



Environmental Planning and Policy Update

City Council Meeting July 2021



Oil and Gas Update



City Oil & Gas Permit Applications

- Five applications are currently deemed complete and being processed by the city
- Eight Oil and Gas Permits had previously been submitted and deemed complete by the city – all by Extraction
- One application (Condor) does not currently have complete information to begin processing
- Two applications (Harlo and Anteater) were withdrawn due to inactivity.

Site Name	Case Number	Operator	Council Action Required	Well Count
Pelican	OG-002-19	Extraction Oil and Gas	Conditional Use Permit	28
Heron	OG-003-19	Extraction Oil and Gas	Conditional Use Permit	24
Blue Jay	OG-004-19	Extraction Oil and Gas	Rezoning	18
Owl	OG-005-19	Extraction Oil and Gas	Rezoning	18
Falcon	OG-006-19	Extraction Oil and Gas	Rezoning	18

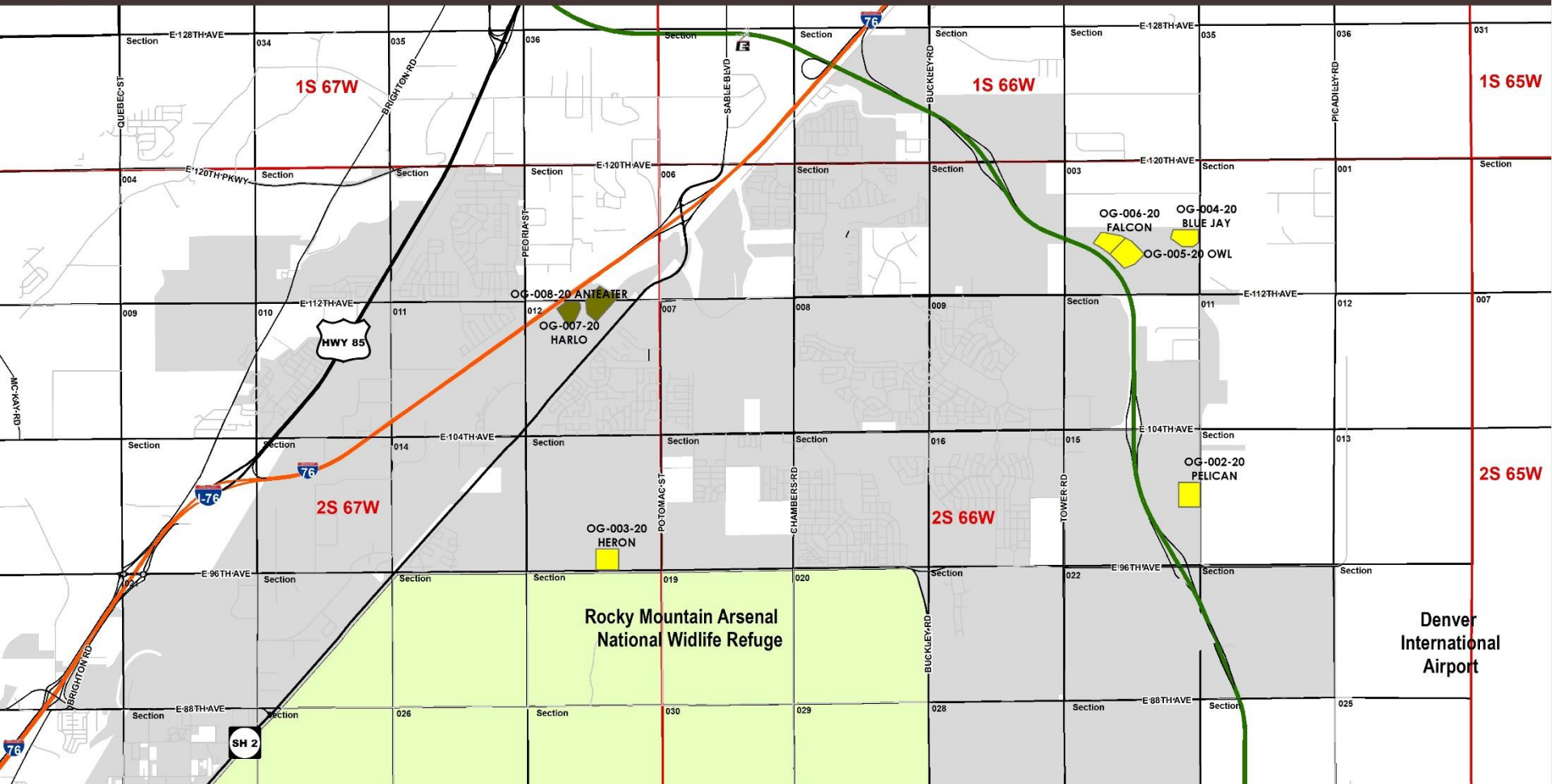
- All operators have asked (at the request of the city) that holds be placed on the processing of all Form 2A's, with the additional request of a 2nd comment period.
- Oil and Gas Permits may not be approved until Council actions have occurred *and* a CUP for a pipeline has been approved by Council, per the ROA.

