JOB AID

CCS/CCUS INJECTION REPORTING IN ALBERTA

Jurisdiction	Release/Revision Date	Location of Change in this Document	Comment
AB	August 14, 2025		Initial Release

Contents

Introduction

Carbon capture continues to attract growing investment in Alberta's oil and gas industry. For this document, carbon capture includes **Carbon Capture and Storage (CCS)** and **Carbon Capture Utilization and Storage (CCUS)** schemes.

On November 12, 2024, the Alberta Energy Regulator (AER) updated Directive 065: Resources Applications for Oil and Gas Reservoirs, specifically Sections 2.1.5 and 4.1.7, to introduce new reporting requirements for CCS/CCUS schemes. These **requirements will be effective in Petrinex as of the November 2024 production month.**

This job-aid summarizes the changes introduced to support CCS/CCUS reporting.

Infrastructure Changes

The AER has introduced changes that focus exclusively on well infrastructure. These updates do not include any new facility types or subtypes. Instead, operators will link CCS/CCUS wells to existing injection/disposal facility subtypes.

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CCS/CCUS Well Statuses

Petrinex introduced new CCS/CCUS statuses in June 2025 to support CCS/CCUS reporting. Operators can assign these statuses retroactively, as far back as production month 2024-11 and no earlier than a well status date of 2024-11-01.

The statuses cover the full life cycle of CCS/CCUS wells. The table below outlines the new statuses designed to accommodate these reporting requirements.

CCS/CCUS WELL STATUSES			
Scheme	**Well Status**	**Active**	**Industry Update**
CCS	CO2 N/A DISP CARBON SEQ	Y	Y
	CO2 SUSP DISP CARBON SEQ	N	Y
	N/A N/A N/A CS-COMMIN	N	Y
	CO2 ABAN DISP CARBON SEQ	N	N
	CO2 ABZONE DISP CARBON SEQ	N	N
	CO2 ABRENT DISP CARBON SEQ	N	N
	CO2 ABDWHP DISP CARBON SEQ	N	N
	CO2 CLOSED DISP CARBON SEQ	N	N
	N/A ABZONE N/A CS-COMMIN	N	N
	N/A CLOSED N/A CS-COMMIN	N	N
CCUS	CO2 N/A INJ CO2 EOR SEQ	Y	Y
	CO2 SUSP INJ CO2 EOR SEQ	N	Y
	N/A N/A N/A CO2 EOR COMM	N	Y
	CO2 ABAN INJ CO2 EOR SEQ	N	N
	CO2 ABZONE INJ CO2 EOR SEQ	N	N
	CO2 ABRENT INJ CO2 EOR SEQ	N	N
	CO2 ABDWHP INJ CO2 EOR SEQ	N	N
	CO2 CLOSED INJ CO2 EOR SEQ	N	N
	N/A ABZONE N/A CO2 EOR COMM	N	N
	N/A CLOSED N/A CO2 EOR COMM	N	N

- Wells with an active status of Y (Yes) must be linked to injection/disposal facilities and requires monthly volumetric submissions. You can find more details in the Monthly Reporting Requirements section.

- Statuses with an **Industry Update** value of **Y (Yes)** allow industry users to edit or change the well status. If the **Industry Update** value is **N (No)**, only the AER can set and manage this well status.

Well Status Transitions

The table below provides the well status transitions that Industry operators can make for both CCS and CCUS schemes. The **Transition to Status** column on the far right lists the CCS/CCUS-related statuses that a well can transition to from the status shown in the **Current Status** column. Operators perform these transactions using the **Edit Well Status** screen, following the same process for other well status changes

