



U.S. Department of the Interior
Bureau of Land Management

2024 NMSLO Industry Training Commingling (Bureau of Land Management)





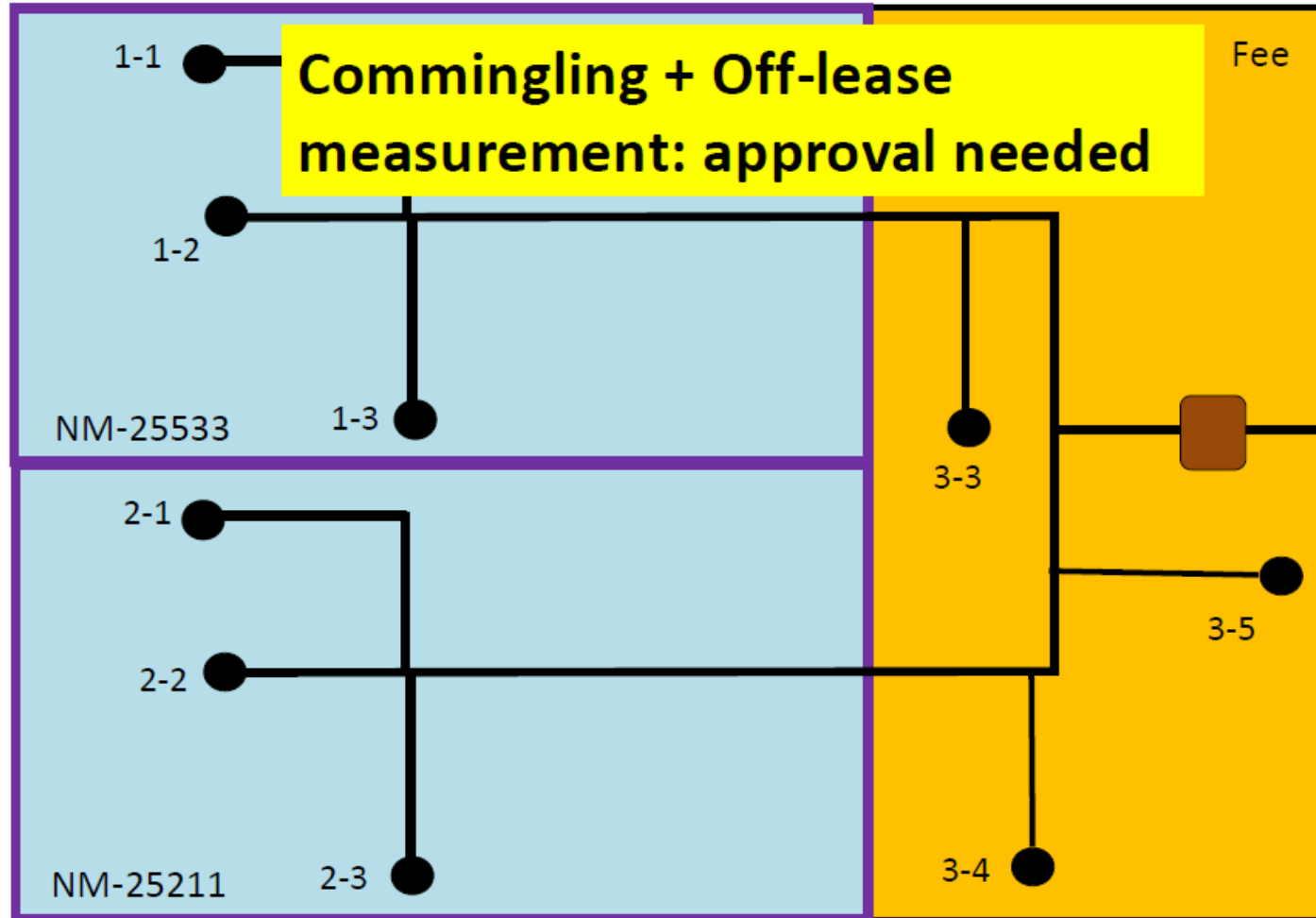
What is Commingling?

