

# 2022 Annual Air Quality Update

Planning Commission/Air Quality Natural Resource Commission

May 24, 2022



# Background

- 1995: City adopted code amendments to “regulate activities that contribute to the degradation of the air quality within City limits”, specifically related to offensive odors
- Established an Air Quality and Natural Resource Commission to deal with:
  - Odor issues
  - Also act as the Plant Management Advisory Commission (noxious weeds)
- Originally a separate citizen’s board, the role was subsequently transferred to the Planning Commission to act in this capacity



# Commission's Functions

- Develop & recommend an odor management plan for the City and its environs to be reviewed and transmitted to City Council at least every 3 yrs
- Review odor complaints and formally designate those sources determined to be significant generators
- Issue “odor control permits”
- Consider appeals to staff actions taken in response to odor complaints



# Odor History

1995

- Extensive complaints regarding offensive odors
- Council adopted air quality ordinance
  - Violation if 10+ verified complaints in six hour period or;
  - Odor intensity reading greater than 7:1 d/t (dilution threshold)
  - Odor hotline established



# After one year...

- Council amended ordinance to be more responsive:
  - Violation now THREE or more confirmed calls (6 hours)
  - No change in dilution threshold
  - Community Survey completed – odor identified as 2<sup>nd</sup> greatest issue



# 1997 - 2001

- Minor adjustments to ordinance (procedural)
- Several hundred complaints received annually
  - 1997: 650
  - 1998: 230
  - 1999: 358
  - 2000: 363
  - 2001: 230
- 2001 & 2002: Seven companies (sources) were cited with violations
  - All stipulated to their liability



# 2002-2010

- Reduced number of complaints from previous years
- 2004 Citizen Survey – odor dropped to the 8<sup>th</sup> greatest concern
- 2009/2010 – Due to lower call volume, staffing requirements lessened



# 2011 - 2016

- Spike in odor complaints – high percentage described as “rendering”/JBS
- City staff worked proactively with JBS to address
- JBS submitted voluntary compliance plan
  - Improve scrubbing technology
  - Raised odor stack
  - Direct and regular contact with JBS representatives





# Recent History

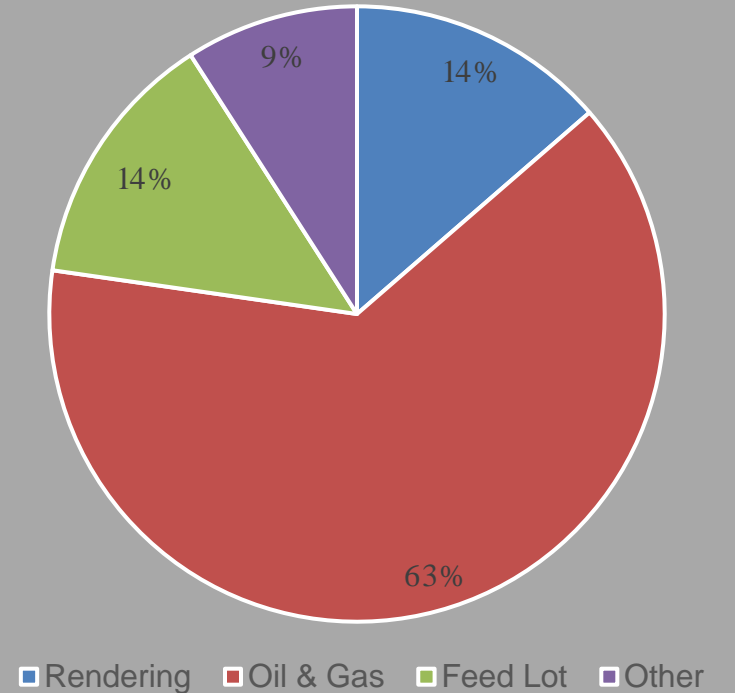
- 2017 & 2018 - low number of odor complaints (no violations)
- 2019 – uptick in complaints (no violations)
- 2020 – minimal odor complaints (COVID/furloughed staff - no violations)
- 2021 – Minimal odor complaints (no violations)
- Consistent source of odor complaints received – JBS
  - Continue to work with JBS on voluntary compliance plan



