PETRINEX
CANADA'S PETROLEUM INFORMATION NETWORK

Learning Aid:

AER Annual Methane Emissions Reporting CSV Spreadsheet Upload Specifications

Updated: March 2, 2026

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Introduction

There are two main ways that you can submit monthly data to Petrinex. You can submit data:

- **Online**. The Petrinex online forms allow you to enter data that is reported to Petrinex.
- **Batch upload process**. In a batch submission, you create data in your internal system, and then upload it to Petrinex. The standard for batch file submission is XML (Extensible Markup Language). You can also create your data in spreadsheets and upload this data directly to Petrinex as a CSV (Comma Separated Values) file.

You may now upload data in spreadsheets for:
AER Annual Methane Emissions Reporting – submit mandatory information as required by Alberta Energy Regulator for annual methane emissions reporting.

Note: Each spreadsheet upload is considered a full-facility replacement for the reported period. Each AER Annual Methane Emissions Reporting upload that you make to Petrinex overwrites earlier uploads, therefore new submissions must include all data for the year. If you report additional data after the first submission, then you must resubmit the initial data, along with the new data.

Create and Save Data within a Spreadsheet

You must follow specific rules to create and save data in a spreadsheet for upload to Petrinex. For example, you can only upload data created within a spreadsheet, if that data is saved as a CSV (Comma Separated Values) file. Petrinex does not accept data on a spreadsheet saved as any other format. You may create spreadsheets in any spreadsheet software (such as Microsoft Excel) that can save as a CSV file.

For illustration purposes only, Microsoft Excel conventions are used in the following step-by-step procedures. In this example, we use the terms spreadsheet and worksheet. A worksheet is an individual page that is organized into columns and rows and is always stored in spreadsheet. A spreadsheet may contain many worksheets. Note: Microsoft Excel refers to spreadsheets as workbooks.

Follow these steps to create and save data within a spreadsheet before uploading the data to Petrinex.

Step 1. Download the worksheet template for the work process data that you want to upload.

To download the worksheet template, complete the following steps.

a. Go to the Learning Centre website page
b. Click the Job Aid – AER Annual Methane Emissions Submission CSV Spreadsheet Upload Templates.

Step 2. Create a new worksheet from the template.

a. Create a new worksheet within your existing spreadsheet.
b. Copy the provided template into your new worksheet or type the header row from the template into your new worksheet. Row 1, the header row, must contain the column descriptions in your new worksheet.

Note: You may only include one work process (AER Annual Methane Emissions Reporting) per worksheet, but you may include multiple facilities (note the data must be sorted by facility) when submitting a file to Petrinex. The order of the header row must match the order that is specified in the templates for AER Annual Methane Emissions Submissions work process).

Header Row

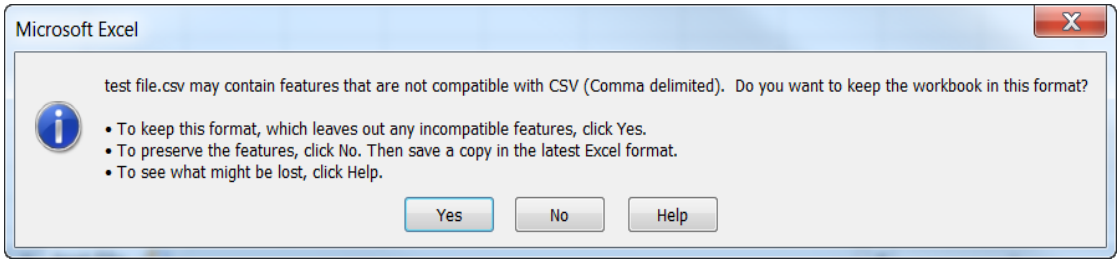
	A	B	C	D
1	Verb	Noun	Format Version	Submitting Facility Province
2				
3				
4				

Step 3. Enter the data from your existing spreadsheet into the new worksheet.
Starting in Row 2, copy, move, paste, or link the appropriate data from your spreadsheet into the new worksheet.