City Oil and Gas Permits



Submitted City Permits

Active as of 10/22/2020



local streets

Approved Under Review City Limit Boundaries
Denied Withdrawn



0 1,100 2,200 4,400 6,600 8,800 Feet

State Permit Applications

- Antelope Pad (Petro Operating) is the only remaining pending 2a application.

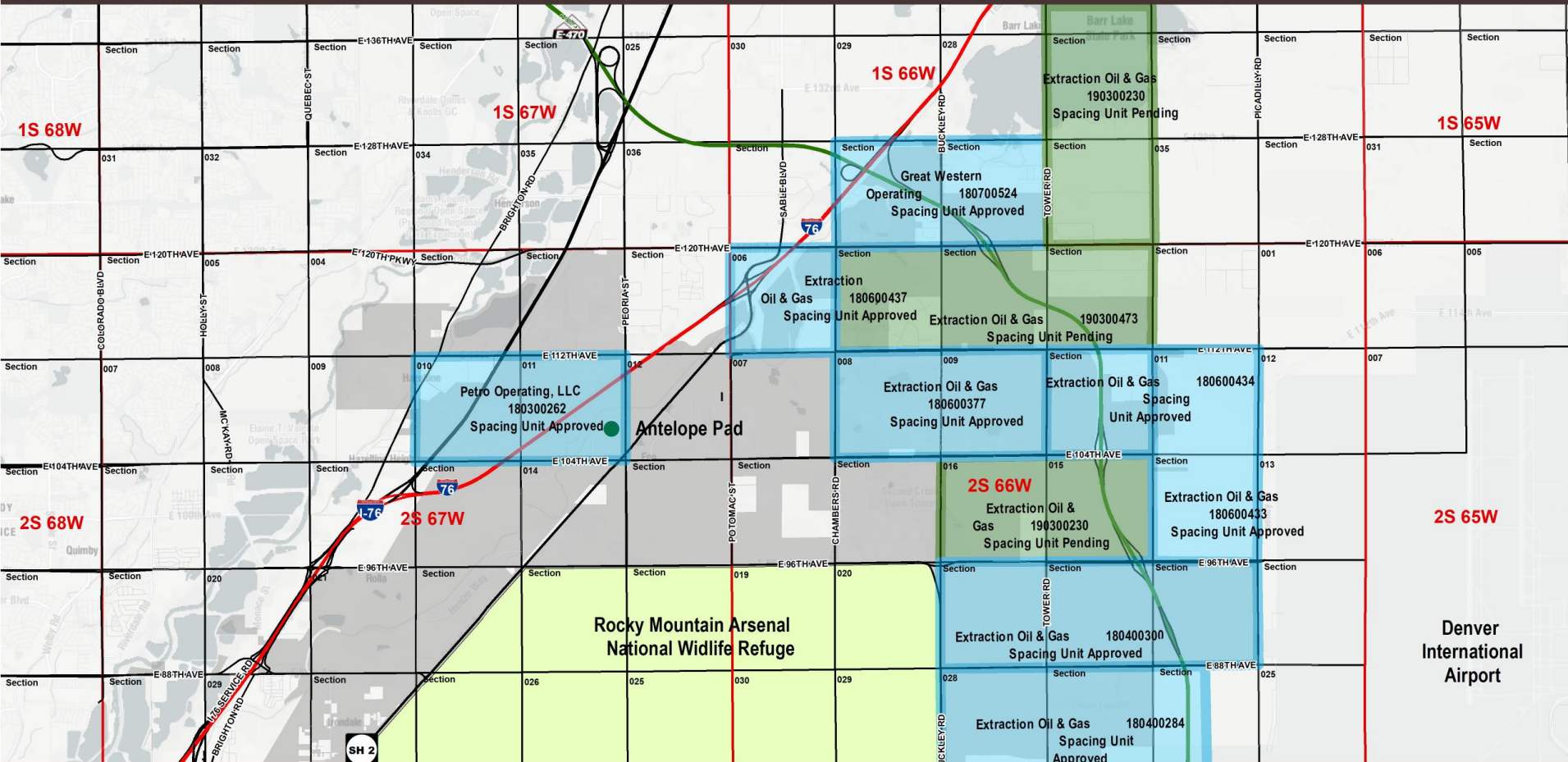


Map of COGCC Activity



Applications to the COGCC Within Commerce City Boundaries

Active as of 4/26/2021



Status of State Applications

- Spacing Unit Approved
- Spacing Unit Pending
- City Limit Boundaries
- Pending Form 2A
- Approved Form 2A



