

Energy, Minerals and Natural Resources Department Oil Conservation Division

- Waste Rule Update
- Orphan Well Plugging & Site Remediation
- OCD Enforcement FY22-24
- Oil and Gas Facility Setbacks

DYLAN FUGE, DIRECTOR

OCTOBER 5, 2023

Waste Rule Update

OCD Waste Rule – Refresher

- **Statutory Framework:** Oil & Gas Act directs OCD to protect Correlative Rights, Public Health and the Environment.
 - Within that framework, OCD established robust rules to minimize waste after a multi-year stakeholder process.
- **Phase 1:** initiated natural gas loss reporting.
 - Accurate data critical to establishing meaningful baselines to measure progress.
- **Phase 2:** began in 2022; established enforceable targets for operators to reduce waste.
 - Overall goal: reduce waste to achieve 98% gas capture by 12/31/2026.
 - The rule also prohibits routine venting and flaring at both upstream (production wells & facilities) and midstream (gas gathering pipelines & boosting facilities) facilities.

State Regulation Comparison				
Here's how New Mexico's new rules stack up against other similar oil-producing states				
Rule Specification	New Mexico	North Dakota	Colorado	Oklahoma
Gas capture percentage	98%	91%	No capture percentage, requirements tracked differently in these states	
Regulations for gas gathering pipelines and midstream operations	Yes	No	No	No
Curtailing of production for not meeting targets	Yes	No	No	No
Prohibits routine flaring	Yes	No	Yes	No

OCD Waste Rule – Key Dates

Date	Requirement
<i>5/25/21</i>	<i>Effective Date of Parts 27 and 28</i>
<i>8/23/21</i>	<i>Midstream Operations Plan and GIS Map of systems requirements take effect.</i>
<i>10/1/21</i>	<i>Operators must begin to gather data for quarterly natural gas venting and flaring reports.</i>
<i>2/15/22</i>	<i>Deadline to submit Q4 2021 natural gas venting and flaring reports to Division.</i>
<i>4/1/22</i>	<i>Operators begin collecting monthly natural gas venting and flaring data using new form C-115.</i>
<i>5/15/22</i>	<i>Deadline to submit Q1 2022 natural gas venting and flaring reports to Division.</i>
<i>6/1/22</i>	<i>Operators first monthly C-115B natural gas venting and flaring report due.</i>
<i>6/1/22</i>	<i>Operators must file a copy of form C-115B with the New Mexico State Land Office re: information about venting and flaring on Division’s website.</i>
<i>2/28/2023 & Each Sub. Year</i>	Deadline to certify compliance with gas capture requirements and compliance schedule as applicable.
12/31/26	All operators must capture not less than 98% of the natural gas they produce or gather in each of the two reporting areas, one north and one south of the Township 10 North line.

OCD Waste Rule – 2023 Deadlines

- **Flare Stack Upgrades:** The rule requires wells or facilities that produce > 60mcf/d and have a flare stack that was installed before May 25, 2021, to be retrofitted with an automatic ignitor, continuous pilot, or technology that alerts for flare malfunctions no later than 18 months after May 25, 2021.
 - OCD established a certification to verify completion; certification due **Dec. 31, 2022.**
 - Certification issued under 1978 NMSA 70-2-11 A, 70-2-12 A, and 19.15.27.8.E.(3) NMAC.
 - As of 9/30/2023 OCD has received **38 certifications.**
 - We do not have a firm number we were expecting but think this is a little light.
 - Status of flare retrofits are part of ongoing compliance reviews.
- **February 28, 2023,** deadline to certify compliance w/ gas capture baselines/compliance schedules.
 - What is being certified to?
 - If an operator is already at 98%, they must maintain that or better going forward.
 - If an operator is less than 98%, the rule establishes a compliance schedule to achieve 98%.
 - At this point, **ONLY** OCD can make changes to an operator's baseline capture rate
 - As of today, 90 percent of actively producing operators have submitted their certifications

OCD Waste Rule – Progress to Date

- ~79% of the operators with active production are regularly reporting
 - Non-reporters represent <1% of the gas produced and only ~7% of the wells
- Comparing pre-rule to post-rule OCD has observed:
 - a **36% reduction in gas lost**, with **routine venting and flaring down 69%**,
 - significant reductions in **venting and flaring from tanks (down 30%)** and **during maintenance and repair activities (down 69%)**, and
 - that YTD gas capture percentages increased slightly, even though production increased 8%+.

