



# SURFACE COMMINGLING & PRODUCTION MEASUREMENT APPLICATION GUIDELINES

## Disclaimer

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## 1 Introduction

The Code of Federal Regulations, Title 30, Part 250, Subpart L, requires that a lessee submit a written surface commingling and measurement application to and obtain approval from the Regional Supervisor before commencing production or making any changes to the approved commingling, measurement or allocation procedures. Thus, an application must be submitted to the BSEE Measurement Approval and Enforcement (MA&E) Section who will evaluate the proposed commingling and measurement procedures for compliance with the regulations contained in Subpart L, the measurement standards incorporated by reference, Regional Commingling Policy, as well as for consistency with past approval practices. In addition, this evaluation will be guided by BSEE concerns for measurement accuracy, the equitable allocation of oil and gas production, the protection of Federal royalties, and resource conservation. Following the evaluation, the MA&E Section will prepare a response letter and a process flow schematic for the operator.

The purpose of these guidelines is to assist operators with the preparation of surface commingling and measurement applications.

The MA&E Section does not provide approval for any departures from the Code of Federal Regulations, Title 30, Part 250, Subpart K. Any requests for departures on Subpart K should be requested to the BSEE Resource Conservation Section.

## 2 Submit the Correct Processing Fee

The processing fees for commingling and measurement applications can be found at 30 CFR 250.125. These processing fees must be paid before processing can begin and are non-refundable if an application is withdrawn or denied. If the application is returned as incomplete, however, no additional fee is required for the amended application. You should note that per 30 CFR 250.126, all payments must be made electronically through pay.gov and the transaction receipt should be included with the application package.

Since the time required to process commingling and measurement applications can vary considerably, a three-tiered fee structure (complex, simple, and no fee) based on complexity is used. A brief description of the complex and simple fee categories can be found at 30 CFR 250.1202(a)(1). There is no processing fee for any application that does not fall within these two categories; thus “no fee” becomes the defacto third category.

In the event that a complex fee is due, but a simple fee has been paid, the applicant must pay the complex fee before processing can begin and then request a refund for the simple fee. Also, if a fee has been paid and it is later determined that the application requires no fee, a full refund can be requested. The refunds can be requested at the following address:

[http://www.data.bsee.gov/homepg/data\\_center/other/refundrequest/requestrefund.asp](http://www.data.bsee.gov/homepg/data_center/other/refundrequest/requestrefund.asp)

To assist you in determining the fee category, listed below are specific examples of application types.

### 2.1 Complex Fee Applications

Complex Fee Applications are applications that:



- Require the creation of one or more new facility measurement points (FMPs),
- Request the association of a new lease or unit with an existing FMP,
- Request the commingling of production from a new lease or unit with previously-approved production on any platform,
- Request to commingle non-Federal production with Federal production,
- Request to add a new satellite well or subsea well to the existing commingling and measurement authority (but note the exception in the “no fee” list for new subsea wells that connect to existing gathering infrastructure.),
- Request changes to the approved allocation procedures, and/or
- Request to install a “buy-back” or “pigging” meter.

## 2.2 Simple Fee Applications

Simple Fee Applications are applications that:

- Request to temporarily (for a duration not to exceed six months) reroute production,
- Request approval for the measurement of liquid hydrocarbons recovered during production tests conducted prior to pipeline construction,
- Request changes to the previously-approved well testing procedures, and/or
- Request departures (variances) related to items such as meter proving, well testing, sampling frequency, or deviation from required sampling technique.

## 2.3 No Fee Applications

No Fee Applications are information-only letters that:

- Request the termination or inactivation of FMPs,
- Request to replace existing meter(s) at an FMP with meter(s) of the same type,
- Provide information updates such as notifications of operator changes,
- Provide notifications of minor piping or equipment modifications on a platform provided that the commingling, measurement, and allocation procedures will not change,
- Request to add new well(s) on existing structures that are completed in previously-approved leases or unit participating areas provided that the approved measurement, commingling, and well test procedures will not change, and/or
- Request the addition of a new subsea well (completed in a previously-approved lease or unit participating area) which uses existing production gathering infrastructure (pipelines and manifolds) and only requires a pipeline jumper to connect to this infrastructure.

## 3 Determine if the Application Meets Commingling Policy

Since the GOM Regional commingling policy drives the requirements for allocation metering, compliance with this policy should be investigated early in the commingling and measurement application process through discussion with the MA&E Section. The commingling policy calls for the separate and continuous measurement of production from each royalty rate group *prior to commingling*. This policy facilitates the Section’s goal of providing for an equitable allocation of production to each contributing lease/unit and the protection of Federal royalty. Examples of how this requirement could be met would be through the use of meters located immediately downstream of dedicated separators, or through the use of subsea multiphase flow meters installed on a jumper located immediately downstream of a subsea wellhead.



Well tests are typically not continuous and this lack of continuity greatly increases uncertainty. Nodal analysis or virtual metering may be continuous and separate, but rely on calculations based on flow parameters and thus have a higher uncertainty than continuous measurement. These methods are more suitable for well rate determination.