0 1,400 2,800 5,600 8,400 11,200 Feet

*This map represents all pending Form 2A applications, and spacing applications that have been submitted by Oil & Gas operators to the COGCC. Approval of a spacing unit by the COGCC does not constitute the ability to drill, unless Form 2's and 2a's within that section are also approved, and a city permit has been issued.



Environmental Update



General Updates

- Sheen investigation completed by Suncor on 7/8
 - Likely cause of May 22 event, was a spill of oil migrating into the aeration basin. The aeration basin is a wastewater treatment pond that treats pollutant in wastewaters
 - Likely cause of May 31 event was a small onsite fuel spill, related to filling a fuel tank providing fuel to generators in the area.
 - In response to the sheen events on May 22 and May 31, Suncor is improving protections to the outfall aeration basin to prevent any spills from entering the basin. Additionally, Suncor removed all loose soil around the aeration basin which will prevent further materials from entering the basin during storm events



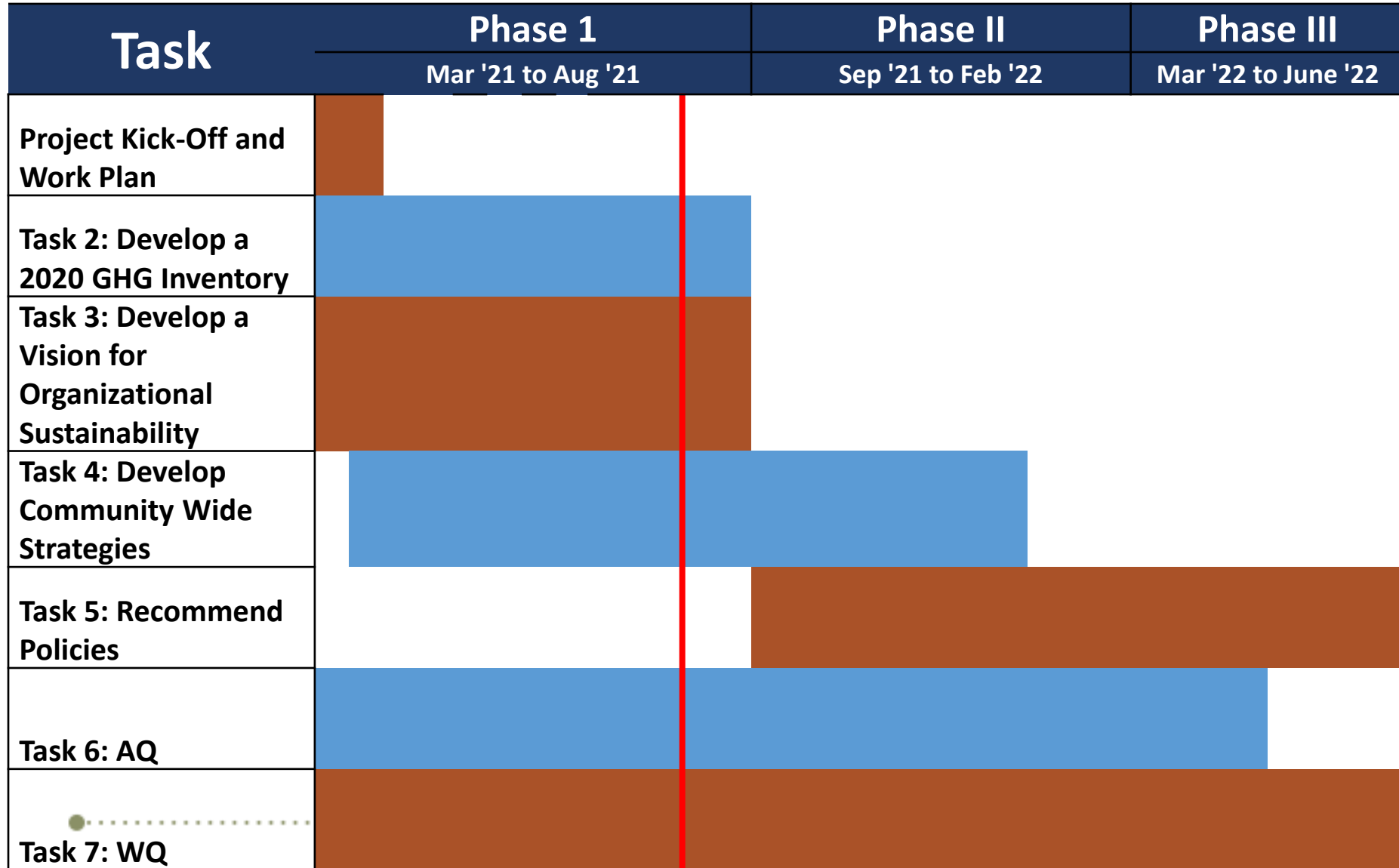
Policy Development Update

- City Organizational Sustainability Survey Launched on 7/8
 - Gathering feedback from all City employees on how energy efficiency, water use, and general sustainability are integrated into their day to day job functions, and potential areas for improvement
 - Focus group being scheduled with key internal staff members to review and prioritize potential improvements
- Recruitment for EPAC currently ongoing
 - 11 applications received as of 7/9
- Draft Air Quality Impacts Report completed and under review by staff
 - Based on existing stationary emission sources from CDPHE
- Draft LID (low impact development) stormwater guideline document
 - Will not be incorporated into 2021 stormwater manual criteria update, due to need for outreach with development community on potential methods, criteria, and requirements

Policy Development Update

- Mapping analysis on water quality impacts under way
- Content on ECS efforts launched on c3gov.com/environment
 - Additional pages on community outreach strategy, air quality, water quality, and GHG inventory will be added in the next 1-2 months
- GHG inventory at 80% completion
 - Final work being done to account for fugitive emission sources from various industrial operations
- Preparing materials for first EPAC meeting (to begin in September)

Timeline - Policy Development



CDPHE Information on Suncor

- 31 exceedances by Suncor since last update (May 27 – July 9)
- 7/8: Exceedance of Sulfur Dioxide (SO₂) limit of 15.68 lb/hr
 - Max reported value of 45 lbs/hr
 - Occurred due to a hole in the No. 2 SRU thermal reactor and unit shutdown
- 7/8: Exceedance of Sulfur Dioxide (SO₂) limit of 250ppm at 0% O₂ (12-hr avg)
