



# *COGCC Interim Form 2B: Cumulative Impacts Data Identification Introduction, Definitions, & Filling It Out*

Operator Training

January 19, 2021  
Revised January 21, 2021



**COLORADO**  
**Oil & Gas Conservation  
Commission**  
Department of Natural Resources

# Overview

- Interim Form 2B - Instructions
  - What it is
  - How to use it
  - How to submit it
- Form 2B - Important Definitions
  - Estimate
  - At time of submittal
  - Describe versus Evaluate
  - Minimize versus Mitigate
- Form 2B - How to fill it out
  - Text Boxes & Tables (Interim Form 2B)
  - Sections: Location Scale Data versus OGDG Scale Data (eForms & Interim Form 2B)
  - Following Instructions (eForms & Interim Form 2B)



# Thank you

- Melissa Housey
- Greg Deranleau, John Noto, Sabrina Trask
- Our partners at CPW
- Our partners at CDPHE, particularly APCD

Answers to Form 2B questions may need to be redirected to multiple people in multiple agencies to get the most complete answer to a given question...please be patient



# Interim Form 2B - what is it

- Until the Form 2B is finished going through development, testing, and release in eForms, an “Interim Form 2B” will be used
- The Interim Form 2B is an Excel spreadsheet based on the Form 2B Checklist
  - Form 2B Checklist will be released closer to the Form 2B eForms release
- Spreadsheet mirrors the layout and tabs as they will be in the eForms version



# Interim Form 2B - how to use it

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Schwarz, Stephen Share

A1

Interim Form 2B Version: January 19, 2021

Contact & Plan Information Tab			
Ref #	Form 2B Field	What is this?	Operator Answer
1	Contact Name (First Name)	The name and contact information for an employee of the Operator who is available and able to answer technical questions related to the form. (REQUIRED)	
2	Contact Name (Last Name)		
3	Phone		
4	Fax		
5	Email		
6	Operator Num	COGCC Operator Number assigned to the operator upon registration (Form 1) with the COGCC. (REQUIRED)	
7	Suff	Drop-down to indicate a Suffix for the Operator Number, that is associated with a regional mailing address. (OPTIONAL)	
8	Address	Corporate mailing address from the operator's registration (Form 1). (REQUIRED)	
9	City		
10	State		
11	Zip		
12	Oil & Gas Development Plan Name:	This is the name for the entire Oil and Gas Development Plan. Must match the name of the OGDP on the associated Form 2C and OGDP Hearing Application. (REQUIRED)	
13	Oil & Gas Development Plan Docket #:	The docket number the COGCC Hearings Unit has assigned to the Oil and Gas Development Plan Hearing Application. (REQUIRED)	
14	OGDP ID#:	The OGDP ID number the COGCC has assigned to the Oil and Gas Development Plan. This will only be used when an existing approved OGDP is being modified, amended, or otherwise changed. (OPTIONAL)	
	This Oil & Gas Development	If this Oil and Gas Development Plan (OGDP) is part of a Comprehensive	

“Checklist” style format

- Ref # - cite the “Ref#” and “tab” when asking questions (example: “I have a question about the OGDP name, Ref #12 on the Contact & Plan Information tab” ...)
- Form 2B Field - the unique data field, dropdown, checkbox, title, question, or other prompt on the eForm 2B
- What is this? - description of the information the data field is asking for
- Operator Answer - this is where you’ll put the answer to the question (unless the answer is a table, then fill out the table)

Overview Resources **Contact & Plan Information** Oil & Gas Location #XX Info (2) Oil & Gas Location #XX Informat OGDP Scale Data Benefi ...

Ready 80%



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6	Operator Num	COGCC Operator Number assigned to the operator upon registration (Form 1) with the COGCC. (REQUIRED)	
7	Suff	Drop-down to indicate a Suffix for the Operator Number, that is associated with a regional mailing address. (OPTIONAL)	
8	Address	Corporate mailing address from the operator's registration (Form 1). (REQUIRED)	
9	City		
10	State		
11	Zip		
12	Oil & Gas Development Plan Name:	This is the name for the entire Oil and Gas Development Plan. Must match the name of the OGDP on the associated Form 2C and OGDP Hearing Application. (REQUIRED)	
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This Oil & Gas Development (OGDP) is part of a Comprehensive

Overview Resources **Contact & Plan Information** Oil & Gas Location #XX Info (2) Oil & Gas Location #XX Informat OGDP Scale Data Benefi ...