BLM

- 43 CFR 3170.3(a)
 - Commingling, for production accounting and reporting purposes, means **combining, before the point of royalty measurement**, production from more than one lease, unit PA, or CA, or production from one or more leases, unit PAs, or CAs with production from State, local governmental, or private properties that are outside the boundaries of those leases, unit PAs, or CAs.
 - Combining production from multiple wells within a single lease, unit PA, or CA, or combining production downhole from different geologic formations within the same lease, unit PA, or CA, **is not considered commingling** for production accounting purposes.



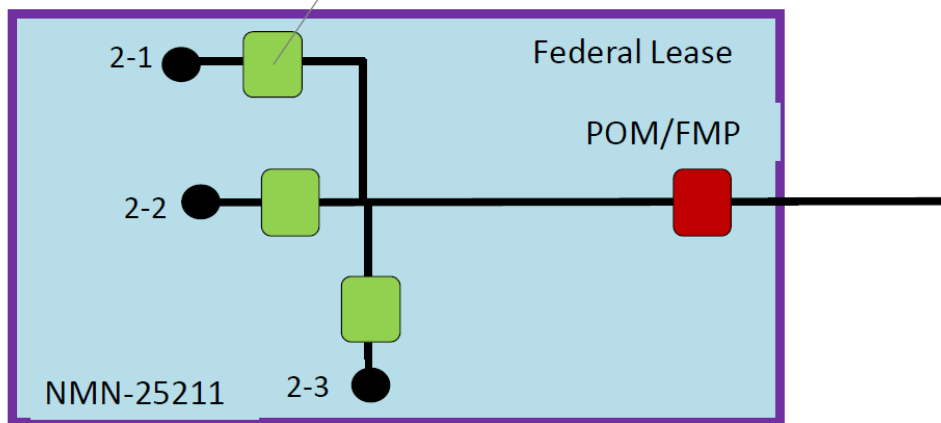
What is Commingling for BLM?





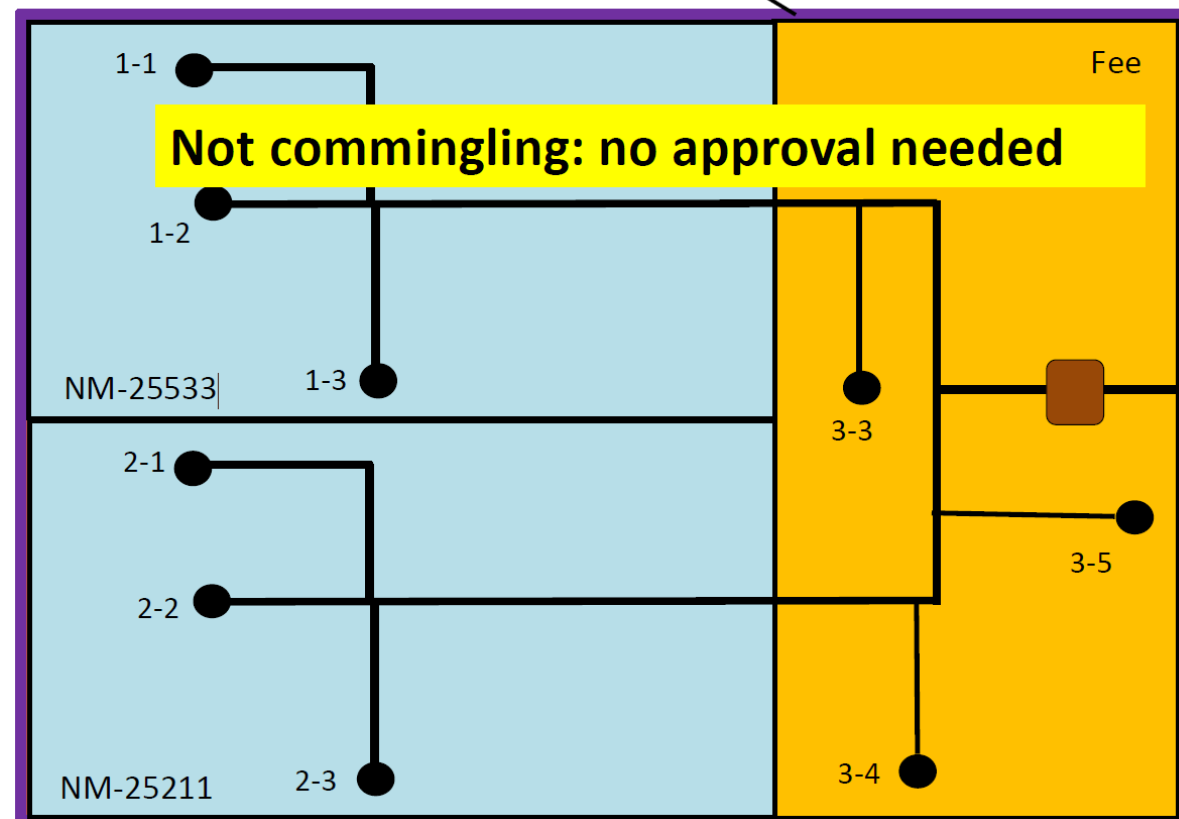
What is Not Commingling for BLM?

