

## 5. Reporting and Allocation Requirements

### Introduction

Many different parties can be involved in the movement of natural gas across a particular location. The Common Stream Operator (CSO) of the affected location, using the predetermined allocation methodology agreed to by the parties involved, performs allocations.

As the CSO of the West Whitecourt, Kaybob Amalgamated, West Fox Creek and Kaybob 3 gas plants and their associated gathering systems, SemCAMS is responsible for both daily and monthly allocation of sales gas and by-products to **Customers**. Daily confirmations and allocations are provided by the CSO on an estimated basis throughout the current month. Final month end allocations are provided by the CSO on an accounting basis after the close of the current month.

It is SemCAMS responsibility to equitably allocate sales products back to the **Customer** based on the **Customer** or operator provided **gathered volumes** and **product stream analysis**. To carry out these tasks effectively, SemCAMS requires accurate and timely production, ownership and take-in-kind (TIK) information from the **Customers**. For this reason, this process applies not only to **acceptance points** but to entities attached upstream of **custody group allocation points**.

The **Customer** is responsible for ensuring all expectations detailed in this document have been met prior to start up and flow of production and the commencement of the allocation process. To ensure the accuracy of daily and monthly allocations, it is imperative that every **Customer** have the following in place:

1. Required tie in and measurement conditions as outlined in Chapter 4. In addition to meeting the operational tie in and measurement needs, the **required New Well Form is the base document that activates SemCAMS internal daily and monthly allocation set up. The submission of this document to the SemCAMS field BD Supervisor prior to start up is critical to the success of the daily and monthly allocation process.**
2. Required gathering and processing agreement conditions as outlined in Chapter 2.2.2. It is essential that every **Customer** have all required gathering and processing agreements in place prior to start up and the commencement of the daily confirmation and allocation process.

In the event a **Customer** has production that is not covered under an appropriate agreement and the required tie in and measurement conditions SemCAMS has the right to bill the **Customer** directly for any re-work costs associated with the re-allocation of plant sales products.

## 5.1 Fixed Data Requirements

### 5.1.1 Working Interest Ownership

**Timely** working interest ownership notification is required for the allocation process. Ownership change is defined as but not limited to physical (uwi) ownership and corporate (merger, acquisition, amalgamation, corporate structure change) ownership.

There are 2 basic types of working interest ownership data that affect the allocations process:

1. Legal property ownership as it relates to the actual working interest in a unique well identifier (UWI), units, pools or facilities.
2. Corporate ownership as it relates to a company's legal identification.

Correct ownership information must be in place prior to physical flow of the product in order for the data processes to correctly capture that ownership for the daily and monthly allocation process. Ownership of **new** property's or **changes** to the ownership of an existing property can create unique fixed data issues if the ownership information is not received **prior** to the real time physical flow of the associated product.

Natural gas is allocated and sold on the futures market daily and proper ownership data must be attached to that product before that product can be properly allocated to the Transportation Service Provider (TSP). **Timing** of the receipt of this information is critical to the CSO. If new or changed working interest ownership is not in place before the product is sold daily, the ownership change is pushed into the month end production accounting process which can result in additional transportation costs and negative market implications due to fluctuating natural gas prices.

The purpose of production accounting is to fine tune and finalize the distribution of physical product not to continually undo and redo the entire product ownership distribution because ownership data is not provided in time for the proper **daily** allocation, shipment and sale of the physical commodity.

A completely new property is the easiest to set up because there are few if any assumptions in place regarding the need to have the data organized prior to physical flow of the product. All associated parties understand their data systems have to be set up to report and account for new product for today's automated environment to work.

Changes in ownership of an existing producing property have more risk associated with the management of change. While paper change can be retroactive, physical flow of the associated product cannot be without utilizing production accounting to reverse/modify the production month daily allocated sales volumes through the TSP gas balance adjustment process.

**New or changed working interest Information must be received by the daily CSO prior to the 1<sup>st</sup> day of the physical production month. Any ownership information submitted after the start of the physical production month will not be applied to the daily or monthly allocation process until the 1<sup>st</sup> day of the following production month.**

There is a proactive set-up requirement associated with the daily allocation of the physical product. Working interest information is required for the CSO to ensure all associated downstream requirements are in place prior to the commencement of flow or change in ownership of existing properties. If TSP transportation and sales arrangements are not in place, the daily flowing sales gas product cannot be allocated. Flowing product without timely ownership notice jeopardizes not only the owner's real time daily allocations but allocations of the entire **common stream**.