An additional aspect of the commingling policy is that, on a given level of allocation, measurement should be similar in terms of meter type and hydrocarbon quality. For example, the measurement of the liquid hydrocarbons which are dumped from a separator and measured by turbine meters will be inferior to measurement by a LACT unit. The liquid hydrocarbons from a separator could have considerable amount of dissolved gases (requiring a correction for shrinkage) and water content and the meters are typically transfer-proved resulting in uncertainties that can exceed 2.0 percent. The liquid hydrocarbons measured by a LACT unit, on the other hand, have typically been treated (to reduce water content) and weathered (to remove any gas in solution) and the meters are proved in situ using prover loops. LACT units are typically designed to reduce measurement uncertainty to within 0.25 percent. These two types of measurement should therefore not be competitive with one another on the same level of allocation. Correspondingly, the subtraction (or “keep whole”) of a quantity determined by turbine meters located immediately downstream of a production separator from the quantity determined by a LACT unit should be avoided, if practical.

Below are some definitions that are pertinent to the commingling policy followed by the issues associated with commingling, specific applications of the commingling policy, and conditions in which a variance from the commingling policy can be requested to the BSEE MA&E Section.

### 3.1 Definitions

Commingling - the mixing of production from two or more leases and/or unit participating areas upstream of the royalty settlement point.

Natural Gas Processing - the separation of non-methane hydrocarbons from the raw feed to a gas plant in order to produce residue gas and gas plant liquids and to remove impurities such as hydrogen sulfide.

Royalty Settlement Point – the measurement point approved by BSEE for the determination of production quantity and quality for reporting purposes. The measurement taken at this point is typically of custody transfer quality and is used for the reporting of production to the Office of Natural Resources Revenue (ONRR) on the Oil and Gas Operations Reports (OGORs).

- For liquid hydrocarbon production, the point of royalty settlement will typically be a LACT unit or calibrated tank, which will also be the royalty valuation point.
- For gas production, the point of royalty settlement will typically be the export metering point on the offshore platform, which will only be the point of royalty valuation in the case of a direct gas sale.
- For processed gas production, royalty payments are based on the combined value of residue gas, all plant products, and any condensate recovered downstream of the royalty settlement point without resorting to processing. In this scenario, the royalty valuation points will be downstream of the royalty settlement point.

Royalty Valuation Point - a point at which the value of production is determined.



Unit Participating Area - that part of the unit area that BSEE determines is reasonably proven by drilling and completion of producible wells, geological and geophysical information, and engineering data to be capable of producing hydrocarbons in paying quantities.

### 3.2 Commingling Issues and Considerations

- There is always risk associated with commingling since it introduces uncertainty at each allocation point. The goal of BSEEs commingling policy is to minimize this risk with respect to Federal revenue.
- The commingling of production from leases or units with different royalty rates can have a detrimental impact on Federal revenue. The greater the difference in royalty rates, the greater the associated risk.
- There are a variety of lease royalty rates (12 ½, 16 ⅔, or 18 ¾ percent) and royalty suspension programs in the Gulf of Mexico Region.
- The effective royalty rates associated with royalty suspension leases can change over time and with market conditions. If oil and gas prices exceed the price thresholds or if the lease produces in excess of the royalty suspension volume, royalty will be due. (Note that the royalty suspension quantities for leases with RS A, RS B, and RS C royalty bid codes are not subject to price thresholds).
- Commingling can either enhance or degrade quality of the production measured at the royalty settlement point. That notwithstanding, BSEE typically does not participate in any quality banks upstream of this measurement point.
- The mixing of production from two or more unit participating areas within the same unit agreement is considered commingling since each participating area has a unique reporting identifier (unit agreement number and allocation suffix). Each unit participating area may have a unique composite royalty rate.
- Lease Allocation Percentages are established by the BSEE Development & Unitization Section and are based on the amount of original reservoir net acre feet of hydrocarbons on each participating lease.
- For the purposes of BSEEs commingling policy, the composite royalty rate for a unit participating area is determined by taking the sum of the mathematical product of royalty rate and lease allocation percentage for each lease as shown in the example below.

<u>Lease</u>	<u>Royalty Rate</u>	<u>Allocation %</u>	<u>Royalty %</u>
A	1/8 (12.5%)	50	6.250
B	3/16 (18.75%)	30	5.625
C	0	20	0.000

Composite Royalty Rate for Unit Participating Area = 11.875%

- The composite royalty rates associated with unit participating areas can change over time due to unit expansion or contraction resulting in changes in the lease allocation percentages or changes in the royalty status of production from royalty suspension leases.

### 3.3 Commingling Policy as Applied

In those cases where an operator proposes to commingle the production from two or more leases and/or unit participating areas having the same royalty rate, allocation from the royalty settlement point to each lease/unit and well, may be based on periodic well tests. That notwithstanding, the



applicant may still request separate measurement for each lease or unit participating area for other reasons, such as where working interests vary.

