

# *CUMULATIVE IMPACTS DATA IDENTIFICATION - FORM 2B*

Operator Meeting

December 15, 2020



**COLORADO**  
Oil & Gas Conservation  
Commission

Department of Natural Resources

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# *Agenda*

- How the Form 2B is being developed
- How the Form 2B will be reviewed
- Example data fields
- Conclusion and Questions

Disclaimer: the Form 2B is still a work in progress



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# *How the Form 2B is being developed*

- Form asks primarily for impacts by location - a single form 2B will have multiple locations on it
  - Summing total impacts from an OGDG will happen in the database
  - Allows for location data to be more 'apples to apples' compared with data received by other agencies (CPW, CDPHE, etc.)
- Used Rule 303.a.(5) as our guide
  - If the rule asked for "quantitative", we created a data field for a number
  - If the rule asked for "qualitative", we created a text box for a description.
  - Majority of the data fields and tab sections come straight from the rules
  - Example: Rule 303.a.(5).B.iii. - on-location storage volume



# Rule 303.a.(5).B.iii.

**iii. Water Resources.**

**aa.** For any proposed Oil and Gas Development Plan that includes proposed Oil and Gas Locations that will be listed as a sensitive area for water resources, or are within 2,640 feet of a surface Water of the State, the total planned on-location storage volume (measured in Barrels (bbls)) of:

1. Oil;
2. Condensate;
3. Produced water; and
4. Other volumes of stored hydrocarbons, Chemicals, or E&P Waste Fluids.

Form 2B Checklist Version: December 11, 2020			
Water Resources Tab			
Ref #	Form 2B Field	What is this?	How do you get it right?
1	This location is listed as a sensitive area for water resources, or is within 2,640 feet of a surface Water of the State.		
2	Estimated total planned on-location storage capacity of the location for:		
3	Oil (number of tanks)		
4	Oil (volume of bbls)		
5	Condensate (number of tanks)		
6	Condensate (volume of bbls)		
7	Produced Water (number of tanks)		
8	Produced Water (volume of bbls)		
9	Other volumes of stored hydrocarbons, Chemicals, or E&P Waste Fluids (number of tanks)		
10	Other volumes of stored hydrocarbons, Chemicals, or E&P Waste Fluids (volume of bbls)		
11	List, with volumes, the "Other" fluids planned to be stored on location, including, but not limited to: hydrocarbons, chemicals, or E&P Waste fluids.		



# *How the Form 2B is being developed*

- There are places where we ask for an “estimated” value
  - Example: Estimated total number of weeks to drill all planned wells for this location
  - We understand that the value provided is an ESTIMATE and not an ACTUAL
  - We understand that operations in the field take more or less time than anticipated
- We are asking these “estimation” questions to get an understanding of what you as an Operator plan to see with your Operations
- Different Operators will have different estimations, and we expect that
- We will be asking for how estimated values were derived, but we are not looking to hold Operators to the estimates they provide
  - Example: “1 well usually takes 7 days and it is a 6 well pad, so estimated 6 weeks of drilling time”



# *How the Form 2B will be reviewed*

- The data being provided is, for the most part, an Operator's understanding of their proposed operations
- As long as the values provided and explanation of how the values were derived make sense, likely not a lot of questions
- If the values or explanations provided don't make sense, expect questions
  - Example: "54 well pad (2-mile laterals, DJ basin) planned to be drilled in an estimated 2 weeks"
  - Values will be cross checked from related Form 2A or Location Scout Card Database and COGIS Maps



# More example data fields: Rule 303.a.(5).B.i.

- i. **Air Resources.** A quantitative evaluation of the incremental increase in the pollutants listed below, estimated for the entire proposed Oil and Gas Development Plan. The emissions estimates will include both stationary and mobile sources of emissions during all pre-production activities, and both stationary and mobile sources of emissions for the first year of production based on all proposed wells and equipment.
- aa. Oxides of nitrogen (NO<sub>x</sub>);
  - bb. Carbon monoxide (CO);
  - cc. Volatile Organic Compounds (VOCs);
  - dd. Methane (CH<sub>4</sub>);
  - ee. Ethane (C<sub>2</sub>H<sub>6</sub>);
  - ff. Carbon dioxide (CO<sub>2</sub>); and
  - gg. Nitrous oxide (N<sub>2</sub>O).

