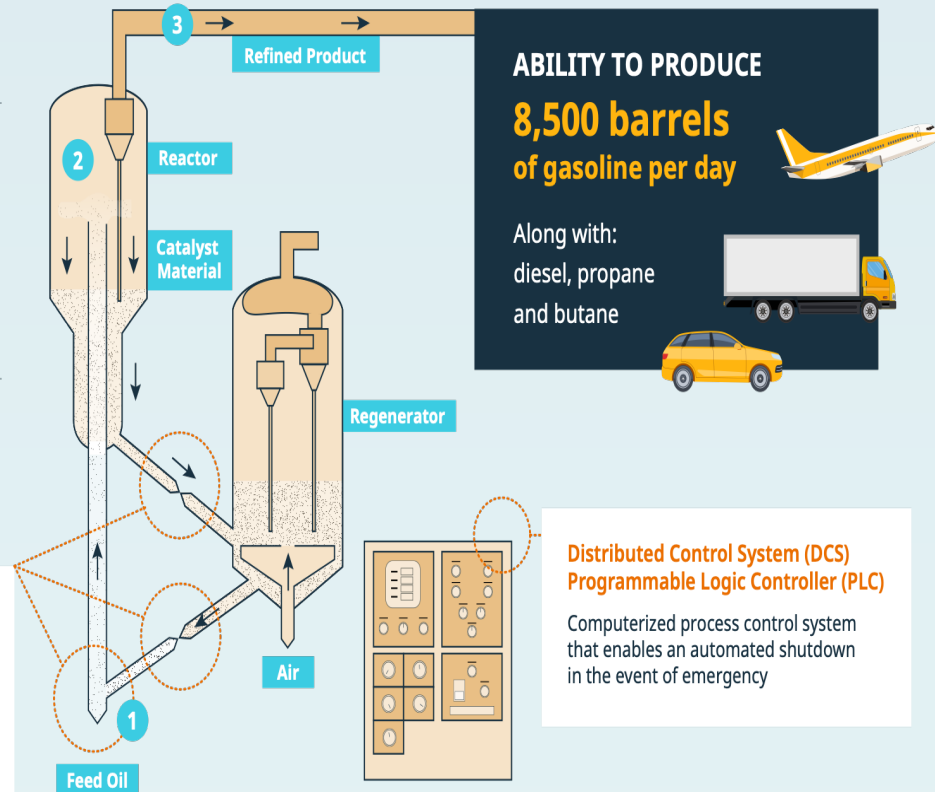
1 Feed oil enters FCC Reactor

2 Reactor mixes Feed Oil repeatedly using Catalyst Material and Air from Regenerator

3 Refined Product exits FCC

Automated Shutdown Valves

Newly-installed hardware that isolates and seals off processes during a shutdown



Exceedance Reports

Databases Packet & Website

<https://www.c3gov.com/living-in/environment-sustainability/air-quality>

Air, Water, EPCRA & NPDES

- 7 Events
- 13 Exceedances
- Plus * 1 Emergency Planning and Community Right to Know Notification
- No NPDES violations

5/17/2022	5/18/2022	Not listed	Oil	Tank 76, Pump J-49	F	Spill
5/22/2022	5/23/2022	30 H2S		Sulfur Recovery Unit, Plant 2 Flare	B	Control Equipment Problems
5/22/2022	5/23/2022	Operating 30 Temperature		Sulfur Recovery Unit, Plant 2 Flare	B	Control Equipment Problems
5/22/2022	5/23/2022	30 SO2		Sulfur Recovery Unit, Plant 2 Flare	B	Control Equipment Problems
5/27/2022	5/28/2022	24 Oil		Tank 3801	C	Process Problem
6/1/2022	6/2/2022	10 H2S		SRU No 3	B	Control Equipment Problems
6/1/2022	6/2/2022	Operating 10 Temperature		SRU No 3	B	Control Equipment Problems
6/2/2022	6/4/2022	44 O2		Plant 1 FCC	A	Startup/Shutdown
6/2/2022	6/4/2022	44 Opacity		Plant 1 FCC	A	Startup/Shutdown
6/2/2022	6/4/2022	44 Opacity		Plant 1 FCC	A	Startup/Shutdown
6/2/2022	6/4/2022	44 H2S		Plant 1 FCC	A	Startup/Shutdown
6/2/2022	6/4/2022	44 H2S		Plant 1 FCC	A	Startup/Shutdown
6/3/2022	6/4/2022	31 Btu		Plant 2 Flare	B	Control Equipment Problems
6/3/2022	6/4/2022	31 Visible emissions		Plant 2 Flare	B	Control Equipment Problems

Legislative Updates & Leadership

July 7: Draft Plants 1 (West) and 3 (Asphalt Unit) Title V Operating Permit 96OPAD120 public comment memo

July 8: Reg 38 Water Quality Control Commission scheduled for September 12-15, 2022 Rulemaking Hearing comments



Oil and Gas Update

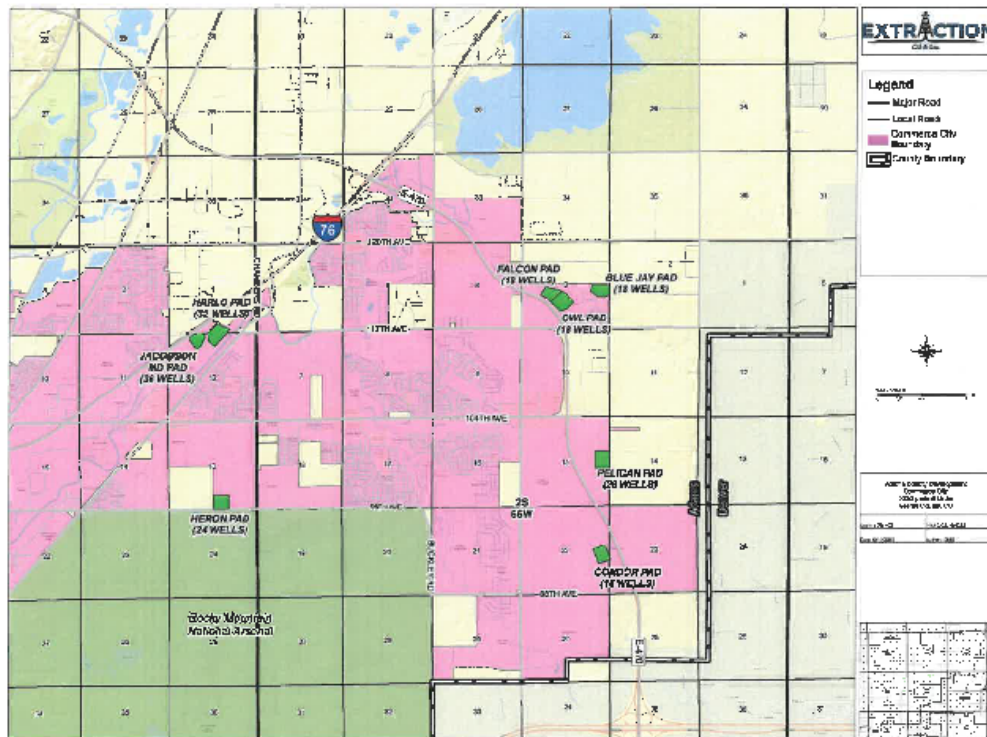


- Verbally expressed intention to withdraw all applications except Blue Jay and Pelican .
- Reduction 7: 2
- Applicant resubmittal expected in August



Oil & Gas Application Map

Exhibit A (continued)





Questions/Comments?

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*Thank
you*