In those situations where production from two or more leases and/or unit participating area with different royalty rates are to be commingled, BSEEs Regional policy calls for the separate and continuous measurement of the gas and liquid hydrocarbons belonging to each royalty-rate group prior to commingling. Note that in regard to unit participating areas, it only takes a single lease with a different royalty rate or royalty suspension provision to create a unique composite royalty rate for the unit participating area.

The production from a royalty suspension lease may be commingled with production from another royalty suspension lease (with different suspension terms) without prior measurement if the estimated reserves for each lease fall short of the royalty suspension volume. In those instances where the estimated reserves for one or more of the leases are greater than the royalty suspension volume(s), BSEE may allow commingling without separate measurement until production from the lease(s) reaches 90% of the respective royalty suspension volume(s). At that time, the operator must notify BSEE within 45 days to schedule a meeting to determine if the approved measurement and allocation procedures should be amended to accommodate the commingling of production with different royalty rates.

In those situations where production from a qualified deep gas royalty relief well will be commingled with other royalty bearing production, BSEE formed an alternative policy which eliminates the need for separate and continuous measurement. This policy reduces expenditures for platform equipment (separators and/or gas meters) while enhancing the measurement accuracy and allocation procedures. The alternative policy necessitates that additional gas measurement requirements be temporarily implemented during the time in which deep gas production from a lease is in royalty relief status. These requirements entail semimonthly (twice per month) testing of all producing wells upstream of the gas sales meters located on the platform and monthly calibration (not to exceed 42 days) of each test separator gas meter utilized to test these producing wells. These additional gas measurement requirements will continue through the end of the month in which the cumulative deep gas production on a lease reaches the applicable royalty relief volume, after which the requirements revert back to the gas measurement and surface commingling provisions under 30 CFR 250.1203 and 250.1204.

Sliding-scale royalty rate leases may be commingled with production from fixed royalty rate leases without the need for separate measurement provided that the quarterly threshold value of the sliding-scale lease(s) is not reached and the effective royalty rate for each commingled lease is the same.

In those situations where production from a State lease is to be commingled with Federal OCS production, separate and continuous measurement of the gas and liquid hydrocarbons belonging to the State and Federal production, individually, is required prior to commingling. The State allocation meters are subject to the provisions of 30 CFR 250, Subpart L, just as the Federal metering facilities.

When separate and continuous measurement is required by BSEE or desired by an operator, then the following will apply:

- Each lease, unit, or lease/unit group should be metered using the same type of meter and the measurement should be made under similar conditions, e.g. wet gas vs. wet gas, treated liquid hydrocarbons vs. treated liquid hydrocarbons, weathered liquid hydrocarbons vs.



weathered liquid hydrocarbons. In other words, all measurement on the same level of allocation should be similar with regard to meter type and hydrocarbon quality.

- All meters which are designated as allocation meters will be subject to the proving, sampling, and inspection requirements as detailed in 30 CFR 250.1202, 250.1203, and 250.1205.
- The use of multiphase flow meters (MPFMs) for allocation purposes will require proving/calibration departures, a contingency plan for meter failure, and preferably periodic verification (e.g., every six months not to exceed 210 days) using conventional single-phase meters located immediately downstream of a separator.

### 3.4 Requesting a Variance from the Commingling Policy

If an operator determines that the requirement for separate and continuous measurement of each royalty rate group cannot be met, an appeal can be made to the MA&E Section. This appeal must describe the overriding considerations, such as space/weight limitations, economics, or other factors which would make separate measurement impractical and would regard commingling (without separate measurement) to be in the best interest of the public. Considerations in determining whether commingling is in the public interest include:

- Maximizing the ultimate recovery of oil and gas from Federal leases,
- Significantly reducing environmental impacts,
- Ensuring that Federal royalty income is not adversely affected, and
- Ensuring that BSEE has the ability to verify allocated production volumes.

The appeal must describe, in detail, the reasons why the terms of the standard commingling policy cannot be met. It should also provide justification for the proposed alternative measurement and allocation methods and demonstrate that these procedures will not appreciably and unnecessarily increase measurement uncertainty or negatively impact royalty.

An example would be an appeal that is based on unfavorable economics due to a low-volume property. In this case, the operator must provide a supporting economic analysis that demonstrates that the lease(s) or unit participating area(s) will not produce volumes necessary for the operator to realize a sufficient rate of return and the operator would likely cease production (or not commence production at all) if required to make the capital expenditures necessary to achieve separate and continuous measurement of non-commingled production.

BSEE will rigorously examine these appeals and will determine if other measurement options are available and feasible. Applications such as these that do not provide for the separate and continuous measurement of each royalty rate group will very likely take longer for BSEE to review and process. As such, these applications should be submitted at least four months prior to the anticipated start date.

It is a good idea for the operator to set up a meeting with the MA&E Section prior to requesting a variance from this commingling policy.