CCS/CCUS WELL STATUS TRANSITIONS (INDUSTRY)		
Scheme	**Current Status**	**Transition To Status**
CCS	N/A DRL & C N/A N/A	CO2 N/A DISP CARBON SEQ N/A N/A N/A CS-COMMIN
	CO2 N/A INJ N/A	CO2 N/A DISP CARBON SEQ
	CO2 SUSP INJ N/A	CO2 N/A DISP CARBON SEQ
	CO2 N/A DISP CARBON SEQ	CO2 SUSP DISP CARBON SEQ N/A N/A N/A CS-COMMIN
	CO2 SUSP DISP CARBON SEQ	CO2 N/A DISP CARBON SEQ N/A N/A N/A CS-COMMIN
	N/A N/A N/A CS-COMMIN	CO2 N/A DISP CARBON SEQ
	CO2 ABZONE DISP CARBON SEQ	CO2 N/A DISP CARBON SEQ N/A N/A N/A CS-COMMIN
CCUS	N/A DRL & C N/A N/A	CO2 N/A INJ CO2 EOR SEQ N/A N/A N/A CO2 EOR COMM
	CO2 N/A INJ N/A	CO2 N/A INJ CO2 EOR SEQ
	CO2 SUSP INJ N/A	CO2 N/A INJ CO2 EOR SEQ
	CO2 N/A INJ CO2 EOR SEQ	CO2 SUSP INJ CO2 EOR SEQ N/A N/A N/A CO2 EOR COMM CO2 N/A DISP CARBON SEQ
	CO2 SUSP INJ CO2 EOR SEQ	CO2 N/A INJ CO2 EOR SEQ N/A N/A N/A CO2 EOR COMM
	N/A N/A N/A CO2 EOR COMM	CO2 N/A INJ CO2 EOR SEQ
	CO2 ABZONE INJ CO2 EOR SEQ	CO2 N/A INJ CO2 EOR SEQ N/A N/A N/A CO2 EOR COMM

- Industry can transition wells in a drilled & cased status to active CCS disposal or CCUS injection statuses. Operators also can transition existing CO2 injection wells whether active or suspended into the new CCS/CCUS statuses.
- Industry can suspend an active CCS/CCUS well and later transition it back to active status, following the same process used for other types of wells.
- Industry can commingle CCS/CCUS wells using the existing process in the **Edit Well Status** screen. When reporting commingled, operators assign it an active status - either **CCS disposal (CO2 N/A DISP CARBON SEQ)** or **CCUS injection (CO2 N/A INJ CO2 EOR SEQ)**. To commingle

additional events, operators click the **Commingle Events** button located under the Facility Link field. Petrinex will only list events that share the same well licence.

- Operators can commingle CCS/CCUS well events, provided the current status allows commingling outlined in the table above. When selected for commingling, Petrinex automatically assigns the well event a status of **N/A N/A N/A CS-COMMIN for CCS disposal** or **N/A N/A N/A CO2 EOR COMM for CCUS injection**.
- Commingled well events are not linked to a facility and volumetric activity is not reported for these well events, as it is captured under the designated reporting event.

Only Industry-performable status transitions are listed above. However, some status transitions can only be performed by the AER. These include:

  - Moving wells to any type of Abandoned status.
  - Moving wells into a Closed status
  - Moving wells from a Closed status to either Active or Suspended

Well to Facility Linkages

Operators **must link active CCS/CCUS wells to injection facilities**, just as they do with other injection/disposal wells. As noted earlier, Petrinex has not introduced any new facility types or subtypes. Instead, operators will link CCS/CCUS wells to existing injection/disposal facility subtypes.

Operators can establish well to facility linkages in one of two ways:

1. Using the **Edit Well Status** screen
   When transitioning to a new well that requires a new facility linkage.
   - For CCS/CCUS wells, this includes setting a newly drilled & cased well into active status for the first time.
   - Transitioning a well from CO2 injection to a new CCS/CCUS scheme may also require a new injection/disposal facility ID, depending on the subtype of the existing linked facility.
   - Some transitions, such as moving a well from an active injection/disposal status to suspended, do not allow changes to the facility linkage.
2. Requesting a **Well to Facility Link Change**.
   Industry operators can request a well-to-facility link change using the designated function in Petrinex. This function allows the current facility operator to link a well to a new facility, provided the new facility has a congruent subtype.
   - If the current facility operator also operates the new facility, Petrinex processes the change immediately.
   - If the facility is operated by a different Business Associate (BA), the new facility operator must approve the request before the change is finalized.