These are not allocation
meters



Not commingling

Unit Participating Area Approved (NM-45721A)





BLM Regulatory Requirements

§ 3173.12	Applying for a facility measurement point.
§ 3173.13	Requirements for approved facility measurement points.
§ 3173.14	Conditions for commingling and allocation approval (surface and downhole).
§ 3173.15	Applying for a commingling and allocation approval.
§ 3173.16	Existing commingling and allocation approvals.
§ 3173.17	Relationship of a commingling and allocation approval to royalty-free use of production.
§ 3173.18	Modification of a commingling and allocation approval.
§ 3173.19	Effective date of a commingling and allocation approval.
§ 3173.20	Terminating a commingling and allocation approval.
§ 3173.21	Combining production downhole in certain circumstances.
§ 3173.22	Requirements for off-lease measurement.
§ 3173.23	Applying for off-lease measurement.
§ 3173.24	Effective date of an off-lease measurement approval.
§ 3173.25	Existing approved off-lease measurement.
§ 3173.26	Relationship of off-lease measurement approval to royalty-free use of production.
§ 3173.27	Termination of off-lease measurement approval.
§ 3173.28	Instances not constituting off-lease measurement, for which no approval is required.
§ 3173.29	Immediate assessments for certain violations.



State Agency Regulatory Requirements

- NMOCD
 - Surface Commingling
19.15.12.10 NMAC
 - Downhole Commingling
19.15.12.11 NMAC
- NMSLO
 - Commingling and Off-Lease
Storage of Oil and Gas on State
Trust Lands
19.2.100.53 NMAC

<https://www.srca.nm.gov/parts/title19/19.015.0012.html>

<https://www.srca.nm.gov/parts/title19/19.002.0100.html>



Key Comparisons Between Agencies

- Similarities

- Require formal approval/ application prior to commingling and/or off-lease measurement (SN 3160-5, C-107-A or B, Commingling application form from SLO's website)
- Site-specific information: plat, diagrams including legal land description, metering/ measurement equipment, wells, storage, lease and/or agreement information, economic analysis, etc.
- Proposal for allocation or metering

- Differences

- Measurement standards (BLM incorporated by reference API measurement standards)
 - NMOCD, metering vs subtraction method
 - Frequencies based on volumes
 - FMP vs allocation meters
- Mineral interest and royalty rate consideration for BLM approvals
- Well testing requirements (may vary by BLM Field Office)
 - NMOCD, periodically, but no less than annually



Commingling Approvals

Industry or State Questions and Concerns

OBJECTIVE/ REASON

- Minimize surface disturbance, reduce emissions and environmental impacts
- NMSLO- All CA are “well-specific”, regulations allows commingling if it reduces surface disturbance (**interpretation**).

OBSTACLES

- BLM process makes it difficult (**BLM is the Obstacle**)
- BLM regulations only allow surface commingling if royalty allocation is the same (or within 1%).



Commingling Approvals

Industry or State Questions and Concerns

OBJECTIVE/ REASON

- Industry would like a standardized process (differs from company to company)
- Anticipated timeframes for approval are unknown; affects plans for area development.

OBSTACLES

- BLM templates and process are confusing, limited, and cumbersome.
- BLM review process, backlogs of requests (including CA and unit proposals), etc.