Step 4. Select/highlight all data on the worksheet. Choose Format – Cells – Number (tab) and choose Text. Click OK. All data on the worksheet must be in text format prior to saving in .csv format.

Step 5. Save your new worksheet. You may only save the worksheet in CSV format for upload to Petrinex. Further, only the active worksheet may be saved as a CSV file. Multiple worksheets, within a single spreadsheet, must be saved as individual CSV files, and uploaded separately.

a. On the File menu, select **Save As**
b. Type the file name that you want to use
c. Select the CSV (Comma delimited) (*.csv) file type
d. Click **Save**. The following message appears.

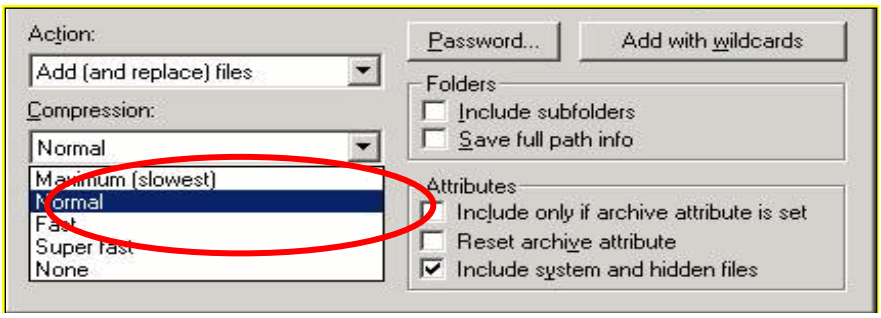


e. Click Yes.

If you were to open this worksheet at this point, you will lose all of the preceding zero's in any of the data. Example BA Code 0123 would show as 123, Facility Identifier 0000123 would show as 123. If you were to upload this document to Petrinex in this manner it would not be accepted as it would not meet the required schema. Therefore, we need to create a worksheet in text to upload.

a. Open a new Excel worksheet and click on Data to import your saved worksheet into this new worksheet.
b. Click "From Text" to open the Import Text file window
c. Highlight the document that you previously saved and click Import.
d. This opens the Text Import Wizard:
    1. Click the radio button – Delimited and click Next
    2. Change the radio button under Delimiters from Tab to Comma and click Next.
    3. You will want to change all of the columns to be Text rather than General. To do this – Hold down the Shift Key and using the scroll bar on the bottom bring it as far to the right as you can. This will highlight all of the columns.
    4. Click the radio button Text
    5. Click Finish
    6. You are now asked where you want to put the data? Click the radio button – Existing Worksheet and click OK.
    7. Save the new worksheet in a .csv file format – you can overwrite the original if you choose to ensure that you do not try to upload the wrong version.

Large files may be compressed, using the file compression utilities PKZIP or WinZip, or the built-in compression utility within Windows XP (referred to as NTFS compression). When using WinZip, files must be compressed in the **Normal** compression mode, as shown below. It is recommended that any files over 5MB should be zipped.



Note: only one file can be included in a zipped file.

Step 6. Submit the saved worksheet (with the .csv file extension) to Petrinex. You may only upload one file to Petrinex at a time.

a. Access Petrinex, using your Web browser.
b. On the Main Menu, select **Data Submission** and then **Batch Upload**.
c. Type in your CSV file location and name or use the **Browse** button to locate the file.
d. Click **Upload**. You will receive an onscreen message indicating if the file is uploaded successfully. We recommend that you record the file incoming key number. If the batch was to fail, this number will help the Petrinex staff in assisting in determining the cause of the failure.
e. You will receive an e-mail notification detailing the results of the upload when Petrinex has processed the submitted upload.

Downloadable Validation Results

A downloadable report is available for all batch validation notifications associated with **Validation Failure and Validation Success with Warning**. This will not impact batch Validation Success notifications. The original "text only" notification details will still be available; however, this downloadable version will allow sorting and filtering of validation results.