 - Max reported value of 709 ppm
 - Occurred due to a hole in the No. 2 SRU thermal reactor and unit shutdown
- 7/8: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in flare gas (3-hr average)
 - Max reported value of 330ppm,
 - Occurred due to a hole in the No. 2 SRU thermal reactor and unit shutdown
- 7/8: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in fuel gas (3-hr average)
 - Max reported value of 300ppm, Occurred at the west plant
 - Occurred due to a hole in the No. 2 SRU thermal reactor and unit shutdown

a. Maximum self-reported value during event window

b. These are draft emissions estimates and are subject to revisions and/or updates. The final emissions will be reported on CDPHE's quarterly excess emissions reports.

c. Information regarding the cause of the deviation may change based on the results of pending investigations.



CDPHE Information on Suncor

- 7/8: Exceedance of Sulfur Dioxide (SO₂) limit of 500 lbs/24 hr period
 - Max reported value of 12,882 lbs
 - Occurred due to a hole in the No. 2 SRU thermal reactor and unit shutdown
- 7/1 – 7/3: Exceedance of 20% opacity limit (6 minute average)
 - Max reported value of 28%, Occurred at the plant 1 FCCU
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 7/1 – 7/4: Exceedance of Carbon Monoxide (CO) limit of 500ppvmd at 0% O₂ (1-hr average)
 - Max reported value of 2,018ppm, Occurred at the plant 1 FCCU
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 7/1: Exceedance of Sulfur Dioxide (SO₂) limit of 15.68 lb/hr
 - Max reported value of 348 lbs/hr
 - Occurred during start-up activities due to a trip of the No. 2 SRU
- 7/1: Exceedance of Sulfur Dioxide (SO₂) limit of 250ppm at 0% O₂ (12-hr avg)
 - Max reported value of 1,430 ppm
 - Occurred during start-up activities due to a trip of the No. 2 SRU

CDPHE Information on Suncor

- 7/1: Exceedance of Sulfur Dioxide (SO₂) limit of 500 lbs/24 hr period
 - Max reported value of 652 lbs
 - Occurred during start-up activities due to a trip of the No. 2 SRU
- 6/26 – 6/27: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in flare gas (3-hr average)
 - Max reported value of 315ppm, Occurred at the plant 1 main flare
- 6/21 – 6/22: Exceedance of 20% opacity limit (6 minute average)
 - Max reported value of 28%, Occurred at the plant 1 FCCU
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/21 – 6/22: Exceedance of Carbon Monoxide (CO) limit of 500ppvmd at 0% O₂ (1-hr average)
 - Max reported value of 2,018ppm, Occurred at the plant 1 FCCU
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/19 – 6/20: Exceedance of Sulfur Dioxide (SO₂) limit of 15.68 lb/hr
 - Max reported value of 15.99 lb/hr, Occurred at the west plant
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event