	Capture Percentage	Gas Produced	Gas Sold
July 2022 Total:	99.15	236,281,646	228,691,779
July 2023 Total:	99.17	257,164,162	249,494,431

- Even with these new requirements kicking-in:
 - In 2022 New Mexico alone responsible for 50% of total US production growth.
 - Bottomline, industry is thriving, and we are making progress on methane emissions.
- OCD has also seen:
 - significant investments in redundant takeaway capacity,
 - enhanced reporting and monitoring capacity, and
 - changes in operational practices.

OCD Enforcement FY22-24

OCDs Enforcement Tools

- **(1) OCD Rules and Regulations** cover
 - Submission requirements
 - OCD currently has 123 form types - notices of intent to perform work, subsequent reports/information following work, or requests for authorizations – all of which help inform our oversight.
 - Operational requirements that address:
 - how an operator must respond to a release,
 - the shape an operator must keep their equipment in,
 - situations where they are allowed to vent or flare,
 - how they must conduct specific tests to demonstrate well integrity, both initially and on an ongoing basis, and
 - how they are allowed to transport product or waste.
- **(2) Field Compliances**
- **(3) Response Requirements**
- **(4) Administrative Enforcement**
 - Types of sanctions: civil penalties, permit denials, revoking authorizations to transport, and plugging orders.



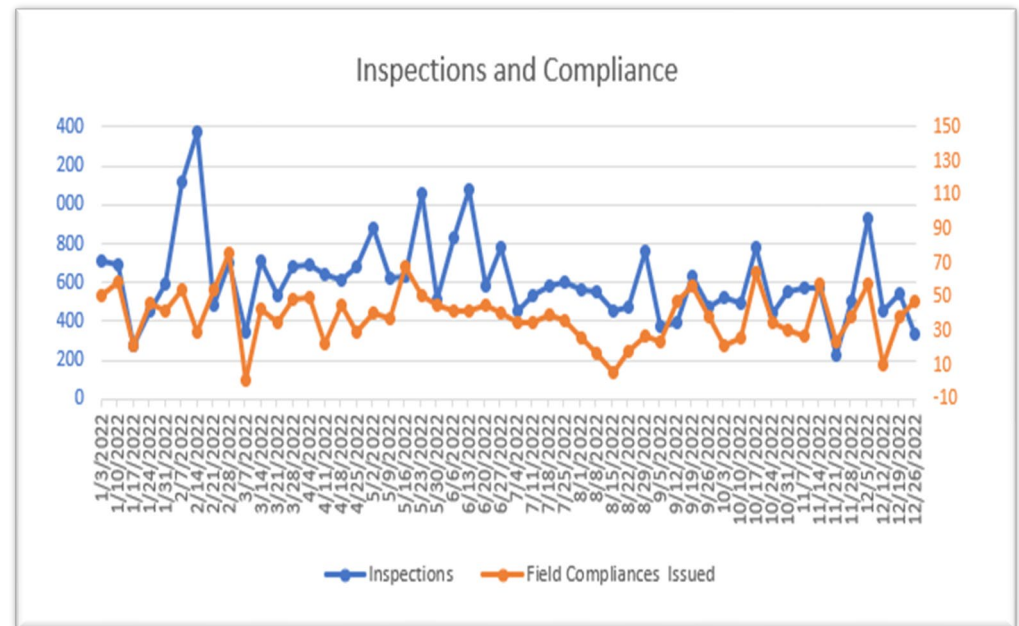
Upfront Compliance Statistics

In 2022:

- OCD received 105,239 records (this doesn't include production reports).
 - OCD rejected 6,454 individual applications.
- OCD approved 91,752 applications.
 - Of these 46,813 were auto approved as informational records.
 - 6,313 were subject to OCD hearings.
 - 52,113 were handled directly by OCD personnel.
 - 40,114 Conditions of approval were placed on approved requests.
 - These types actions encourage/ensure compliance up front in terms of project design, construction and implementation.

Inspection & Field Compliance Statistics

- OCD performs ~30,000 inspections annually (our goal is to visit every site at least once every 3 years)
- In 2022, because of those inspections, OCD issued 2,561 field compliances.
 - To date, operators have taken 1,713 actions to close those compliances.
 - The remaining compliances (those that are still open) require additional actions by operators.
 - Failure to address open compliances can result in subsequent enforcement.
 - Field compliances can include:
 - sign issues,
 - contamination discovery and remediation,
 - required/missing integrity testing, or
 - small releases.
 - Failure to address or respond to an issued field compliances can result in additional enforcement.
 - If inspections uncover more serious issues, they can be referred directly to administrative enforcement.