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Tabs across the bottom, similar to the layout of the tabs of the Form 2B in eForms



# Interim Form 2B - how to use it

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do... Schwarz, Stephen Share

A1

Interim Form 2B Version: January 19, 2021

**OIL & GAS LOCATION DATA TAB**

Oil & Gas Location Information Section

Ref #	Form 2B Field	What is this?	Operator Answer
	1 - The following information is provided for each Oil & Gas Location within the Oil & Gas Development Plan. 2 - Copy/duplicate this tab for as many Oil and Gas Locations within this OGDP.		
1	Oil & Gas Location Name:	Name of proposed Oil and Gas Location. Must match associated Form 2A. (REQUIRED)	
2	Oil & Gas Location Number:	Number of proposed Oil and Gas Location. Must match associated Form 2A. (REQUIRED)	
3	Status:	Indicate the approval and construction status of the Location at the time of the Form 2C submittal using the following choices (REQUIRED): • Proposed • Active, unbuilt • Active, built	
4	Form 2A Doc#:	The eForm-assigned Document Number of the Form 2A for this Oil & Gas Location, as submitted with this OGDP. (REQUIRED)	
5	Loc ID#:	The 6-digit Location ID number the COGCC has assigned to an approved Oil and Gas Location. A Location ID Number only exists if the location was existing prior to April 1, 2009 or if a Form 2A has been approved for the location. (OPTIONAL; Required only if Loc ID# exists for this Location.)	
6	QTRQTR:	Quarter-Quarter or Lot or Tract of the proposed Oil and Gas Location. Must match the associated Form 2A. (REQUIRED)	
7	Sec:	Section of the proposed Oil and Gas Location. Must match the associated Form 2A. (REQUIRED)	
8	Town:	Township of the proposed Oil and Gas Location. Must match the associated	

Oil & Gas Location #XX Information tab

- BEFORE you fill this tab out, make a copy for each location you are including in the OGDP and this Form 2B
- This is the ONLY tab where you will do this
- The information on this tab should be filled out for every location
- Other tabs are related to the OGDP as a whole

Overview Resources Contact & Plan Information **Oil & Gas Location #XX Informat** OGDP Scale Data Beneficial Impacts Mitigation Measure ...

Ready 80%



# Interim Form 2B - how to use it

The screenshot shows an Excel spreadsheet with the following structure:

- Row 1: Interim Form 2B Version: January 19, 2021
- Row 2: **OIL & GAS LOCATION DATA TAB** (blue header)
- Row 3: Oil & Gas Location Information Section (red header)
- Row 4: Table header with columns: Ref #, Form 2B Field, What is this?, Operator Answer
- Row 5: Instructions:  
1 - The following information is provided for each Oil & Gas Location within the Oil & Gas Development Plan.  
2 - Copy/duplicate this tab for as many Oil and Gas Locations within this OGDG.
- Row 6: Ref # 1, Oil & Gas Location Name: Name of proposed Oil and Gas Location. Must match associated Form 2A. (REQUIRED)
- Row 7: Ref # 2, Oil & Gas Location Number: Number of proposed Oil and Gas Location. Must match associated Form 2A. (REQUIRED)
- Row 8: Ref # 3, Status: Indicate the approval and construction status of the Location at the time of the Form 2C submittal using the following choices (REQUIRED):
  - Proposed
  - Active, unbuilt
  - Active, built
- Row 9: Ref # 4, Form 2A Doc#: The eForm-assigned Document Number of the Form 2A for this Oil & Gas Location, as submitted with this OGDG. (REQUIRED)
- Row 10: Ref # 5, Loc ID#: The 6-digit Location ID number the COGCC has assigned to an approved Oil and Gas Location. A Location ID Number location was existing 2009 or if a Form 2A approved for the location. Required only if Loc ID# Location.)
- Row 11: Ref # 6, QTRQTR: Quarter-Quarter or Location proposed Oil and Gas match the associated Form 2A. (REQUIRED)
- Row 12: Ref # 7, Sec: Section of the proposed Location. Must match Form 2A. (REQUIRED)

The 'Move or Copy' dialog box is open, showing the following options:

- To book: Form\_2B\_Interim\_MASTER\_11821.xlsx
- Before sheet: Oil & Gas Location #XX Informat (highlighted)
- Create a copy

Copying the Oil & Gas Location #XX Information tab

- Right click on the tab
- Select "Move or Copy..."
- Select the "Oil & Gas Location #XX Information" tab
- Check the box for "Create a copy"
- Click "OK"



# Interim Form 2B - how to use it

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Oil & Gas Location Information Section