Commingling Approvals

BLM Concerns

- Production Accountability (based on allocation)
 - Increase in complexity, making it more difficult to verify production volumes
 - Required accuracy of measurement (based on averaging period)
 - Volume of Gas: $\pm 2\%$ ($> 1,000$ mcf/day; VHV FMP); $\pm 3\%$ (>200 mcf/day to $<1,000$ mcf/day; HV FMP)
 - Volume of Oil: $\pm 0.50\%$ ($\geq 30,000$ bbl/month); $\pm 1.50\%$ ($\leq 30,000$ bbl/month)
 - Heating Value of Gas: $\pm 1\%$ (VHV FMP); $\pm 2\%$ (HV FMP)
 - Verifiability: Ability to independently recalculate the volume, quality, rate, and heating value based on source records and field observations.
 - Potential impacts to royalties
 - More inspections (field and office)
 - Consider jurisdictional limitations (Federal and non-federal interests)
 - Increased complexity and workloads



Commingling Approvals

BLM Concerns

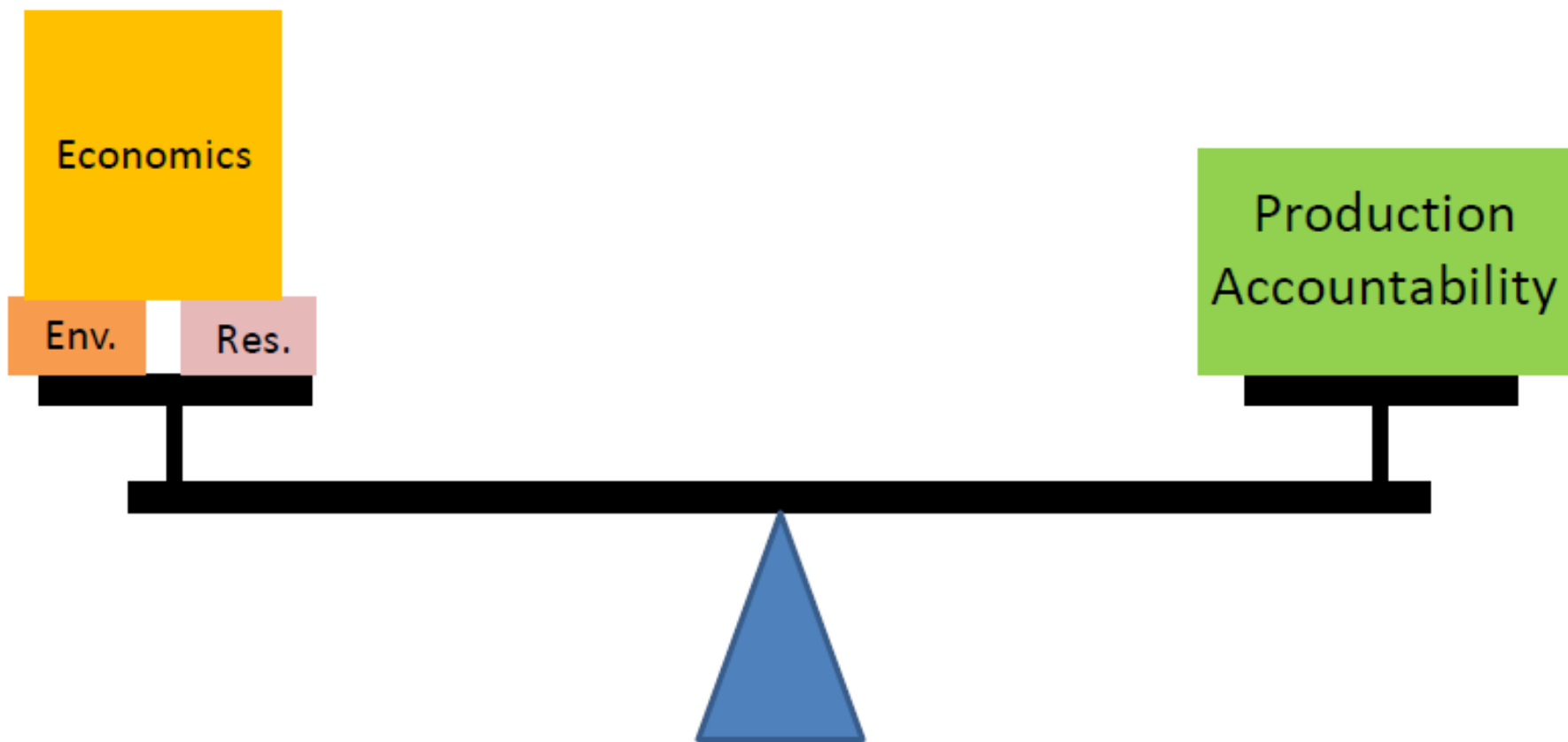
- Recordkeeping
 - Is industry keeping up with all required testing (for allocation purposes), recordkeeping, and accurate reporting to ONRR and State Agencies?
 - Reporting requirements to ONRR for volumes (based on lease or agreement) vs royalties (allocated to individual leases). BLM only verifies volumes.
 - Beneficial use, also known as royalty-free use of lease/agreement production (43 CFR 3178)
 - Waste Prevention Rule (43 CFR 3179)
- State vs Federal Requirements
 - Differences in Conditions of Approval and allocation methodology