## 4 Review Any Pertinent Previous Approvals

Prior to composing a commingling and measurement application, it is a good idea to research previous approvals for the subject lease(s), unit(s), or platform(s). If previous commingling and measurement approvals exist, they will form the baseline for the current request and a review of these authorizations may be necessary to ensure that the application is complete. Also, it is often





advantageous to check for other applications/approvals of the same type since these can be used as templates in preparing your commingling and measurement application.

If an operator has difficulty in locating a previous commingling and measurement approval letter, the letter can be requested from the BSEE MA&E Section.

## **5 Create a Process Flow Schematic(s)**

Since the BSEE MA&E Section will include an AutoCAD flow schematic with their response letter, it will expedite the application review process if the operator includes a process flow schematic which graphically depicts the flow of production from the wellhead to the export pipelines. Ensure that all information on the schematic is correct prior to submitting to BSEE.



## 5.1 What to Include

A process flow diagram should identify the following:

- All pertinent platforms
- The complex ID and structure number for each platform having an FMP
- The operator of each platform
- All lease wells with the well names (if practical), lease number, the area and block corresponding to the lease, and the royalty rates of the leases. If there are numerous wells on the facility, showing a “Typical Well” may suffice.
- All unit participating areas and unit wells with the well names (if practical), the unit agreement number(s), and the leases included in the unit participating area with the respective royalty rates
- The operator, size, segment number, and destination of all departing pipelines to the first trunk line
- The BSEE operations system number(s) associated with each departing pipeline, if known
- The size and segment numbers of all gathering pipelines
- Meter information (size, type, make, model, and serial number) for all proposed or existing liquid hydrocarbon royalty meters
- Meter information (size, type, make, and model) for all proposed or existing liquid hydrocarbon allocation metering points
- The size, type, make, model of the meters (including any buy-back meters) at the gas royalty settlement point and the make, model, and serial number of the flow computer(s)
- The FMP number for all existing measurement points, if known
- The type, make, model, and serial numbers of the flare/vent meters, if these meters have been assigned an FMP
- All valves that, as a condition of approval, are required to be locked closed or open and all valves which are normally closed or open
- The water leg on all three phase separators so that these can be distinguished from two-phase separators
- Fuel gas, gas-lift, buy-back, pigging, and injection meters when these meters impact allocation or royalty measurement procedures
- All proportional-to-flow samplers
- All gas chromatographs
- The API RP 14C component identification for separators, dehydrators, heater treaters, tanks, and other vessels
- For a modified or updated diagram, use clouds around each new item on the flow diagram such as a new meter, vessel, or pipe
- Right of use and easement (RUE) lease number for each platform that is authorized by an RUE

## 6 Information Required in a Commingling / Measurement Application

Applications should be sent to:

U.S. Department of the Interior  
Bureau of Safety and Environmental Enforcement (MS GE-981A)  
1201 Elmwood Park Boulevard  
New Orleans, LA 70123



To allow sufficient time for processing, applications should be submitted at least two months prior to the anticipated start date. Only one copy of the application is required.

Note that applications to commingle production from one lease/unit operator with previously-approved production on another operator's platform can be submitted by the lease/unit operator or by the operator of the receiving platform. When submitted by the lease/unit operator, the application should be accompanied by a letter of concurrence from the operator of the host platform stating that the host operator concurs with the measurement and allocation plan proposed by the operator of the new production.

Applications to commingle State production into a Federal commingling system can be submitted by the State lease operator or by the Producer's Representative for the System on behalf of the State lease holder.

## 6.1 Applications for New or Revised Commingling and Measurement Procedures

Applications should include the following:

- A copy of the receipt for payment of the appropriate processing fee, if applicable
- The date, the name of the applicant, and the phone number and e-mail address of the applicant or the applicant's representative
- The operator of record (if different from the platform operator) for any proposed royalty or allocation FMP
- The specific request
  - Identification of the areas/blocks, leases and units involved, producing wells, pertinent processing equipment, the location of the applicable points of measurement, and if known, the BSEE System designations. If units are involved, the participating areas should be included.
  - If the request is temporary, the applicant should provide the duration
  - The estimated start-up date (if applicable)
- Brief description of the current approval
- Process flow description
  - A description of the flow of production from the wellhead, through the production and measurement equipment and the departing pipelines, and to the first trunkline. In the case of commingling systems, the onshore facilities should be identified.
  - A description of the well test procedures, identifying the test separator(s)
  - A process flow schematic, identifying the items previously listed in Section 5.1
- **A description of the gas measurement facilities:**
  - Platform export meters
    - Pipeline meter station numbers if available
    - Meter owner and operator
  - For orifice meters, indicate:
    - Meter service – whether the orifice meter will be used for royalty or for allocation measurement and the number of meters that will be installed at each measurement point
    - The nominal meter run size and the make and model of the orifice fitting
    - The make, model, and serial number of the associated flow computer if used for royalty measurement. For allocation measurement, only the make and model of the flow computer are required.
    - Gas Meter Tube Micrometer (Mic) Sheet and Meter configuration diagram (refer to Fig. 2.6 of API MPMS 14.3.2.) that includes the following:



- UL – Meter tube length upstream of the orifice plate in multiples of published pipe diameters
- If not using a flow conditioner or if using a 19-tube bundle: the installation configuration as shown in Tables 2.7, 2-8a, and 2-8b of API MPMS 14.3.2. (e.g. two 90° elbows out of plane  $S \leq 2D_i$  and  $R/D_i = 1.5$ )
- If a flow conditioner or a 19-tube bundle is installed: UL2 – Meter tube length from flow conditioner exit to orifice plate in multiples of published pipe diameters ( $UL1 = UL - UL2$ )
- The make and model of the flow conditioner if one is installed
- The position of the thermometer well relative to the orifice plate in multiples of published pipe diameters
- The position of the sample port relative to the orifice plate in multiples of published pipe diameters
- A Roughness report
- An Eccentricity report
- A Tap hole report
- For turbine meters for gas measurement (legacy applications only), indicate:
  - The size, make, model, and serial number of the meter
  - Meter configuration diagram illustrating the position of the flow conditioner, filter, or strainer and the position of the pressure tap and temperature well relative to the meter
  - Calibration certificate
  - Proving procedure
  - The make, model, and serial number of the associated flow computer
- For ultrasonic meters, indicate:
  - Meter service: whether the ultrasonic meter will be used for royalty or allocation measurement along with the number of ultrasonic meters that will be installed at each measurement point
  - A NIST traceable flow calibration report for each ultrasonic meter (must be the complete metering package) which meets the testing requirements of American Gas Association (AGA) Report No. 9, Section 6
  - A schematic detailing the configuration of the metering skid including the position of the flow conditioner and upstream and downstream distances to the first flow disturbance or obstruction
  - A copy of the flow conditioner performance verification test
  - A procedure for monthly (not to exceed 42 days) meter verification as required in the 30 CFR 250, Section 1203. The results of the verification must be retained at the field location for two years and will be made available to BSEE representatives upon request.
  - The size, make, model, and serial number of the ultrasonic meter
  - The make and model and serial number of the associated flow computer
  - The make and model of the gas chromatograph or composite sampler
- For cone meters, indicate:
  - The size, make, and model of the meter and the make and model of the associated flow computer
  - A copy of the factory calibration report which provides the coefficient of discharge
  - A copy of the meter sizing report



- For Coriolis meters, indicate:
  - The size, make, and model of the meter and the make and model of the associated flow computer
  - Verification procedure
- **A description of the liquid hydrocarbon measurement facilities:**
  - Allocation meters
    - Meter size, type, make, and model
    - Number of meter runs
    - Method of proving (master meter, transfer proving, etc.)
    - Method of sampling for S&W determination (proportional-to-flow sampler, spot sample, net oil analyzer)
    - Method of sampling for shrinkage (proportional-to-flow sampler or spot sample)
  - For multiphase meters (used for allocation purposes only), indicate:
    - Meter make, type, and model
    - Verification procedure
  - For helical turbine meters, indicate:
    - Meter make and model
    - Calibration certificate
    - Viscosity index plot (if using viscosity indexing)
  - For Coriolis meters, indicate:
    - Meter make and model
    - Meter configuration diagram
    - Proving Procedure
  - For LACT units, indicate:
    - Number of charge pumps and meter runs
    - Component description, including, but not limited to the following:
      - Size, type, make, model, and serial number of each meter
      - Meter prover type (prover loop, small volume prover, master meter etc.)
      - Detail diagram showing relative location of each component
      - Basket strainer
      - Air eliminator
      - Static mixer
      - Proportional-to-flow sampler and orientation (installed in a vertical run of pipe?)
      - Sample container
      - S&W monitor
      - Temperature sensor and transmitter
      - Flow computer
    - If using a prover loop, the prover calibration (water draw certificate) must be provided
    - LACT unit operator
  - Royalty tanks
    - Complete set of calibration charts (tank tables) for each tank. Calibration charts for tanks having a capacity of less than 1000 barrels must provide volumes at ¼-inch increments. Calibration charts for tanks having a capacity of 1000 barrels or more must provide volumes at ⅛-inch increments.
    - Method of gauging – automatic or manual
  - Inventory tanks



- ID of each tank
- Capacity of each tank
- Calibration charts only on request (but note that inventory tanks must be calibrated)
- Royalty and allocation statements
  - The basis for the royalty determination of the offshore produced gas: Typically this basis is described as the volume and Btu heating value as determined at the gas export metering point at a given location.
  - The basis for royalty determination for offshore produced liquid hydrocarbons and, if applicable, for pipeline condensate recovered onshore: Typically this basis is described as the volume and volume-weighted average gravity as measured by an LACT unit or tank at a given location.
  - Allocation statements or procedures which detail the allocation of all hydrocarbons from the royalty settlement meters to the pertinent unit(s), lease(s), and well(s)

Note that a revised commingling and measurement application is required for new satellite or subsea wells. An exception would be for new subsea wells (completed in a previously-approved lease or unit participating area) which will use existing production gathering infrastructure (pipelines and manifolds) and only require a pipeline jumper to connect to the infrastructure. In this case, only a notification is required.