On the Petrinex In-Box Notifications screen a dropdown icon will be displayed beside the appropriate validation results notification. Clicking on this icon will open a download window to open the file.

Petrinex In-Box Notifications

Date/Time	Notification #	Message Subject		Facility ID	Facility Name
2024-07-22 14:28	OPS015	Validation Results OPS (Split): Failure - [CR 4...			

The downloaded file will open in csv and display information specific to the type of batch file that was submitted. Standard columns include the type of file submitted, file number, number of submissions: received, successful, partially successful and rejected. All the other columns will detail the various data elements submitted and any error message codes and descriptions applicable to this particular type of batch submission.

AER Annual Methane Emissions Reporting Worksheet Format

Spreadsheet Column	Data element	Example Field Content	Format	Required on each row? Y/N	Comments
A	Verb	ADD		Y	ADD is the only valid verb
B	Noun	MTHEMIS		Y	MTHEMIS is the only valid noun
C	Revision	001	(prefix with 0's)	Y	Current is 001
D	Province State	AB	2 chars	Y	Must be AB
E	Type	CS	2 chars	Y	Must be a valid facility type - See Appendix A
F	Identifier	0001234	7 digits (prefix with 0's)	Y	Must be a valid identifier
G	Year	2025	YYYY	Y	
H	DefinedVentGasVolume	3000.000	12 digits (3 decimals)	N	Defined Vent Gas volume (m3)
I	DefinedVentGasMass	1500.000	12 digits (3 decimals)	N	Defined Vent Gas methane mass (kg)
J	PneumaticDevicesInstrumentsVentGasVolume	0.000	12 digits (3 decimals)	N	Pneumatic Devices Instruments Vent Gas volume (m3)
K	PneumaticDevicesInstrumentsMass	0.000	12 digits (3 decimals)	N	Pneumatic Devices Instruments methane mass (kg)
L	PneumaticDevicesPumpsVentGasVolume	0.000	12 digits (3 decimals)	N	Pneumatic Devices Pumps Vent Gas volume (m3)
M	PneumaticDevicesPumpsMass	0.000	12 digits (3 decimals)	N	Pneumatic Devices Pumps methane mass (kg)
N	CompressorSealsVentGasVolume	12000.000	12 digits (3 decimals)	N	Compressor Seals Vent Gas volume (m3)
O	CompressorSealsMass	4000.000	12 digits (3 decimals)	N	Compressor Seals Vent Gas methane mass (kg)
P	FugitiveVentGasVolume	3000.000	12 digits (3 decimals)	N	Fugitive Vent Gas volume (m3)
Q	FugitiveMass	1000.000	12 digits (3 decimals)	N	Fugitive methane mass (kg)
R	PrimaryContactName	James Smith	50 chars	N	Name of Contact
S	PrimaryContactTitle	Regulatory Advisor	50 chars	N	Title of Contact
T	PrimaryContactEmail	James.smith@123.com	128 chars	N	Email of Contact
U	PrimaryContactPhone	4031231234	20 chars	N	Phone # of Contact