Ref #	Form 2B Field	What is this?	Operator Answer
	1 - The following information is provided for each Oil & Gas Location within the Oil & Gas Development Plan. 2 - Copy/duplicate this tab for as many Oil and Gas Locations within this OGDG.		
1	Oil & Gas Location Name:	Name of proposed Oil and Gas Location. Must match associated Form 2A. (REQUIRED)	
2	Oil & Gas Location Number:	Number of proposed Oil and Gas Location. Must match associated Form 2A. (REQUIRED)	
3	Status:	Indicate the approval and construction status of the Location at the time of the Form 2C submittal using the following choices (REQUIRED): • Proposed • Active, unbuilt • Active, built	
4	Form 2A Doc#:	The eForm-assigned Document Number of the Form 2A for this Oil & Gas Location, as submitted with this OGDG. (REQUIRED)	
5	Loc ID#:	The 6-digit Location ID number the COGCC has assigned to an approved Oil and Gas Location. A Location ID Number only exists if the location was existing prior to April 1, 2009 or if a Form 2A has been approved for the location. (OPTIONAL; Required only if Loc ID# exists for this Location.)	
6	QTRQTR:	Quarter-Quarter or Lot or Tract of the proposed Oil and Gas Location. Must match the associated Form 2A. (REQUIRED)	
7	Sec:	Section of the proposed Oil and Gas Location. Must match the associated Form 2A. (REQUIRED)	
8	Town:	Township of the proposed Oil and Gas Location. Must match the associated Form 2A. (REQUIRED)	

Ready

Overview Resources Contact & Plan Information **Oil & Gas Location #XX Info (2)** Oil & Gas Location #XX Informat OGDG Scale Data Benefi ...

Copying the Oil & Gas Location #XX Information tab

- Creates copy of the tab that can be renamed
- Rename the tab as: [Location Name & Number] Information tab
- Create and rename as many copies as there are locations within the OGDG



# Interim Form 2B - how to submit it

[Slide revised January 21, 2021]

- The Interim Form 2B will be submitted to COGCC in **ONE** place
  - Submitted via eForms as an attachment to the Form 2C (as an excel spreadsheet) with the label INTERIM FORM 2B
- The Interim Form 2B must be submitted in **ONLY** eForms
- For OGDG eFiling Hearing Application, state that the Interim Form 2B is attached to the Form 2C instead of providing Form 2B doc#
- Once the Interim Form 2B is submitted it will undergo a technical review by COGCC Staff
  - Any changes or edits that arise during the technical review will be made with Operator concurrence
  - We are planning to have the eForms version of the Form 2B ready prior to the Commission hearing any OGDGs
  - The eForms version of the Form 2B must be submitted before the OGDG can go to Commission Hearing
    - ◆ Submittal of the eForms version of the Form 2B should not hold up an Operator's OGDG Hearing schedule

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  - Following Instructions (eForms & Interim Form 2B)



# Form 2B Definitions - Estimate

- For MANY of the data fields on the Form 2B, we are asking for an “estimated value”
  - Examples: “estimated number of truck trips,” “estimated weeks to,” “estimated emissions”
- The review of the Form 2B will be undertaken with the understanding that the estimated values are based on each individual Operator’s own estimation of their operations
  - Remember the purpose of the Form 2B is as a data submittal form directly to the Cumulative Impacts Data Evaluation Repository (CIDER database)
  - In many cases actual values are reported on different forms or to other agencies after the operations have occurred
  - Because the Form 2B is data estimated before operations take place, we are not looking to enforce on discrepancies between the estimates submitted on the Form 2B and the actuals submitted on later forms
    - ◆ If significant discrepancies occur, we will reach out to ensure the data quality of future Form 2B submittals to make sure the estimates being provided are accurately reflecting the operations that will occur



# Form 2B Definitions - At time of submittal

- For some of the data fields on the Form 2B, the answer at the time of submittal of the Form 2B may be different from the what the answer would be at the time of OGDPA approval
  - Example: number of proposed wells or locations within one mile of a proposed oil and gas location
    - ◆ Between submittal and approval some of the locations/wells could be approved or withdrawn
- With this in mind, the review of the Form 2B will be done within the context of the surrounding conditions at the time of the submittal of the Form 2B



# Form 2B Definitions - Describe vs Evaluate

## Describe

- A narrative or qualitative depiction of the situation
- Adjectives

[Operator] has established an investigation level threshold of five (5.0) ppm TVOC based upon previous monitoring. This level was determined to indicate a potential change in onsite emissions that warrants further investigation but has been equivalent to levels below recommended health guideline values. This value was determined using hydrocarbon monitoring and sample data from nearby facilities.