Administrative Enforcement

- OCD lost civil penalty authority because of *Marbob Energy Corp. v. N.M. Oil Conservation Comm.*, 146 N.M. 24 (2009). That authority was reinstated in 2019 in the Produced Water Act.
- Since that date, OCD has formally issued 75+ Notices of Violation (“NOVs”) which in total proposed over \$12 million in civil penalties (to date OCD has assessed ~\$3.5 million in civil penalties).
 - To date, all NOVs have settled for some combination of stipulated penalties for future violations, prospective compliance actions, additional reporting requirements, and specific limitations on Operator’s future activities.
- We report annually on NOVs to the legislature.
 - In FY22, we issued 36 NOVs, resolving 19
 - In FY23, we issued 19 NOVs, resolving 16
 - In FY24, we have so far issued 2 NOVs, and have resolved 5 carryover NOVs from prior FYs.
- Administrative enforcements actions have covered the full range of issues OCD regulates.

OCD Orphan Well Plugging & Site Remediation Work

Orphan Well Plugging Program Update

- **What is an orphan well?**
 - OCD does not use the term orphan well.
 - In NM, orphan wells are a subset of inactive wells.
- **How many are there?**
 - 1700+ orphan wells (either known or likely) on state and private land.
 - 282 having plugging orders and are on our plugging list.
 - 312 previously plugged sites need remediation/reclamation.
- **OCD has a long-standing plugging program (averaging ~30-50/year).**
 - Industry plugs 200-400 wells per year (not orphans, just end of life wells).
- Historically, the primary resource for OCD plugging work has been the State Reclamation Fund
 - Fund Balance as of 6/30/2023 = \$20,451,505.
 - Fund replenishes itself through the tax established by the Oil & Gas Conservation Tax Act.
 - Anticipated revenue FY24 = \$16,262,400.
 - Legislatively authorized expenditures FY24 = \$16,262,400.
- While these resources are significant, they will not meet the need.
 - OCD is spending **\$118,946 on average** to plug each well, but costs have ranged from **\$50,386 (low-end) to \$320,481 (high-end)** just for plugging
 - Assessment, remediation and reclamation of a typical well pad with minor issues averages \$35,000 per site but can easily reach the millions if major remediation is required.