CDPHE Information on Suncor

- 6/19 – 6/20: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in fuel gas (3-hr average)
 - Max reported value of 300ppm, Occurred at the west plant
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/19 – 6/20: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in flare gas (3-hr average)
 - Max reported value of 291ppm, Occurred at the west plant main flare
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/17: Exceedance of Sulfur Dioxide (SO₂) limit of 500 lbs/24 hr period
 - Max reported value of 2,127 lbs
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/17: Exceedance of Sulfur Dioxide (SO₂) limit of 15.68 lb/hr
 - Max reported value of 27.7 lbs/hr
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/16: Exceedance of Sulfur Dioxide (SO₂) limit of 250ppm at 0% O₂ (12-hr avg)
 - Max reported value of 453 ppm
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event

CDPHE Information on Suncor

- 6/17: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in fuel gas (3-hr average)
 - Max reported value of 300ppm, Occurred at the west plant
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/17: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in flare gas (3-hr average)
 - Max reported value of 300ppm, Occurred at the west plant main flare
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/16: Exceedance of 500 lb or greater release of Sulfur Dioxide (SO₂) limit under the EPCRA
 - Reported release of 2,136 lbs
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/14: Exceedance of CO limit of 0.060 lb/mmBtu (24-hr average)
 - Max reported value of 0.067
 - Occurred at boiler 8 due to planned start up activities following the 2021 turnaround maintenance event
- 6/14: Exceedance of Sulfur Dioxide (SO₂) limit of 15.68 lb/hr
 - Max reported value of 29.13 lbs/hr
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event



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CDPHE Information on Suncor

- 6/14: Exceedance of Sulfur Dioxide (SO₂) limit of 250ppm at 0% O₂ (12-hr avg)
 - Max reported value of 655 ppm
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/14: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in fuel gas (3-hr average)
 - Max reported value of 208ppm, Occurred at the west plant
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/14: Exceedance of greater than 5 minutes of visible emissions in a 2 hour period
 - Max reported value of 7 minutes, 52 seconds
 - Occurred at plant 3 flare, due to planned start up activities following the 2021 turnaround maintenance event
- 6/10: Exceedance of CO limit of 0.060 lb/mmbtu (24-hr average)
 - Max reported value of 0.1 at boiler 6, 0.11 at boiler 8
 - Occurred at boilers 6 & 8 due to planned start up activities following the 2021 turnaround maintenance event
- 6/10: Exceedance of Sulfur Dioxide (SO₂) limit of 15.68 lb/hr
 - Max reported value of 29.13 lbs/hr
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event

CDPHE Information on Suncor

- 6/10: Exceedance of Sulfur Dioxide (SO₂) limit of 250ppm at 0% O₂ (12-hr avg)
 - Max reported value of 735 ppm
 - Occurred due to planned start up activities following the 2021 turnaround maintenance event
- 6/9: Exceedance of Hydrogen Sulfide (H₂S) limit of 162ppm in flare gas (3-hr average)
 - Max reported value of 175ppm, Occurred at the east plant flare
 - Occurred due to an upset and relief valves lifting to the flare



Suncor Monthly Update

- The following information is provided by Suncor regarding their recent updates and activities at the Commerce City Refinery.
- **Refinery maintenance:**
 - The refinery's planned maintenance, also called turnaround, has been completed. This work included the upgrade of the automatic shutdown system for the Plant 1 Fluidized Catalytic Cracking Unit (FCCU). The number of emissions exceedances from this year's work decreased 28% compared to the last turnaround in 2016, and the duration of emissions decreased by 56%.
- **Sand Creek update:**
 - The investigation summary report for the sheens that appeared on May 22 and May 31 is available at Suncor.com/Colorado. Subscribers of Refinery Notifications have been alerted.
- **Community air monitoring:**
 - CC-ND Air Monitoring, a new air monitoring network for the Commerce City and North Denver communities, is launching soon. For information or to watch the public meeting recordings, go to Suncor.com/CCND-air.
- **Sand Creek update:**
 - As of June 1, subscribers began receiving notifications in English and Spanish about operational activities at the Commerce City Refinery, such as repairs, maintenance, and startup/shutdown processes. Text SUNCOR to 888777 or visit Suncor.com/CCRSignUp to learn more and sign up.



Questions?

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