The table below lists CCS/CCUS well statuses that require facility linkages and identifies which injection/disposal facility subtypes operators may link those wells to. These linkages ensure proper reporting and tracking of injection activities in Petrinex.

CCS/CCUS WELL-FACILITY LINKAGES			
Scheme	**Well Statuses**	**Subtype**	**Subtype Description**
CCS	CO2 N/A DISP CARBON SEQ CO2 SUSP DISP CARBON SEQ	503 509	DISPOSAL DISPOSAL (ISSUED BY AER ONLY)
CCUS	CO2 N/A INJ CO2 EOR SEQ CO2 SUSP INJ CO2 EOR SEQ	501 506 508	ENHANCED RECOVERY SCHEME IN-SITU OIL SANDS ENHANCED RECOVERY SCHEME (ISSUED BY AER ONLY)

Monthly Reporting Requirements for CCS/CCUS Schemes

Changes to monthly reporting required for CCS/CCUS schemes are limited to volumetric reporting. Petrinex has not introduced any changes or new requirements for other monthly reporting functions such as allocations, pipeline splits, or other facility-level changes.

Volumetric Reporting

- Operators must report all CCS/CCUS injection activity at the well level.
- Facility level reporting remains unchanged. Operators will continue to report the same activities for injection/disposal facilities as they do for other types of wells.
- All active CCS/CCUS wells will require a monthly volumetric submission, just like any other active injection/disposal wells.
- Petrinex lists CCS/CCUS wells under the **Well Activity view** of the injection/disposal facility in the **Edit Volumetric Submission** screen.

The table below outlines the standard well-level volumetric activities permitted for wells with active CCS/CCUS statuses. These activities follow the same reporting rules as other injection/disposal wells.

CCS/CCUS VOLUMETRIC WELL ACTIVITIES			
Scheme	**Well Status**	**Activity**	**Activity Description**
CCS	CO2 N/A DISP CARBON SEQ	INJ FUEL FLARE VENT SHUTIN	INJECTION FUEL FLARE VENTED SHUT-IN
CCUS	CO2 N/A INJ CO2 EOR SEQ	INJ FUEL FLARE VENT SHUTIN	INJECTION FUEL FLARE VENTED SHUT-IN

Key Change to Volumetric Reporting for CCS/CCUS Wells

Operators **must** now report the **average density of CO2 injected into CCS/CCUS wells** each production month, as required by AER Directive 065: Resources Applications for Oil and Gas Reservoirs. This is the primary change to volumetric reporting for these schemes.

Density Reporting Details

- Petrinex added a new Density column to the Well Level Activity screen between the Volume and CCI columns in volumetrics.
- Batch upload parameters have been updated to support density values. Please review the updated AB CSV Upload Specifications and AB CSV Upload Templates.
- The density column is visible for all wells at injection facilities, but it is it is only applicable to CCS/CCUS wells.
- Operators **must report a density value only when injecting CO2 at active CCS/CCUS wells.**
- Do not report density for:
    - injection of other products at a CCS/CCUS well.
    - injection of CO2 at other injection/disposal wells that are not part of a CCS/CCUS scheme.
- Reported density values must be numerical and be greater than 0.000 up to a maximum value of 1500.000 (maximum 3 decimal places).

As previously noted, operators can report density for all CCS/CCUS wells from the 2024-11 production month. This requirement aligns with AER Directive 065: Resources Applications for Oil and Gas Reservoirs, which mandates reporting of the average density of CO2 injected during each production month.

Contacts

Please see the contact information for the various business areas below if you have questions or require more information on CCS/CCUS reporting.

For questions or information related to how CCS/CCUS schemes are **reported in Petrinex**, please contact the **Petrinex Business Desk:**

Phone: 403-297-6111 (Calgary)
1-800-992-1144 toll free)
Email: petrinexsupport@petrinex.ca

For questions or information related to **Regulator policies and guidelines** related to CCS/CCUS reporting, please refer to the AER Directive 065: Resources Applications for Oil and Gas Reservoirs, Sections 2.1.5 and 4.1.7, or contact the **Production Accounting Help Desk**:

Phone: 403-297-8952 extension 3
Email: pa.help@aer.ca