# 2017 Complaints-sources

22 Total Source Complaints

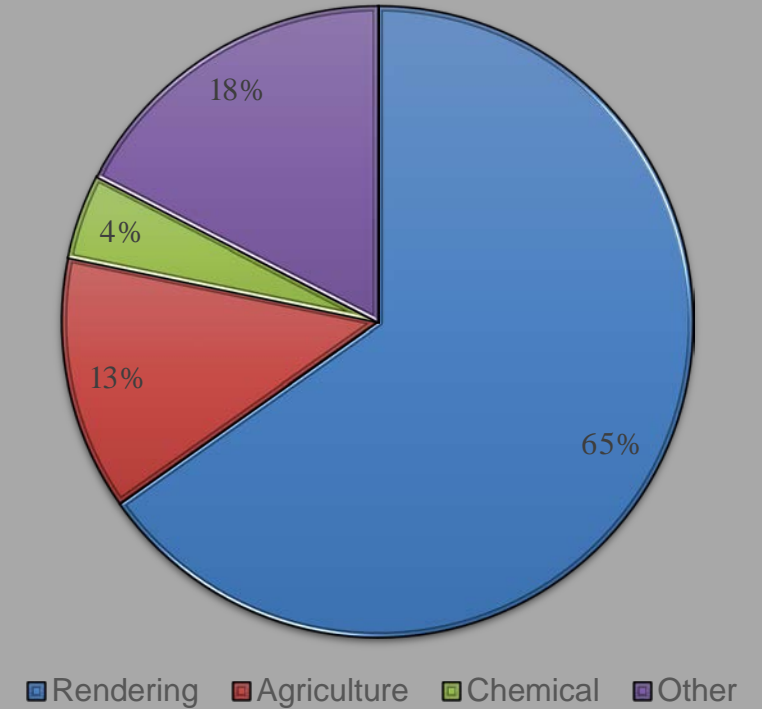
- Rendering = 3
- Oil & Gas = 14
- Feed Lot = 3
- Other = 2



# 2018 Complaints-sources

23 Total Source Complaints

- Rendering = 15
- Agriculture = 3
- Chemical = 1
- Other = 4

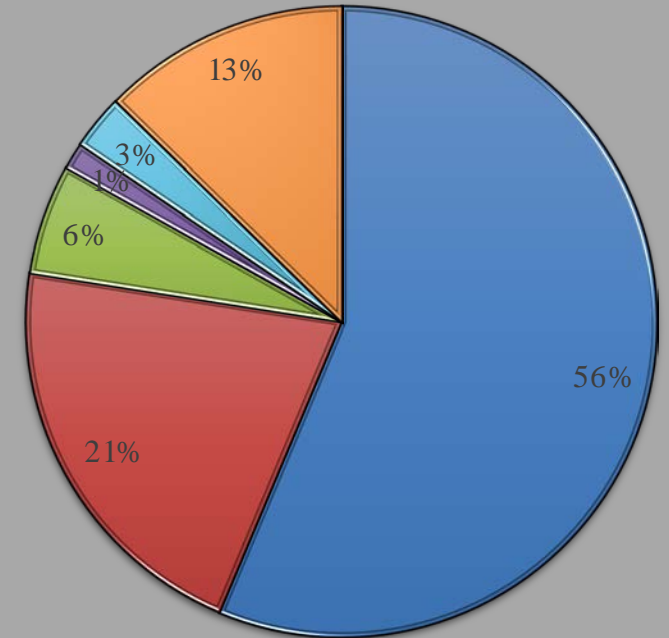


# 2019 Complaints-sources

71 Total Source Complaints

- Rendering = 40
- Hide Plant = 15
- Agriculture = 4
- Sewer = 1
- Oil & Gas = 2
- Other = 9