Spreadsheet Column	Data element	Example Field Content	Format	Required on each row? Y/N	Comments
V	SecondaryContactName	Michael Jones	50 chars	N	Name of Contact
W	SecondaryContactTitle	Regulatory Advisor	50 chars	N	Title of Contact
X	SecondaryContactEmail	Micheal.jones@123.com	128 chars	N	Email of Contact
Y	SecondaryContactPhone	4032462468	20 chars	N	Phone # of Contact
Z	CompressorSealsInventorySerialNumberIdentifier	K300	30 chars	N	Serial number or identifier
AA	CompressorSealsInventoryLocationException		2 chars	N	Location exception portion of legal land description
AB	CompressorSealsInventoryLegalSubdivision	01	2 chars	N	Legal subdivision portion of legal land description
AC	CompressorSealsInventorySection	02	2 chars	N	Section portion of legal land description
AD	CompressorSealsInventoryTownship	003	3 chars	N	Township portion of legal land description
AE	CompressorSealsInventoryRange	04	2 chars	N	Range portion of legal land description
AF	CompressorSealsInventoryMeridian	5	1 char	N	Meridian portion of legal land description
AG	CompressorSealsInventoryInstallationYear	2025	YYYY	N	
AH	CompressorSealsInventoryCompressorType	RECIPROCATING	15 chars	N	Compressor type: RECIPROCATING or CENTRIFUGAL.
Ai	CompressorSealsInventoryThrowCount	4	Integer	N	Throw count, blank if compressor type is CENTRIFUGAL
AJ	CompressorSealsInventorySealType	RODPACKING	15 chars	N	Seal type: DRY, WET, or RODPACKING.
AK	CompressorSealsInventoryControlledVentIndicator	N	1 char	N	Controlled vent indicator Y or N
AL	CompressorSealsInventoryVentGasVolume	1000.000	12 digits (3 decimals)	N	Vent Gas volume (m3)
AM	CompressorSealsInventoryPressurizedTime	8760	5 chars	N	Pressurized time (hours)
AN	FugitiveSurveyScreeningSiteWellIdentifier	SiteA	60 chars	N	Fugitive Survey or Screening Site/Well Identifier
AO	FugitiveSurveyScreeningDate	2025-01-31	YYYY-MM-DD	N	Survey or Screening Date
AP	FugitiveSurveyNumberIdentifiedSourcesFugitiveEmissions	5	Integer	N	Number of identified sources of fugitive emissions
AQ	FugitiveSurveyScreeningType	FUGSURVEY	15 chars	N	Survey or Screening type: FUGSURVEY, FUGSCREENING, ALTFEMPMOBILE, or ALTFEMPSTATIONARY.
AR	FugitiveSitelevelEmissionsRate	20.00	8 Digits (2 decimals)	N	Site-level emissions rate

Appendix A

These are the only facility subtypes that can made a methane emissions reporting submission

Facility Subtype Code	Facility Subtype
311	Crude Oil Single-well Battery
321	Crude Oil Multiwell Group Battery
322	Crude Oil Multiwell Proration Battery
331	Crude Bitumen Single-well Battery
341	Crude Bitumen Multiwell Group Battery
342	Crude Bitumen Multiwell Proration Battery
343	Crude Bitumen/Heavy Oil Administrative Grouping
344	In-situ Oil Sands
345	Sulphur Reporting at Oil Sands
351	Gas Single Well Battery
361	Gas Multiwell Group Battery
362	Gas Multiwell Effluent Measurement Battery
363	Gas Multiwell Proration SE Alberta Battery
364	Gas Multiwell Proration Outside SE Alberta Battery
365	Gas Multiwell Group Battery (Issued by AER only)
366	Gas Multiwell Proration SE AB Battery (Issued by AER only)
367	Gas Multiwell Proration Outside SE AB (Issued by AER only)
371	Gas Test Battery
381	Drilling and Completing
401	Gas Plant Sweet
402	Gas Plant Acid Gas Flaring < 1t/d Sulphur

403	Gas Plant Acid Gas Flaring > 1t/d Sulphur
404	Gas Plant Acid Gas Injection
405	Gas Plant Sulphur Recovery
406	Gas Plant Mainline Straddle
407	Gas Plant Fractionation
501	Enhanced Recovery Scheme
502	Concurrent Production/Cycling Scheme
503	Disposal
504	Acid Gas Disposal
505	Underground Gas Storage
506	In-situ Oil Sands
507	Disposal (Approved as part of a Waste Plant)
508	Enhanced Recovery Scheme (Issued by AER only)
509	Disposal (Issued by AER only)
601	Compressor Station
611	Custom Treating Facility
612	Custom Treating Facility (Approved as part of a Waste Plant)
621	Gas Gathering System
622	GGS (Pipes only or Compressor lt 75kw. Issued by AER only)
671	Tank Farm / Oil Loading and Unloading Terminal
673	Third Party Tank Farm/Oil Loading and Unloading Terminal
701	Surface Waste Facility
702	Cavern Waste Facility
902	Water Source Battery