



➔ **REGULATION 7 & REGULATION 22**

December 2021 Rulemaking

global **environmental** and **advisory** solutions



INTRODUCTION:



Pat Dilsaver-Senior Scientist



REGULATION NO. 7

Key Changes and Challenges from December 2021 Rulemaking

Combustor Performance Testing



- For combustors utilized to comply with 95% performance efficiency for:
- Storage tanks (Section I.D, II.C.1) with controlled actuals above 6 tpy of VOC
 - Compressors (wet seal degassing) (Section II.B.3.b)
 - Glycol Dehydrators (Section II.D)
 - Well completion and maintenance (Section II.F)



Due dates for sites in operation prior to December 31, 2021:

Location Status	Oct. 31, 2023	Oct. 31, 2024	May 1, 2025	May 1, 2026	May 1, 2027	May 1, 2028
Within a Disproportionately Impacted Community	15%	40%	70%	100%	---	---
Nonattainment	10%	30%	50%	80%	100%	---
Attainment	5%	15%	30%	50%	75%	100%



Due dates for sites in operation after December 31, 2021: Combustors must be tested within 2 years of commencing operation, or 5 if the device has never been in operation (newly manufactured) and has been tested by manufacturer

Combustor Testing-Cont.

- Initial notification of sites and planned testing year due to the Division on July 31, 2022
- Retesting due 5-10 years after initial test based on location
- COGA pursuing outlet only testing to reduce costs
- Low flow facilities may have difficulty with traditional 3- 1 hour tests
- BMS systems may allow flow for only short spurts



Flowmeter Installation prior to ECD

- Installation of flowmeter on ECD's required to be installed according to table
- Shortage of meters, labor required to retrofit facilities
- Not required if deemed technically or economically unfeasible and approved by the Division
- Alternative methods can be used if approved by the Division

Facility Status	Compliance Date
Devices where operation began before February 14, 2022 in disproportionately impacted communities	December 31, 2022
All other devices that started operations before February 14, 2022	May 1 st , 2023
Devices that began operation after February 14, 2022	At commencement of operation

Updated Component Inspections frequencies utilizing AIMM

➔ At Natural Gas Compressor Stations beginning January 1, 2023:

Fugitive VOC Emissions (R12 Basis)	Inspection Frequency
> 0 tpy and ≤ 12	Quarterly
> 0 and < 50, located within a disproportionately impacted community or within 1,000 ft of an occupied area	Bimonthly



➔ At Well Production Facilities that commence operation **before** May 1, 2022, inspection frequency beginning January 1, 2023:

Facility Fugitive Emissions Threshold	Frequency (AIMM)
> 0 and < 2	Annual
>0 and < 2 within 1,000 ft of an occupied area	Semi-annual
> 0 < 2, within a disproportionately impacted community in the nonattainment area	Semi-annual
> 2 and < 50	Quarterly
> 2 and < 12, located within 1,000 ft of an occupied area or within a disproportionately impacted community	Bimonthly
> 12, located within a disproportionately impacted community or 1,000 ft of an occupied area	Monthly
> 20, without storage tanks	Monthly
> 50, with storage tanks	Monthly

➔ At Well Production Facilities that commence operation **AFTER** May 1, 2022: Monthly

LEAK REPAIR SCHEDULE

→ Beginning February 14, 2022

For facilities Using AVO or Non-quantitative AIMM, within a disproportionately impacted community, must repair the leak in accordance with repair schedule in II.E.7.b. or conduct a follow up monitoring using EPA method 21, within 5 working days of leak detection. If shown that leak requires repair, must be repaired as follows;

- If greater than 500 PPM and less than 10,000 PPM hydrocarbons-must be repaired in accordance with II.E.7.a

- If Method 21 follow up not performed, or greater than 10,000 PPM hydrocarbons-must be repaired In accordance with II.E.7.b

- Must take action where feasible to mitigate emissions from leaks placed on delay of repair **no later than 48 hours after placing on delay**

- Leaks on delayed repair list must include date, duration, and which leaks were not repaired within 5 working days after discovery, and schedule for repairing the leaks, including the date parts were ordered.

- Leaks on delayed repair list must include a description of action taken to mitigate emissions, or reason why not technically feasible

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PDO James

Not sure this actually changes much, just adds an option to repair on a different schedule if you follow up with Method 21? Struggling on what the actual change here is

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WELL OPERATIONS AND MAINTENANCE

January 1, 2023- For all downhole well maintenance and liquids unloading activities:

- Attempt to create differential pressure to unload without emitting
- Monitor wellhead pressure and flowrate of natural gas
- Equalize wellhead pressure with separator pressure prior to conducting unloading, swabbing, or maintenance activities
- Close wellhead vents to atmosphere and end direct emission of natural gas to atmosphere
- Utilize artificial lift where feasible, or except on new wells
- Must utilize capture and recovery and utilize a control device unless:
 - In a DI community, with less than 6 unloading or swabbing events per year
 - Not in a DI community, with less than 6 unloading events per well, and did not have more than 10 aggregate events within a rolling 6-month period
- Keep record of events, volume of gas vented, if controls were used
- Records of events to be included starting in the June 30, 2023 annual report

MIDSTREAM SEGMENT PIGGING OPERATIONS, BLOWDOWNS

Capture and Control Required:

Status/Location	Pigging of 12" OD or larger pipeline	Other Pigging Units	Compressor Blowdowns	Other Blowdowns
Operation before Feb. 14, 2022, located within a DI community	Required if > 500 psig	Uncontrolled VOC ≥ 0.5 TPY or methane ≥ 1 TPY	Uncontrolled VOC ≥ 0.75 TPY or methane ≥ 1.5 TPY Not including events where volume < 50 CF	All other blowdowns where volume > 50 CF
Operation before Feb. 14, 2022, not in a DI community	Required if > 500 psig	Uncontrolled VOC ≥ 1.0 TPY or methane ≥ 2 TPY	Uncontrolled VOC ≥ 1 TPY or methane ≥ 2 TPY Not including events where volume < 50 CF	All other blowdowns where volume > 50 CF

- Residual gas after capture/control can be vented IF below thresholds above
- Open Flare may be used pending Division approval if capture not feasible

Status/Location	Jan. 1, 2023	June 1, 2023	Jan. 1, 2024
Operation before Feb. 14, 2022, located within a DI community	50%	100%	--
Operation before Feb 14, 2022, not in a DI community	--	--	100%

STAND ALONE PIGGING STATIONS

Status/Location	Capture/Control Deadline
Location in DIC commencing operation PRIOR to February 14, 2022 - High pressure pipelines with 12" OD or greater - Uncontrolled VOC \geq 0.5 TPY or methane \geq 1.0 TPY	January 1, 2023
Location in DIC commencing operation AFTER February 14, 2022 - High pressure pipelines with 12" OD or greater - Uncontrolled VOC \geq 0.5 TPY or methane \geq 1 TPY	Upon Startup
Location OUTSIDE DIC commencing operation PRIOR February 14, 2022 - High pressure pipelines with 12" OD or greater - Uncontrolled VOC \geq 1 TPY or methane \geq 2 TPY	January 1, 2024
Location OUTSIDE DIC commencing operation After February 14, 2022 - High pressure pipelines with 12" OD or greater - Uncontrolled VOC \geq 1 TPY or methane \geq 2 TPY	Upon Startup

Pneumatic Device Inspection at Well Production Facilities

- Beginning **calendar year 2023**: Owners of all natural gas driven pneumatic controllers must be inspected using an approved instrument monitoring method at the same frequency as those in II.E.4.e and II.E.4.f (storage tanks) OR
 - **Quarterly** for sites that have fugitive VOC emissions >0 and <50 TPY
 - **Bimonthly** for sites that have fugitive VOC emissions >0 and <50 TPY and are within 1,000 feet of an occupied area or within a DI community
 - **Monthly** for sites if fugitive VOC emissions are greater than 50 TPY
 - **Must submit annual report of inspections by May 31 of each year, beginning in 2024**

Changes to Emission Inventory Reporting

Beginning in 2022 for CY 2021 the following must be reported:

- Owners must state if activities are located in a disproportionately affected community
- Operations of pig launchers and receivers
- Blowdowns of all other equipment where physical volume is 50 CF or more
- Stages of separation at facility
- Must submit a list of each well production facility, all associated wells by API number, associated location ID, and total CY throughput of liquids, produced water and natural gas.
- Methods used for calculation other than 40 CFR 98, must submit documentation of what was reported to the EPA, and justification
- If the division has a published state emissions factor, this factor must be used
 - If a site specific factor is used, then documentation must be provided. Conduct gas speciation every 5 years to verify accuracy of site specific factor

Emission Inventory Reporting, Continued

Beginning 2023 for 2022:

- Must measure or estimate the volume of natural gas vented or flared during drilling, completion, and production
- Must report blowdowns of all other equipment where physical volume is 40 CF or more
- Must submit gas composition and component counts used for fugitive emissions calculations
- Must report a basis for each maintenance or safety event
- Pneumatic controllers at wellhead must be aggregated with the associated facility or be reported individually
- Pneumatic pumps must be aggregated with the associated facility or reported individually
- Reciprocating compressor leaks or vents must be aggregated per compressor

Emission Inventory Reporting, Continued

Beginning 2024 for 2023

- Must report blowdowns where volume is more than 1 CF
- Must report which capture and control method and best practice is used for each pigging unit



REGULATION NO. 22

Key Changes and Challenges from December 2021 Rulemaking

Regulation 22- Midstream Fuel Combustion Committee

- By July 31, 2022 midstream segment owners must provide;
 - Name, location of each natural gas processing and compressor station
 - Inventory of ALL fuel combustion equipment and any electric motors
 - Steering committee will identify tons of CO2e reduction to be achieved by the segment and owners
 - Steering committee guidance document to be made public by December 31, 2022.
 - Final guidance document due by March 31, 2023.

Regulation 22- GHG Intensity Program for Upstream Segment

- Beginning January 1, 2023 all intensity operators must participate in this program
- Company plans must be submitted by August 31, 2023
- By 2025, operators must begin achieving mtCO₂e/kBOE targets for preproduction and production emissions on all wells
- New facilities have intensity targets for any wells and facilities coming online in that calendar year
- Annual verifications due June 30 of 2024 onward

Intensity Targets in mtCO2e/kBOE

Operator Overall Intensity Targets			
Operator	2025	2027	2030
Majority	10.94	8.46	6.80
Minority	34.39	26.60	21.38

New Facility Intensity Targets			
Facility Location	2023-2025	2026-2027	2028-2030
NAA and DI	7.7	6.0	4.8
Rest of State	8.59	6.64	5.34

Majority Operators have $\geq 10,000$ KBOE of production

KBOE = Thousands of Barrels Equivalent, 1,000 bbl oil/condensate = 1 KBOE, 5.8 MMscf gas = 1 KBOE

THANK YOU

Questions?



Pat Dilsaver
Senior Scientist– SLR Consulting

 pdilsaver@slrconsulting.com

 www.slrconsulting.com