\* Average response time = 25 Minutes

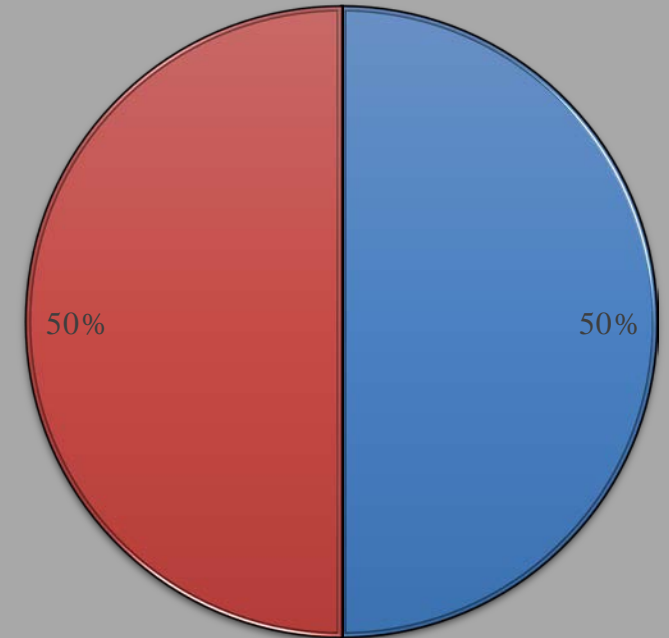


■ Rendering ■ Hide Plant ■ Agriculture ■ Sewer ■ Oil & Gas ■ Other

# 2020 Complaints-sources

4 Total Source Complaints

- Hide Plant = 2
- Other = 2



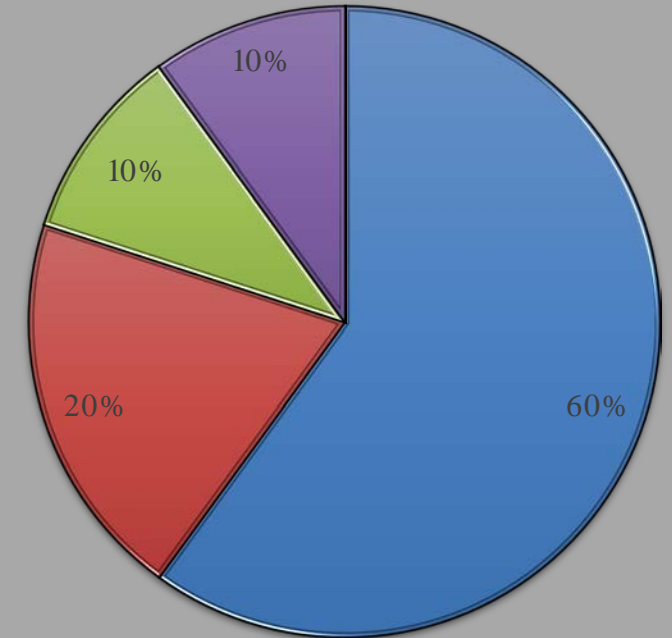
■ Hide Plant

■ Other

# 2021 Complaints-sources

10 Total Source Complaints

- Hide Plant = 6
- Burning Smell = 2
- Dog Waste = 1
- Other = 1



■ Hide Plant ■ Burning Smell ■ Dog Waste ■ Other

# Odor Alert Condition & Violation

- **Threshold**
  - At least two confirmed 7:1 d/t readings within 1 hour (15 minutes apart)
    - City can investigate independent of complaints

**OR**

- **Complaints**
  - **Three independent complaints within six hours that can be field verified (w/o judgement of the type of smell or instrumentation)**



# Odor Certification

Colorado Air Pollution Control Commission

- Determine & grade odor emissions
  - Use of Nasal Ranger
  - Scentometer
- 
- *Only certified inspectors can measure odor emissions*





# Investigation Process

- Investigate within 1 hour of complaint
- Triangulate possible source
- Inspection takes place outside of property line (property boundary)
- Confirm complaints
- Use instrumentation measurement as warranted



# If Violation level is present:

- Contact source representatives to determine circumstances
- Possible Notice of Violation
- Show cause hearing before Commission (or consideration of stipulation)
- Follow up by staff



# Final Points & Action Items

- 2022 complaints to date: 6 (full year reported in January 2023)
- Include odor question in bi-annual community survey to discern degree of community concern
- Review City Council Strategic Plan for odor-related action steps
- Odor Management Plan Update should be prepared per 3-year review cycle for Commission review and consideration (Jan 2023)



# QUESTIONS/DISCUSSION