## Evaluate

- An appraisal or assessment of the significance
- Math

*Air Monitoring Plan – VOC ppm Determination*

	VOC Mass	Benzene Mass	VOC to Benzene Ratio	Calculated VOC @ 9ppb Benzene
Sample 1	26.314	0.028	0.001	8.5
Sample 2	29.164	0.028	0.001	9.4
Sample 3	15.647	0.022	0.001	6.4
Sample 4	18.512	0.024	0.001	6.9

This continuous system uses 5 PPM VOC as a marker for benzene to protect public health. The ratios were determined and are conservative because:

- Actual representative gas analyses (referenced in table above) were used to calculate VOC to Benzene ratios
- 5 PPM is at least three times lower than each individual ratio referenced in table above
- The chosen length of time established for the alerts is much shorter in duration than the 14 continuous days referenced by ATSDR 9ppb health guideline values.

# Form 2B Definitions - Mitigation Hierarchy

- **AVOID ADVERSE IMPACTS** means to differentially select alternative locations, practices, or methods for Oil and Gas Operations based on site-specific circumstances, so that those operations will not cause quantifiable direct, indirect, or cumulative adverse impacts to the potentially affected resource(s). Avoidance may include a no action alternative.
- **MINIMIZE ADVERSE IMPACTS** means, as provided by § 34-60-106(2.5), C.R.S., providing necessary and reasonable protections to reduce the extent, severity, significance, or duration of Unavoidable direct, indirect, and cumulative Adverse Impacts to public health, safety, welfare, the environment, or Wildlife Resources from Oil and Gas Operations.
- **MITIGATE ADVERSE IMPACTS** means, with respect to Wildlife Resources, measures that compensate for Unavoidable direct, indirect, and cumulative Adverse Impacts and loss of such resources from Oil and Gas Operations, including, as appropriate, habitat replacement, on- or off-site habitat enhancement, habitat banking, or financial payment in lieu of habitat replacement or enhancement to compensate for the loss of habitat and ensure that wildlife populations are protected.



# Form 2B Definitions - Minimize vs Mitigate

## Minimize

- To reduce to the smallest amount possible
- Operational
- Addresses unavoidable impacts
- Engineering controls

### Examples:

- Quiet frac
- Location size
- Hard or dust free surfaces
- Tankless design

## Mitigate

- To offset the intensity or severity of impacts
- Compensatory
- Addresses remaining impacts
- Administrative controls

### Examples:

- Timing
- Landscaping
- Payment
- Offsite projects
- Air monitoring





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# Form 2B - How to fill it out

- Interim Form 2B has two types of data fields: text box and data table

– Text box

- ◆ Number
- ◆ YES/NO answer
- ◆ Narrative Responses
- ◆ Some may require adding rows as needed

OIL & GAS LOCATION DATA TAB			
Oil & Gas Location Information Section			
Ref #	Form 2B Field	What is this?	Operator Answer
12	Operations Duration	1 - This section asks about the ESTIMATED duration of different pre-production and production activities on the oil & gas location. 2 - ONLY provide answers for the oil & gas location listed via Ref# 1&2.	
13	Estimated total number of weeks to construct this Oil & Gas Location	The estimated time in weeks to construct the Oil and Gas Location for the activities proposed in this OGDG. (REQUIRED)	
14	Estimated total number of weeks to drill all planned wells for this Oil & Gas Location	The estimated time in weeks to drill ALL proposed, undrilled wells on the Oil and Gas Location for this OGDG. If multiple occupations are planned for drilling all the wells on this Location, indicate the TOTAL number of weeks for all combined occupations. (REQUIRED)	
15	Number of planned drilling occupations to drill all planned wells for this Oil & Gas Location	The number of occupations planned to drill ALL proposed, undrilled wells on the Oil and Gas Location for this OGDG. (REQUIRED)	

Terrestrial and Aquatic Wildlife Resources and Ecosystems Section			
Ref #	Form 2B Field	What is this?	Operator Answer
65	List of High Priority Habitats (HPH) within a mile:	1 - This section references the different types of High Priority Habitats (HPH) within one mile of the Working Pad Surface of the proposed Oil and Gas Location.	
	66	67	68
	High Priority Habitat name:	High Priority Habitat distance:	High Priority Habitat estimated acreage disturbed:
	Provide the name of the HPH within one mile of the proposed Oil and Gas Location. (Example: Bald eagle, active nest). (REQUIRED)	Indicate the distance (in feet) from the edge of the Working Pad Surface to the listed HPH. (REQUIRED)	Indicate the amount (in acres) of the listed HPH that is estimated to be disturbed by the construction of the proposed Oil and Gas Location as part of this OGDG. (REQUIRED)
	HPH 1		
	HPH 2		
	HPH 3		
	HPH 4		
	HPH 5		
	HPH 6		

Add extra rows as needed.