Whether it is a regulatory, TSP or financial, the monthly calculation, shipment and sale of natural gas and associated product are based on the calendar month. In addition, most if not all daily and monthly database systems are not designed to accommodate changes in fixed data within the same calendar month. Proactive ownership notice allows for the proper set up of all daily allocation requirements of real time sale of natural gas and the proper validation and set up in all associated production accounting and financial systems.

**Working interest ownership must be provided in writing by all product owners to SemCAMS Joint Interest Administration.**

CSO will only accept written working interest information from the owner of the product. Notice must be on corporate letterhead (PDF file via email, fax or mail) with the following information:

- Full legal name of company - the current ownership environment often has a parent company with many subsidiaries. Different properties are often attached to different subsidiaries.
- Corporate contact information – operations, joint venture, marketing and production accounting. Even if the working interest owner of the product does not operate the property, contact information is necessary to fulfill other requirements such as gathering and processing agreements, take-in-kind direction or the need to communicate with the owner for property specific common stream issues.
- Agent – if product owner chooses to appoint a third party to communicate with the CSO, including the authority, without limitation, to provide and receive instruction and notice on all TSP business and contractual matters, product owner must provide written instructions identifying the third party and the limit of their authority.

Product owner is required to provide this instruction via SemCAMS Take in Kind Authority Form (Appendix F or retrieve from SemCAMS website) in PDF format. SemCAMS will not take direction from an Agent without written notice from the product owner via the Take in Kind Authority form.

**Working interest ownership information must correspond to the production accounting identity at the acceptance point (AP) into SemCAMS systems (UWI, custody group allocation point and prorated group allocation point.**

**UWI's** - Surface locations no longer suffice as property identifiers for working interest information. Many zones have different working interests therefore all ownership must be reported at the UWI level. **All** working interest owners (not just the operator) must provide property ownership information to SemCAMS in writing.

Any change/addition to a down hole location (interval, event sequence) requires new property ownership documentation by **all** working interest owners regardless of their past association with the surface or previous down hole location. SemCAMS cannot and will not “assume” ownership. Producer operator should include this requirement in their discussions with their working interest partners to avoid take-in-kind issues.

Changes in UWI's **must** be reported to SemCAMS **field BD Supervisor** prior to commencement of flow for composition as well as ownership reasons.

**Corporate Ownership Change effective dates will be the 1<sup>st</sup> day of the next physical production month following receipt of the official copy of the “Certificate of Amendment” along with a letter from your company to SemCAMS Joint Interest Administration requesting that all records be changed to reflect the new company name.**

Retroactive ownership directions will not be accepted. Whether it is a simple one UWI transaction or a more complex merger/acquisition, natural gas must be allocated, shipped and sold daily per SemCAMS current production month product ownership information. It is physically impossible to retrieve daily allocated, shipped and sold product if new product owner directs a retroactive effective date. In addition, the production accounting amendment process may not be able to comply with the new owners take-in-kind directions if the new owner does not have TSP arrangements in place during the physical production month.

Deferring the physical allocation ownership change to the start of the next production month creates order and gives all parties affected by the merger/acquisition, including the CSO, adequate time to set up the proper processes.

**Divesting product owner must maintain all required TSP arrangements until the 1<sup>st</sup> day of the next physical production month following receipt of the “Certificate of Amendment”.**

Natural gas that has flowed and been allocated daily to the previous owners shipper cannot be recalled regardless of what the ownership 'paper' says. Previous owners also often remove their transportation contracts before the new owner has shipper arrangements in place. Production must be shut in if the CSO cannot allocate the flowing product to the sales pipeline.

Again, production accounting databases are not designed to split the same product between multiple owners/shippers within the same production month cycle. **The allocation process is based on the calendar month and change in ownership must follow that design.** Complying with this requirement not only makes the data management of the change financially clear, it eliminates unnecessary allocation issues among the entire common stream.

### 5.1.2 **Take-in-kind (TIK) Directions from Product Owner:**

The CSO requires instructions from the product owner regarding their contractual arrangements with the TSP in order to properly allocate sales gas to the correct TSP, Shipper and associated Shipper contract. This direction is to include **Customers** pooled general contract volumes as well as any dedicated or contract specific requirements.

TIK directions must be submitted to the daily CSO and Production Accounting via SemCAMS Notice of Take in Kind form (See Appendix F or SemCAMS website) in PDF format by the working interest owner of the product. TIK directions will not be accepted from a Shipper or Agent without the corresponding Notice of Take in Kind Authority form (See Appendix F) from the product owner stating the individual or company is authorized to act on their behalf.