What's wrong with Commingling? NOTHING... it's the allocation, which makes it complicated. Commingling sources must be reported separately.



Commingling Approvals

Ideal Situation





Commingling Approvals

BLM Guidance

- IM 2013-152 (expired)
 - Attachment 1 outlines the basic methodology; some Field Offices still use to evaluate commingling requests
<https://www.blm.gov/policy/im-2013-152>
- Field Office Guidance
 - Some offices may provide templates or additional guidance
 - Carlsbad Field Office (Pecos District)
 - Oklahoma Field Office



Commingling Approvals

BLM Guidance

- Field Office Guidance
 - All commingling requests are different and multiple categories may apply. It is nearly impossible to give a preliminary yes or no to any situation.
 - It is up to the operator to provide the evidence needed for evaluation and the basis of their request.
 - The operator may request commingling PRIOR to drilling.



Commingling Approval Categories

Categories below are not official but do provide a general summary of each section in the CFR.

1) No impact to royalties [43 CFR 3173.14 (a)]

2a) Economically marginal property [43 CFR 3173.1 (a) & 3173.14 (b) (1)]

2b) Nominal production [43 CFR 3173.14 (b) (2)]

2c) Tribal approval 43 CFR 3173.14 (b) (3)

2d) Maximizing recovery 43 CFR 3173.14 (b) (4)

2e) Best public interest 43 CFR 3173.14 (b) (5)



Commingling Approval Categories

**1) No impact to royalties [43 CFR 3173.14 (a);
In general, possibly the simplest option to approve**

- Considerations for approval (Lease, unit/PA, or CA)
 - 100% Federal or Indian Tribal Lease mineral interests
 - Same fixed royalty rates and revenue distributions
 - Same ownership (Tribe) and fixed royalty rates
 - Same proportions of mineral interest: Fed/Fee or Indian (subject to same royalty rates and revenue distribution)
- Must submit a methodology acceptable to the BLM for allocation among the leases and/or agreements (which includes produced water)
- Must demonstrate lease or agreements proposed for inclusion is producing in paying quantities (or capable), pending approval of commingling and allocation (CAA) request
- FMP for proposed CAA measures production originating only from leases and/or agreements in CAA



Commingling Approval Categories

2a) Economically marginal property [43 CFR 3173.1 (a) & 3173.14 (b) (1)];
Possibly the most complicated option(s) to approve

- Considerations for approval (Lease, unit/PA, or CA)
 - Must meet requirements of 43 CFR 3173.14(a)(2) through (4) and one of the following:
 - Lease or agreement meets the definition of **economically marginal property** [see 43 CFR 3173.1(a)] . Condition may no longer be met if BLM determines that Federal or Indian lease or agreement ceases to be an economically marginal property

Definition of economically marginal property is broad but considers:

- Opting to plug well(s) or shut-in leases or agreements vs investing to achieve non-commingled production and measurement
- Expected revenue vs nominal costs (including operating costs) of capital expenditures to achieve non-commingled production and measurement over a payout period of 18 months
- Royalty Net Present Value over life of equipment is less than the investment to achieve non-commingled production

Note: Oil and gas are evaluated separately



Commingling Approval Categories

2b) Nominal production [43 CFR 3173.14 (b) (2)] Possibly the most complicated option(s) to approve

- Considerations for approval (Lease, unit/PA, or CA)
 - Must meet requirements of 43 CFR 3173.14(a)(2) through (4) and one of the following:
 - Average monthly production over preceding 12 months is <1,000 mcf of gas or <100 bbl of oil per month

Note: Oil and gas are evaluated separately



Commingling Approval Categories

2c) Tribal approval 43 CFR 3173.14 (b) (3) Possibly the most complicated option(s) to approve

- Considerations for approval (Lease, unit/PA, or CA)
 - Must meet requirements of 43 CFR 3173.14(a)(2) through (4) and one of the following:
 - A CAA that includes Indian leases or agreements and has been authorized under tribal law or approved by a tribe



Commingling Approval Categories

2d) Maximizing recovery 43 CFR 3173.14 (b) (4);
Possibly the most complicated option(s) to approve

- Considerations for approval (Lease, unit/PA, or CA)
 - Must meet requirements of 43 CFR 3173.14(a)(2) through (4) and one of the following:
 - CAA covers downhole commingling from multiple formations that are covered by separate leases or agreements; and BLM has determined commingling is acceptable for the purpose of achieving maximum ultimate economic recovery and resource conservation



Commingling Approval Categories

2e) Best public interest 43 CFR 3173.14 (b) (5) Possibly the most complicated option(s) to approve

- Considerations for approval (Lease, unit/PA, or CA)
 - Must meet requirements of 43 CFR 3173.14(a)(2) through (4) and one of the following:
 - Overriding considerations:
 - Public interest
 - No negative impacts to royalties
 - Topographic or environmental considerations that make non-commingled measurement physically impractical or undesirable



Applying for a Commingling and Allocation Approval (CAA)

- 43 CFR 3173.15
 - Complete Sundry Notice Form 3160-5; if off-lease measurement is applicable, a separate Sundry Notice is not necessary as long as information under 43 CFR 3173.23(b) through (e) and 43 CFR 3173.23(f) through (i), as applicable is included as part of the request
 - Allocation agreement, including allocation methodology
 - List of Federal and/or Indian leases and/or agreements, specifying type of production (oil and/or gas)
 - Topographic map(s), which includes boundaries of leases and/or agreements, location of existing or planned facilities, location of wellheads (including US Well Numbers), FMP numbers, etc.
 - Surface use plan of operations if new surface disturbance is proposed on BLM-managed lands within boundaries of leases and/or agreements from which production would be commingled



Applying for a Commingling and Allocation Approval (CAA)

- 43 CFR 3173.15
 - Continued
 - Right-of-way grant application (Standard Form 299), filed under 43 CFR part 2880, if the proposed FMP is on a pipeline, or under 43 CFR part 2800, if the proposed FMP is a meter or storage tank. Only applies when new surface disturbance is proposed, and its associated facilities are located on BLM-managed land outside any of the leases or agreements whose production would be commingled
 - Written approval from the appropriate surface-management agency (if new surface disturbance is proposed)
 - Right-of-way grant application for the proposed FMP, filed under 25 CFR part 169, with the appropriate BIA office, if any of the proposed surface facilities are on Indian land outside the lease, unit, or communitized area from which the production would be commingled



Applying for a Commingling and Allocation Approval (CAA)

- 43 CFR 3173.15
 - Continued
 - Documentation demonstrating that each of the leases and/or agreements proposed for inclusion in the CAA is producing in paying quantities (or capable) pending approval of the CAA
 - All gas analyses, including Btu content (if the CAA request includes gas) and all oil gravities (if the CAA request includes oil) for previous periods of production from the leases and/or agreements proposed for inclusion in the CAA, up to 6 years before the date of the application for approval of the CAA. Gas analysis and oil gravity data is not needed if the CAA falls under § 3173.14(a)(1)

Don't forget all ownership (Federal, Indian/Tribe, Private, State), mineral interests, and royalty rates information!!!