# Form 2B - How to fill it out

- Interim Form 2B has two types of data fields: text box and data table
  - Data table - out to the right of the “Operator Answer” column
    - ◆ Number
    - ◆ Reflects the table layout that will be on the eForms version of the Form 2B

Interim Form 2B

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Process Heaters or Boilers							
Storage Tanks							
Venting or Blowdowns							
Combustion Control Devices							
Non-Road Internal Combustion Engines							
Drill Mud							
Flowback or Completions							
Loadout							

Form 2B eForms mockup

	NOx	CO	VOCs	Methane	Ethane	CO2	N2O
Process Heaters or Boilers	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Storage Tanks	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Venting or Blowdowns	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Combustion Control Devices	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Non-Road Internal Combustion Engines	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Drill Mud	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Flowback or Completions	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Loadout	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

# Form 2B - How to fill it out

- Different tabs ask for data at the OGDG level and the individual location level
- See below to make sure the tabs are answered appropriately
  - Contact & Plan Information tab = OGDG Scale
  - Oil & Gas Location #XX Information tab = Location Scale
  - OGDG Scale Data tab = OGDG Scale
  - Beneficial Impacts tab = OGDG Scale
    - ◆ If some beneficial impacts are site specific, identify them in the “evaluation” text box answers
  - Mitigation Measures tab = OGDG Scale
    - ◆ If some mitigation measures are site specific and will not apply to the entire OGDG, state as such in your “Operator Answer/Mitigation Description”
  - Submit tab = Location Scale or OGDG Scale
    - ◆ Specify in the comments



# Form 2B - How to fill it out

- Pay careful attention to the “Form 2B Field” and the “What is this?” columns, as the information being asked is specific and the questions may not necessarily flow into one another
  - Example: Terrestrial and Aquatic Wildlife Resources and Ecosystems Section of the Oil & Gas Location #XX Information tab
    - ◆ Some questions ask about the location’s disturbance and land use, while other questions ask about the surrounding land use
    - ◆ Pay attention to the questions and what they are asking

# Form 2B - Oil & Gas Location #XX Info tab

Multiple sections grouped by topic

- Oil & Gas Location Information section
- Water Resources section
- Terrestrial and Aquatic Wildlife Resources and Ecosystems section
- Public Welfare section
- Air Resource section
- Public Health section
- Existing Oil and Gas section



# Form 2B - Oil & Gas Location #XX Info tab

## Oil & Gas Location Information section

- Location data
  - QtrQtr/Sec/Twnp/Rng
  - # of wells
- Operations Duration
  - Estimated weeks for construction, drilling, & completions
  - Estimated months of production
- Qualitative evaluation of noise, light, & odor during pre-production & production phases



# Form 2B - Oil & Gas Location #XX Info tab

## Public Welfare section

- Number of RBU, non-school AND non child care center HOBUs, School Facilities, and Child Care Centers
  - 0' - 2,000'
  - 2,001' - 5,280'
- Recreation and Scenic Value
  - List all State Parks, State Trust Lands, or State Wildlife Area within 1-mile of the Oil & Gas Location
    - ◆ COGIS Maps layers
  - List all Designated Outdoor Activity Areas within 1-mile of the Oil & Gas Location
    - ◆ COGIS Maps layer
  - List all mapped trails that support recreational activities within 1-mile of the Oil & Gas Location
    - ◆ Colorado Trail Explorer (COTREX) website: <https://trails.colorado.gov/>



# Form 2B - Oil & Gas Location #XX Info tab

## Existing Oil and Gas section

- Total number of oil & gas locations within 1-mile
  - Total acreage disturbance during construction of the active and proposed oil & gas locations within 1-mile
    - ◆ Source of data: field observation, COGCC location files, aerial photos, and/or other
    - ◆ For estimations, use GIS or GoogleEarth to measure approximate length and width, multiple together for square foot area, and divide by 43,560 to convert to acres (1 acre = 43,560 sq. feet)
- Total number of oil & gas wells within 1-mile
- Total permitted capacity of on location storage (in number of pits or tanks) of the active and proposed oil & gas locations within 1-mile
  - Existing Storage (optional)
  - Source of data: field observation, COGCC location files, aerial photos, and/or other
  - For estimations, COGCC typically uses a 500 bbl as a typical tank estimate, while 350 bbl may also be reasonable for older locations



*Visit Us On the Web*

[colorado.gov/cogcc](http://colorado.gov/cogcc)



**COLORADO**  
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