TIK directions must be received by the daily CSO **five business days before the start of the physical production month.** If TIK directions are not received the working interest owner will be deemed as **not** TIK and their product will be allocated to the well operator for the entire physical production month and subsequent production accounting process.

### **Nominations**

In order for product to be allocated to a sales pipeline, product owner must have transportation arrangements in place via the shipper contract nominations process prior to commencement of flow. The nomination process is the way in which those who want to transport natural gas request space on downstream pipelines. Nominations are notices to Transportation Service Providers (TSP) of how much gas the Shipper wishes to transport, where the gas will be entering the pipeline system (acceptance point), and where it will be delivered (delivery point).

The North American Gas Industry Standards Board (NAGISB) **business practices standards** define:

- A procedure and timetable for nominating gas on all transportation service providers, ensuring a seamless process for scheduling transportation service throughout North America even when more than one pipeline must be used to get the gas to its destinations.

- How and when transportation service providers should respond to Shippers with scheduled quantities, which are agreements on the quantity of gas scheduled to flow,
- Confirmations, which the owners and/or operators of the gas transaction points and facilities (SemCAMS Plants) involved in the nomination, send to the transportation service provider to confirm the quantities and dates specified in the nominations.

NAGISB standards specify that a **standard gas day** which is basically an accounting period that identifies when gas flows begins, as 9 a.m. to 9 a.m., central clock time.

- Shipper nominates quantity, receipt and delivery point to TSP,
- TSP responds to shipper,
- Shipper notifies CSO, receipt of delivery owners,
- CSO, receipt or delivery owners confirms to TSP quantities, dates and times.

SemCAMS is CSO at three plants that are dually connected to Alliance Pipeline (APL) and TransCanada's Alberta Nova Pipeline. As APL rigidly adheres to the NAGISB **business standards**, K3, KA and WWC plants regularly follow the NAGISB Cycle 1 and 3 nomination standards Monday to Friday excluding stat holidays. Should there be operational issues CSO may **at their discretion** submit Cycle 2 and/or 4.

The CSO (unless they are a product owner with TSP arrangements) **cannot nominate gas**. Shippers nominate and the CSO responds to the Shipper nomination with a confirmation based on estimated sales for the gas day.

**Timely Nomination (Cycle 1)** – nominations under this cycle will be for the next gas day commencing at 9:00 AM CCT. Shipper nominations must be in before 11:30 AM for gas to be scheduled. **Daily CSO must confirm shipper nominations or provide estimated confirmations if CSO sales estimates differ from Shipper nominated volumes by 2:30 PM CCT to complete the cycle process.**

**Evening Nomination (Cycle 2)** – this cycle can be used to fine-tune the nominations from the Timely nomination cycle. Nominations under this cycle are for the next gas day commencing at 9:00 AM CCT. *SemCAMS does not routinely support this cycle unless there is a plant operational justification.*

**First Intra-day Nomination (Cycle 3)** – gas scheduled under this cycle is for today's gas day (same day). Shipper nominations under this cycle are to be submitted by 10:00 AM for an effective time of 5:00 PM CCT. Shipper nominations and/or CSO confirmations under this cycle can be used to correct or change any volumes due to upstream production changes, operational curtailments, increased Authorized Overrun Service (AOS), unexpected outages, etc. *CSO must confirm*

*shipper nominations or provide estimated confirmation if CSO sales estimates differ from Shipper nominations by 11:00 AM to complete this cycle.*

**Second Intra-day Nomination (Cycle 4)** – this is the last cycle in which to change nominations for the same gas day. Nominations under this cycle are due by 5:00 PM. *SemCAMS does not routinely support this cycle unless there is a plant operational justification.*

## 5.2 Daily Confirmation and Allocation Process

As the **CSO**, it is SemCAMS responsibility to equitably allocate sales products back to the **Customer** based on the **Customer working interest, gathered volumes, product stream analysis and take-in-kind directions**. SemCAMS performs this role in two capacities; daily and monthly.

The daily allocation process involves the forecasting (confirmation) and allocation of sales gas back to **Customer** provided **gathered volumes in accordance with their shipper nominations** on a daily basis. SemCAMS provides this service on behalf of each **Customer** in order to comply with their daily sales contract obligations.

The daily **gathered volumes** provided by the **Customer** are used by the CSO for two purposes:

1. As an estimate to calculate each **Customer** forecasted sales volumes for the next day's sales pipeline confirmations. For the purpose of calculating an estimated sales volume, the CSO applies an estimated shrinkage (calculated by well/entity from the previous month monthly allocation process) to the gathered volume provided by the **Customer**.
2. As an actual to revise the forecast made on the previous day (APL only).