Not referenced under 43 CFR 3173.15



Applying for a Commingling and Allocation Approval (CAA)- Field Office Guidance

- For Downhole CAA, include:
 - Pertinent reservoir information such as the presence of hydrogen sulfide, formation pressures, water cut, decline characteristics, drive mechanism, and existing or anticipated enhanced recovery projects.
- For Allotted Indian Leases, include:
 - Evidence that all Indian allottee mineral owners of leases included in the commingling request have been notified of the request. An affidavit from the operator stating that a notice was mailed to each allottee mineral owner of record for whom the superintendent or area director has an address will satisfy this notice requirement
- For Horizontal wells with pad off-lease:
 - The map should include the approximate wellbore path and the location of the producing interval(s)



Applying for a Commingling and Allocation Approval (CAA) - Field Office Guidance

- For royalty-free use, include:
 - A list of all equipment for which the applicant seeks approval of off-lease royalty-free beneficial use of gas or oil, and a schematic showing where fuel is to be taken in relation to the CDP (Central Delivery Point)
- For economically marginal properties, consider:
 - Cost vs Value Analysis
 - What is needed will vary depending on the situation. In general, it should include:
 - Amortization table showing value
 - Total cost estimate for non-commingling and/or operating costs. Quotes from vendors are better than internal analysis documents. VRUs should not be included.
 - Basis for all assumptions



Applying for a Commingling and Allocation Approval (CAA) - Field Office Guidance

- For economically marginal properties, consider:
 - More on Amortization Table
 - Pricing - If Indian minerals, use <https://www.onrr.gov/indian/indian-pricing>
 - Differentials
 - Operating costs
 - Estimated production rates
 - Taxes
 - Net income
 - Total time
 - Anything else that is helpful



Applying for a Commingling and Allocation Approval (CAA) - Field Office Guidance

- For economically marginal properties, consider:
 - More on Assumption Basis
 - Pricing – Include how it ties to differentials
 - Differentials – Historical reference is optimum if possible
 - Operating costs – An LOS going back for ~years if possible
 - Estimated production rates - Type curve analysis, decline curves, etc

Note: This is not an investor presentation. There are certainly situations where estimates will be low. This analysis is looking for the P50 (or mean) of all possible outcomes.



Best Practices/Solutions

BLM

- Become very familiar with the regulatory requirements (3170s/3180s vs State Regulations)
 - When in doubt, reach out to your local BLM field or state offices for support, in addition to the State Agencies.
- Understanding the benefits and disadvantages of agreements vs commingling/off-lease measurement
 - Communitization vs Unitization/Participating Areas (this solution may vary by area and FO)



Best Practices/Solutions

BLM

- Definitions of agreements
 - **Unit:** The area described in an agreement as constituting the land logically subject to exploration and/or development under such agreement.
 - **Participating Area:** That part of a unit area which is considered reasonably proven to be productive of unitized substances in paying quantities or which is necessary for unit operations and to which production is allocated in the manner prescribed in the unit agreement.
 - **Communitization Agreement (CA):** An agreement to combine a lease or a portion of a lease that cannot otherwise be independently developed and operated in conformity with an established well spacing or well development program, with other tracts for purposes of cooperative development and operations.



Best Practices/Solutions

State Agencies/Industry

- Request and approve larger non-standard spacing orders (e.g. 1280/2560 acres)
 - Would allow BLM to set up/approve larger CA, which would eliminate requirements for requesting commingling approval.

Multi-Pronged Approach

- More BLM/State/Industry meetings to discuss viable solutions.
 - Not one size fits all
 - Focus on areas instead of attempting to standardize
 - From the BLM's perspective, many of the commingling challenges could be avoided by larger spacing units and/or units



QUESTIONS/ COMMENTS

THANK YOU FOR YOUR TIME!!

Jose Rios

Inspection & Enforcement Coordinator
Bureau of Land Management
New Mexico State Office- Minerals Division
301 Dinosaur Trail
Santa Fe, NM 87508

Office: 505-954-2145

Cell: 505-372-9520

e-mail: jrios@blm.gov