## 6.2 Requests for Commingling and Measurement Design Concurrence

Prior to incurring expenses for processing and measurement equipment for a new development, an operator may request BSEE concurrence for their commingling and measurement design. These applications should include the following:

- The reason for the request
- Supporting documentation for a new metering technology, allocation scheme, well testing procedure, deviation from commingling policy, etc
- As necessary, concurrence from other operators
- Justification for any departures or deviations from commingling policy

## 6.3 Applications for Departures (Sampling, Well Testing, Proving, etc.)

Applications should include the following:

- A simple processing fee
- The reason for the request
- The regulation pertaining to the departure request
- Justification for the requested departure
- What procedure/process is proposed in lieu of the requirement prescribed in the regulations



## 6.4 Applications to Forgo Royalty Relief or Pay Royalty at a Higher Rate

These are requests to forgo royalty relief or pay at a higher royalty rate in lieu of providing for the separate and continuous measurement of production from each royalty rate group as required by BSEE Regional commingling policy. The application to forgo royalty relief or pay royalty at a higher rate must be separate from the subsequent application to acquire or revise the commingling and measurement authority on a platform.

Applications should include the following.

- The reason that the requirements of the commingling policy cannot be met
- The specific production to which the request will apply, for example: all of the production from a lease or only the production from a single well, both gas and liquid hydrocarbon production or only gas production.
- Any future plans to eventually provide for separate and continuous measurement and thus revert to the lease terms for royalty or royalty relief
- An additional application with a process flow diagram
- Complex processing fee for the new application

## 6.5 Request for a New Condensate/Pipeline Condensate Commingling System

Applications should include the following:

- A map of the proposed commingling system
- The pipeline operator
- A copy of the M&A agreement between the pipeline and producers
- A list of proposed producers on the system
- The proposed allocation procedure
- The location of the onshore facility (including the latitude and longitude)
- The process flow diagram of the onshore facility
- The onshore facility operator
- The proposed producer representative
- The assigned allocator
- The FMP operators of record
- LACT P&ID, list of components including meter information and serial numbers, proving procedures, and water draw certificate for prover loop.
- Royalty tank calibration tables (tank tables), tank ID, and capacity
- Inventory tank ID and capacity
- Make, model, and size of the flash gas royalty meter and the make, model, and serial number of the associated flow computer. If an orifice meter will be used to measure flash gas, then a mic sheet is required.
- A complex processing fee

## 6.6 Reallocation Requests

This is a request to reallocate production retroactive to a specific timeframe either due to inaccurate measurement, equipment failure, pigging, temporary storage, system being down, meter malfunctions, or rerouting production. These requests are usually submitted by a producer or the allocator of a commingling system. Example: A meter malfunction caused misallocation for the previous month and it affects the allocation of production within the system.



Applications should include the following:

- Reason for the reallocation
- The reallocation timeframe
- Producers/platforms impacted by the reallocation
- The proposed reallocation scheme

## 6.7 Requests for Pipeline De-inventory

These are requests to remove liquids from an out-of-service pipeline or one that is being decommissioned.

Applications should include the following:

- Pipeline information (segment number)
- Source of production (leases or units)
- Estimated liquid volume
- Measurement method that will be used to determine volume
- Sampling method, if applicable
- How and to where the liquid hydrocarbons will be transported
- Location where royalty will be determined
- The receipt for payment of the appropriate processing fee

## 6.8 Requests for Meter Replacements

These are requests to replace royalty meters. These meters will be vetted for compliance with API measurement standards. Examples include replacing an orifice meter with a smaller orifice meter due to a decline in production or replacing an orifice meter with an ultrasonic meter. No processing fee is required.

Applications should include the following:

- All pertinent meter information
- Meter configuration diagrams
- Micrometer sheets and flow loop calibrations (if applicable)

## 6.9 Measurement for Off-Lease Injection

These are requests for the royalty measurement of hydrocarbons that will be injected into an off-lease well for secondary recovery or temporary storage. These applications should be submitted following an approval from the BSEE Well Analysis Section for secondary recovery or from the BSEE Unitization Section for temporary storage.

Applications should include:

- The leases and units from which the injected production is sourced
- The well into which the production will be injected
- The method of measurement, for royalty purposes, with all pertinent meter information
- An updated process flow schematic





- A receipt for a 1) simple processing fee payment for projects that are expected to continue for six months or less, or 2) a complex processing fee payment for projects that are expected to continue for more than six months

## 6.10 Well Test Changes

These are requests to change the well rate determination method.