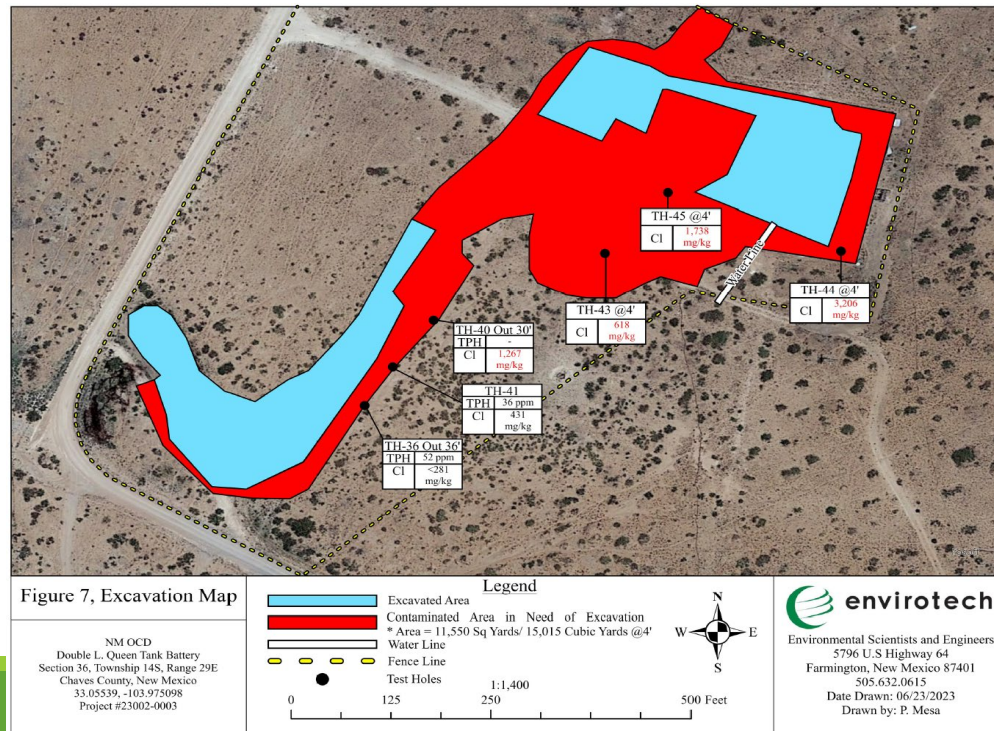


Current and Future Funding Opportunities

- **The Federal Bipartisan Infrastructure Law's \$4.7 billion in orphan well funding provides a historic opportunity from three different buckets.**
- **Initial Grant**
 - \$25,000,000 initial award with an effective date of October 1, 2022.
 - Requires methane emissions be measured both pre- and post-plugging.
 - Contractor and subcontractor wages must be at or above the US Department of Labor/NM Workforce Solutions prevailing wage rates.
 - \$25,000,000 obligated as of 9/30/23, must be expended by 10/1/2024.
- **Formula Grants**
 - OCD eligible to receive \$72,260,000.
 - Phase 1 of funding distribution open (funding opp. – \$18 to \$25 million); application in process.
- **Performance Grants**
 - Incentivizes states to make regulatory improvements to prevent orphan wells in the future
 - New Mexico expecting to qualify through bonding increase implemented in 2018
 - Incentivizes states to continue to spend state funds for orphan well plugging and reclamation
 - Grant funding to match states expenditures which exceeds the previous 10-year average

Current Status of Plugging Work

- With the influx of federal and state money, our plugging program has grown significantly:
 - We have **5 rigs** under contract (soon to be 6), plugging **~1 well/rig/week**
 - In FY23, we plugged **78 wells** (**65 w/ federal money** and **13 w/ state money**).
 - In FY24, we have plugged **30 wells** (**all w/ federal money**).
 - We have begun work on **8 remediation sites** (**3 large** and **5 smaller**).
- Our distribution of the plugging funds is roughly **60/40** between plugging and remediation/reclamation, with the latter costing significantly more per site.



Site Remediation Example



Before

Current State



Well Plugging Site Prioritization

- Of the subset of wells where OCD has a plugging order, we apply the following methodology.
- **Highest priority wells are those which threaten human health or the environment**
 - Wells with integrity issues, including active leaks.
- **Other wells are reviewed using the following criteria:**
 - Adjacent to occupied structures or within a municipal boundary,
 - History of integrity issues or non-compliance with OCD rules,
 - Lack of water protection casing,
 - Abnormally high well pressure,
 - Located in an agricultural area,
 - Age of well and last date of production,
 - Presence of hydrogen sulfide and/or naturally occurring radioactivity,
 - Proximity to a water supply well, and
 - Proximity to other orphan wells (for cost efficiency)

Plugging Challenges

Common challenges when plugging orphaned wells

- **Locating the wells**
 - Older wells may not be properly surveyed or permitted.
 - Often requires consultation with other agencies.
- **OCD must obtain legal orders through a hearing prior to plugging (notice and opportunity to respond for operator)**
- **Wellsite access**
 - For wells on private land, OCD must negotiate access
 - OCD can have to re-builds roads.
- **Downhole plugging issues**
 - Neglected wells have unknown issues including collapsed casings, improperly cemented casing, and production equipment stuck downhole
- **Environmental contamination**
 - Contamination onsite must be remediated
 - Unknown issues may result in significantly greater costs



Abandoned Well previously buried underground

Oil and Gas Facility Setbacks

Setbacks for Oil and Gas Act Facilities

The Oil and Gas Act does not currently authorize the OCD to establish/enforce setbacks between oil and gas facilities and other structures/resources – e.g., occupied buildings.

- **OCD's rules do require setbacks for a subset of facilities, including:**
 - 19.15.17 – imposes a 1,000' setback for permanent pits or multi-well fluid management pits from a residence, school, hospital, institution or church. Also, limits below grade tanks to 300' from a residence.
 - 19.15.34 - Prohibits a recycling containment from being within 1,000' of a residence, school, hospital, institution or church at the time of initial registration.
 - 19.15.36 - Prohibits surface waste management facilities from being within 500' of the nearest residence, school, hospital, institution or church at the time of initial application.
- **What are other states doing in terms of setbacks:**
 - **California:** 3,200' (proposed)
 - **Colorado:** 2,000'
 - **Montana:** No affirmative setbacks but requires notice within 1,320'
 - **North Dakota:** 500', unless agreed to in writing by owner of an occupied dwelling; also grants certain rights to owners of permanently occupied dwellings within 1,000'
 - **Texas:** None
 - **Wyoming:** 500', also requires notice with 1,000'

Oil & Gas Act Reform Efforts

Overview of Oil & Gas Act Reform Effort

- The New Mexico Oil & Gas Act has been around for a long time and has not been meaningfully updated since the late 80s/early 90s.
- OCD is working with key stakeholders to see if we can arrive at a consensus reform package for the upcoming session in the following areas:
 1. Freshwater Use,
 2. Lock-in 98% gas capture by 2026 target,
 3. Setbacks,
 4. Financial Assurance/Civil Penalty Updates,
 5. Fee Increases,
 6. Redirecting OCD Civil Penalties to Reclamation Fund, and
 7. Tighten well transfer rules/limits.

Thank You & Questions