Refer to Table 5-1 for a visual example of this process.

Month to date cumulative balancing is done throughout the physical production month to ensure **Customers** gas sales volumes are not over or under stated prior to the close of the production month. This is accomplished by continually refreshing the 1-31 day revised sales estimates, comparing sales estimates to the previously scheduled sales pipeline volumes and adjusting forward day confirmations to reduce month to date cumulative shipper differentials.

**It is imperative that all parties understand that sales gas volumes are allocated on a daily basis to meet the needs of the Customers sales pipeline contractual obligations. To effectively perform this task, SemCAMS requires accurate and representative gathered volumes (by owner/entity) on a daily basis.**

### 5.3 Daily Volumetric Reporting – Data Requirements

Acting as the **CSO**, Central requires daily volumetric reporting for each acceptance point on a daily basis. It is the responsibility of the **Customer** to provide the volume data requested via web based reporting, email or fax. As the daily reporting needs vary with the type of acceptance point, the expectations for each are outlined below:

Type of Receipt Point	Daily Data Expectations
<b>Measured Well Head/UWI</b>	<ul style="list-style-type: none"> <li>• <b>Gathered volume</b> for previous day on a daily basis by 11:00 local Alberta time to daily <b>CSO</b> at processing plant.</li> <li>• Daily CSO will not confirm or allocate sales volumes for <b>new</b> production until the operator provides a gathered volume report with hours online.</li> <li>• Requires <b>advance</b> notification for future change in ownership, working interest, dedication, special marketing arrangement or shipper driven change prior to the <b>start</b> of the physical production month.</li> </ul>
<b>Prorated Group Allocation Point</b>	<ul style="list-style-type: none"> <li>• <b>Gathered volume</b> for previous day by <b>well/UWI</b> on a daily basis by 11:00 local Alberta time to daily <b>CSO</b> at processing plant.</li> <li>• Daily CSO will not confirm or allocate sales volumes for <b>new</b> production until the operator provides a gathered volume report with hours online.</li> <li>• Require <b>advance</b> notification for future change in ownership, working interest, dedication, special marketing arrangement or shipper driven change prior to the <b>start</b> of the physical production month.</li> </ul>
<b>Custody Group Allocation Point</b>	<ul style="list-style-type: none"> <li>• <b>Gathered volume</b> for previous day by owner / working interest and by customer driven marketing arrangement on a daily basis by 11:00 local Alberta time to daily <b>CSO</b> at processing plant.</li> </ul>

	<ul style="list-style-type: none"> <li>• Daily reports to be up to date with regard to owner / working interest and by any <b>Customer</b> driven special TSP contractual arrangements.</li> <li>• Daily CSO will not confirm or allocate sales volumes for <b>new</b> production until the operator provides a gathered volume report with hours online.</li> <li>• <b>Operator reported gathered and sales estimates vs. actual must be with +/- 3%.</b></li> <li>• Require <b>advance</b> notification for future change in ownership, working interest, dedication, special marketing arrangement or shipper driven change prior to the <b>start</b> of the physical production month.</li> </ul>
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#### 5.4 Scheduled or Unscheduled Plant to Plant Re-route Process

Due to the temporary nature of the re-routes, certain processes need to be defined in order for the sales gas and product to be properly allocated to the **Customer** at the both plants:

- TSP arrangements **must** be in place on APL or TCPL at the receiving plant in order for the CSO to allocate sales gas to the sales pipeline. The TSP will not accept nominations at a meter station **after** the physical production month has closed therefore the CSO cannot comply with the product owners TIK directions daily or via the production accounting month end process if transportation is not in place at the receiving plant.
- If working interest owner TIK arrangements are not in place at the receiving plant prior to the commencement of the re-routed flows, the CSO will allocate their share of sales gas and product to the operator at the acceptance point into SemCAMS system for the remainder of the re-route/production month in the **daily and monthly** allocation process.
- Working interest owners of re-route volumes must provide written working interests per production identifier and TIK directions to the daily CSO of the receiving plant prior to the start of the re-route.
- Re-route operator will report daily gathered volumes to the originating or “home” plant and SemCAMS will be responsible for ensuring the re-route plant daily CSO receives the gathered data for the daily allocation process. Both plant daily CSO’s will co-ordinate and calculate and record all operator reported re-routed gathered data (including first and last day re-route gathered volumes) for daily and monthly allocation purposes.

- SemCAMS production accounting will provide re-route gathered volumes at both plants to **Customer** production accounting for month end allocations. The final month end **Customer submitted** month end production accounting identifier gathered volumes for each plant must remain within +/- 3% of the gathered volumes used in the daily allocation process.