Applications should include:

- An updated process flow schematic
- The reason for changing the well rate determination procedure
- The new well test method
- The wells that will be tested with the new method
- The proposed well rate determination frequency, if applicable
- A receipt for the payment of a simple processing fee

## 6.11 Requests for Temporary Flow Changes

These are requests to temporarily reroute production or to change the delivery point.

Examples include requests to (1) inject liquid hydrocarbons into a gas pipeline due to an outage on the oil export pipeline and (2) route gas to an alternate delivery point due to a pipeline break on the main gas export pipeline.

Applications should include:

- An explanation of the operational situation causing the need for a temporary flow change
- The pertinent platform(s), lease(s), and unit(s)
- The proposed changes to the approved commingling, measurement, and allocation procedures
- Any pertinent meter information
- The expected volume and duration of the temporary flow change
- A receipt for the payment of a simple processing fee (assuming a duration of no more than six months)

## 6.12 Requests to Barge Liquid Hydrocarbons

These are requests to barge production from a facility.

Examples: A platform no longer has access to an oil export pipeline and will barge from the facility on a permanent basis. A producer has to temporarily barge from a platform due to equipment or pipeline problems or an outage on the normal delivery pipeline.

Applications should include:

- The barge name and company (if applicable)
- The method of royalty measurement
- The onshore destination of the production
- The duration of the barging



- If applicable, a copy of the approval from the BOEM Plans Section for a supplemental DOCD revision
- A copy of the receipt for payment of a 1) simple processing fee if the proposed barging will be conducted for six months or less or 2) a complex fee if barging operations will continue for more than six months.

### 6.13 Request to Assume the Role of Producer's Representative for an Existing Commingling System

Applications should include:

- The name of the commingling system and BSEE Operations System number
- Name of the previous Producer's Representative
- Contact information for the new Producer's Representative (name, phone number, email address, and mailing address)
- Proposed effective date for the transfer of duties
- Details of any changes to the approved commingling, measurement, or allocation procedures
- Acceptance of the following responsibilities (where applicable):
  - Proving the onshore liquid hydrocarbon royalty meters
  - Verifying/calibrating the onshore flash gas meters
  - Gauging the onshore inventory tanks
  - Submitting copies of the proving reports, run tickets, and gas volume statements to the MA&E Section
  - Allocating the liquid hydrocarbons and the flash gas recovered at the system terminal to each injector in accordance with the approved procedures
  - Submitting Production Allocation Schedule Reports (PASRs) to ONRR, as necessary

### 6.14 Request to Resign as Producer Representative for a Commingling System

Applications should include:

- The reason for the resignation
- Documentation to support that the operator is no longer the highest liquid producer on the system or has no interest in the system due to a sale or to the cessation of their production

### 6.15 Request for Production Tests (Flow Backs) prior to Pipeline Construction

These are requests for the measurement and disposition of liquid hydrocarbons recovered during well tests or well clean-up operations that are conducted prior to pipeline installation. These tests are performed to collect key data such as flow rate, well pressure, temperature, composition, and fluid properties for development planning.

These applications should be submitted at least two weeks prior to the intended test date and can be emailed to [fred.jacobs@bsee.gov](mailto:fred.jacobs@bsee.gov) and [kelly.johnson@bsee.gov](mailto:kelly.johnson@bsee.gov).

Note that approval for flaring must be obtained from the Resource Conservation Section of the BSEE Office of Production and Development prior to receiving approval for the measurement of liquid hydrocarbons during a production test. Also note that any approval given by the MA&E



Section for the production test is only for the measurement of the recovered liquid hydrocarbons and it is incumbent upon the operator to obtain any other requisite approvals.

Applications should include:

- Well name and API number
- Lease number
- Confirmation that a simple fee has been paid
- The expected start date and duration of the production test
- The anticipated volumes for the liquid hydrocarbon and gas production
- The name of the rig from which the production test will be conducted
- A description of the gas and liquid hydrocarbon processing and metering equipment (size, type, make, and model)
- The company and name of the vessel (tanker, barge, or workboat) that will be used to transport the liquid hydrocarbons to shore
- If a workboat will be used to transport the liquid hydrocarbons to shore, the number and capacity of the DOT-certified marine portable or USCG-approved transport tanks that will be used to contain the liquid hydrocarbons
- The destination for the liquid hydrocarbons and the name of the company to whom they will be sold

Within two weeks following the completion of the production test, the operator must submit the volume determination reports for the onshore and offshore locations. These reports should include the metered volumes, the individual gauge readings with the corresponding tank volumes (as applicable), all run tickets, meter proving reports, tank calibration tables (as applicable), and any laboratory results such as API gravity and S&W.

The BSEE MA&E Section will review the information submitted and will determine the appropriate production measurement point (either offshore or onshore) and the corresponding volume for royalty and production reporting, as applicable. The response will also include the proper procedures for reporting the test production to ONRR. These procedures will typically direct the operator to report the volume of royalty bearing liquid hydrocarbons on the OGOR-B using Disposition Code 04 (Sales – Royalty Due – Not Measured) and to report the volume of flared gas on the OGOR-B using Disposition Code 21 (Flared Oil–Well Gas).

## 7 Notifications (Information-Only Letters)

The operator should submit notifications to the MA&E Section for certain situations where there is no change in the commingling or allocation procedures. These notifications will be used to update BSEEs records, but no formal approval will follow.

### 7.1 Notification of a Change in Operator for a Platform or FMP

Notifications should include the following:

- Platform name, FMP Number(s), and previous operator
- Effective date for the change in operator
- Contact information for the new operator
- Acknowledgement that the existing commingling and measurement procedures will not change



## 7.2 Notification of Meter Changes at Approved Measurement Locations

Notifications should include the following:

- Location of the measurement point where the meter or recorder has been added, replaced, removed, or taken out of service
- The FMP number, if known
- Description of the change. (Has a meter been added? Has a meter been taken out of service? Has one or more meters been replaced? Has the recorder been changed?)
- The effective date of the change
- For new liquid hydrocarbon royalty and allocation meters or for meters that have been replaced, removed, or taken out of service, give the type, make, model, size, and for royalty measurement only, the serial number
- For gas royalty - basis and allocation meters provide the following:
  - If a meter has been replaced, removed, or taken out of service, give the type, nominal size, and the make
  - If a recorder has been replaced, removed, or taken out of service give the type, make and model
  - For new recorders, provide the type, make, model, and, for royalty - basis measurement only, the serial number
  - For new orifice meters, provide the make and model, and the nominal meter run size
  - For new turbine, ultrasonic, and v-cone meters, provide the size, make, and model and, if used for royalty - basis measurement, the serial number
- Notification is not required for the replacement of a gas or liquid hydrocarbon allocation meter with another meter of the same size, type, make, and model
- Notification is not required for the replacement of a gas recorder used for allocation measurement with another recorder of the same type, make, and model
- For transfer proving of liquid hydrocarbon allocation meters, notification is not required when meters of the size, type, size, make, and model are included in or removed from the rotation
- For a notification of platform abandonment
  - When all of the wells on a platform have been shut - in and have been determined to be of no further utility, it is incumbent upon the lease or unit operator to request the termination of all platform FMPs. Provide the platform name and, if known, the FMP numbers and the date of last production.
- For the termination of an FMP(s)
  - If an FMP is no longer being used, the operator should request that the status of the FMP be changed to "terminated". Notifications of this type should include:
    - the location of the meters associated with the FMP
    - the FMP number
    - the meter information (sizes, makes, and models)
    - the reason for the termination (i.e., gas or liquid hydrocarbons are being measured exclusively at another active FMP for delivery into another system; lease terminated; lease or unit has ceased production; etc.)
    - the effective date of the termination
- When requesting termination of a liquid hydrocarbon FMP because only dry gas is being produced, state on your application that in the event liquid hydrocarbons are produced, you will shut - in the liquid hydrocarbon producers and obtain approval for the



measurement of liquid hydrocarbons from the Measurement Approval & Enforcement Section prior to continuing liquid hydrocarbon production.

## 8 Response Letter from the BSEE MA&E Section

The response letter from BSEE typically begins with a description of the commingling and measurement request from the operator. This description includes the leases (with area and block) and units being commingling (if any), where it occurs (e.g. on a platform or at a subsea tie-in or manifold), all allocation and royalty measurement requests, any requested departures, and the BSEE Operations Systems used for export. The royalty statements will define the basis for the royalty quantity and quality of any exported gas or liquid hydrocarbons. In the case of liquid hydrocarbons, royalty is typically based on the volume and volume-weighted average gravity as determined by a LACT unit. For gas production, royalty is typically based on the volume and Btu heating value as determined at the export metering point. In those instances when production is commingled, the allocation statement will detail the apportionment of all exported hydrocarbons to each contributing lease, unit participating area, and well.

Each gas and liquid hydrocarbon royalty or purchase (buy-back) metering facility will be described in detail together with any pertinent information related to compliance, proving/calibration/verification methods, restrictions, etc. A standard caveat in the response letter states that requests must be submitted to the MA&E Section office prior to making any changes in the approved commingling, measurement, allocation, or testing procedures.

It is important for the operator to read the entire approval letter which may list conditions of approval at the end of the letter. Any issues or concerns with the approval should be discussed with the BSEE MA&E Section.

BSEE may provide a verbal approval if the surface commingling and production measurement application has been reviewed, but the formal response letter has not yet been finalized.

## 9 Unnecessary Documentation for a Commingling / Measurement Application

Some examples of information that BSEE does not need to process a surface commingling and production measurement application include:

- Safe Charts
- Multiple copies of the application
- Copies of previous approvals
- Information on fuel gas meters
- Information on gas-lift meters unless used as an allocation meter
- Serial numbers for totalizers, meter tubes, pressure or temperature transmitters, orifice fittings, or well test meters if used exclusively for well rate determination
- Separate drawings of individual components other than a new LACT unit