The following information provides a verbal description of terms used and what is presented in Table 5-1. Note: In the example in Table 5-1, the end of the 4<sup>th</sup> production day has taken place and the 5<sup>th</sup> production day is just beginning.

<b>Production Day (PD)</b>	represents the physical gas day, the 2 <sup>nd</sup> PD ends on the morning of the 3 <sup>rd</sup> calendar day (at the <b>Customers</b> “day end” time – “day end” time should be set to 09:00 CCT to correspond with industry standards).
<b>Gathered Volume</b>	from <b>Customer</b> , represents volume for the production day after it has ended. This is considered an actual for the PD.
<b>Forecasted Sales Volume</b>	by daily CSO, gathered volume from previous production day adjusted for shrinkage (in this example 30% shrinkage estimated based on previous months actual) is used to estimate (confirm) the sales volume for the next day. i.e. <b>Confirmed Sales Volume</b> for the 3 <sup>rd</sup> PD is based on <b>Gathered Volume</b> for 2 <sup>nd</sup> PD – Refer to solid arrows.
<b>Allocated Sales Volume</b>	by daily CSO, gathered volume for completed PD are adjusted for shrinkage (see description above) and prorated to total <b>actual</b> sales for that PD. This value effectively <b>overwrites</b> the <b>Confirmed Sales Volume</b> for the completed PD but is shown separately for clarity. i.e. <b>Allocated Sales Volume</b> for the 4 <sup>th</sup> PD is based on <b>Gathered Volume</b> for the 4 <sup>th</sup> PD – Refer to dotted arrows.

Table 5-1 Daily Allocation Process - Example

Production Day (PD)	2	3	4	5
Gathered Volume (e <sup>3</sup> m <sup>3</sup> )	120	110	20 <sup>1</sup>	Future <sup>2</sup>
Forecasted Sales Volume (e <sup>3</sup> m <sup>3</sup> )	N/A <sup>3</sup>	84 (120 x 0.7)	77 (110 x 0.7)	0
Allocated Sales Volume (e <sup>3</sup> m <sup>3</sup> )	N/A	71 (110 x 0.7 then prorated to total sales for day)	12 (20 x 0.7 then prorated to total sales for day)	Future

<sup>1</sup> Receipt point went down early in day of 4<sup>th</sup> PD – will be down for 2 days for maintenance. **Forecasted Sales Volume** for the 5<sup>th</sup> PD adjusted to 0 e<sup>3</sup>m<sup>3</sup> based on this knowledge.

<sup>2</sup> Volume cannot be determined until completion of 5<sup>th</sup> PD.

<sup>3</sup> Volumes for the 2<sup>nd</sup> PD are omitted as they are not required in this example.

## 5.5 Monthly Allocation Process

The monthly allocation process involves the allocation of all plant sales products, inventories and shrinkages to each **acceptance point** on a molecular basis using the month end actual **gathered volumes** as provided by the **Customer**. Because this process is being done on a molecular level it is imperative that the **Customer** provide up to date and representative component analysis data for each **acceptance point**. Refer to section 4 of this document for sampling requirements.

The allocation for each facility is completed per the latest accepted version of the CO&O agreement for the applicable facility. In general, the monthly allocation takes place in two steps: **acceptance points** adjusted to plant inlets then sales to adjusted **acceptance points**.

### *Monthly Allocation – Data Requirements*

To perform the monthly allocation of sales products accurately, SemCAMS requires month end volumetric data that has been validated by the **Customer** prior to submission. It is the responsibility of the **Customer** to provide a **gathered volume** for each **acceptance point by noon on the fourth working day of the month following**. Where no volumes are provided by noon on the sixth working day, SemCAMS will use volumetric data from the daily allocation system for the purpose of monthly allocation. Any cost associated with rework required as a result of the use of the daily volumes will be borne by the **Customer(s)** that did not provide month end actual volumes.

## 5.6 EUB Volumetric Reporting

EUB volumetric reporting data provided by the **Customer** will typically also be used for sales product component allocation at month end. It is the responsibility of the **Customer** to ensure EUB volumetric data is accurate and reported appropriately. SemCAMS reserves the right to audit producer reporting practices to ensure current EUB guidelines and expectations are met (i.e. the proration of production to effluent wells). SemCAMS will take all appropriate measures to ensure **Customer** reporting practices do not cause incorrect allocation of products within a given gathering system. Where an audit or review is performed on a **Customer** measurement facility and / or **Customer** reporting practice and timely resolution of the issues is not forthcoming, SemCAMS will seek the involvement of the EUB.