- APEN forms used as an example to build data fields
- Working on guidance with APCD

Form 2B Checklist Version: December 11, 2020			
Air Resource Tab			
Ref #	Form 2B Field	What is this?	How do you get it right?
1	Pre-Production Emissions		
2	Stationary Sources		
3	Uncontrolled: Potential to emit (tons/year): NO <sub>x</sub>		
4	Uncontrolled: Potential to emit (tons/year): CO		
5	Uncontrolled: Potential to emit (tons/year): VOC's		
6	Uncontrolled: Potential to emit (tons/year): Methane		
7	Uncontrolled: Potential to emit (tons/year): Ethane		
8	Uncontrolled: Potential to emit (tons/year): CO <sub>2</sub>		
9	Uncontrolled: Potential to emit (tons/year): N <sub>2</sub> O		
10	Controlled: Estimated Actual Emissions (tons/year): NO <sub>x</sub>		
11	Controlled: Estimated Actual Emissions (tons/year): CO		
12	Controlled: Estimated Actual Emissions (tons/year): VOC's		
13	Controlled: Estimated Actual Emissions (tons/year): Methane		
14	Controlled: Estimated Actual Emissions (tons/year): Ethane		
15	Controlled: Estimated Actual Emissions (tons/year): CO <sub>2</sub>		
16	Controlled: Estimated Actual Emissions (tons/year): N <sub>2</sub> O		

17	Mobile Sources		
18	Uncontrolled: Potential to emit (tons/year): NO <sub>x</sub>		
19	Uncontrolled: Potential to emit (tons/year): CO		
20	Uncontrolled: Potential to emit (tons/year): VOC's		
21	Uncontrolled: Potential to emit (tons/year): Methane		
22	Uncontrolled: Potential to emit (tons/year): Ethane		
23	Uncontrolled: Potential to emit (tons/year): CO <sub>2</sub>		
24	Uncontrolled: Potential to emit (tons/year): N <sub>2</sub> O		
25	Controlled: Estimated Actual Emissions (tons/year): NO <sub>x</sub>		
26	Controlled: Estimated Actual Emissions (tons/year): CO		
27	Controlled: Estimated Actual Emissions (tons/year): VOC's		
28	Controlled: Estimated Actual Emissions (tons/year): Methane		
29	Controlled: Estimated Actual Emissions (tons/year): Ethane		
30	Controlled: Estimated Actual Emissions (tons/year): CO <sub>2</sub>		
31	Controlled: Estimated Actual Emissions (tons/year): N <sub>2</sub> O		



# More example data fields: Sections/tabs

- The following sections/tabs come straight from Rule 303.a.(5):
  - Air Resources, Public Health, Water Resources, Terrestrial and Aquatic Wildlife Resources and Ecosystems, Soil Resources, Public Welfare, Existing Oil & Gas
- Additional sections/tabs not specified by rule:
  - Mitigation Measures
    - ♦ Opportunity to describe the steps being taken to mitigate the impacts of the locations being proposed
    - ♦ Different from BMPs on Form 2A, which highlight steps taken to avoid/minimize
  - Beneficial Impacts
    - ♦ Opportunity to describe the beneficial impacts of the locations being proposed
    - ♦ Examples: plugging old wells, road improvements for the community, working with naturalist groups on site landscaping, donations to enhance local emergency responder capabilities, etc.





# *Conclusion*

- Disclaimer: the Form 2B is still a work in progress
- Overwhelming majority of the data fields/questions on the Form 2B come straight from Rule 303.a.(5)
- Still working with developers on a final layout
- Will provide Form 2B checklist, form layout, and guidance as soon as we finish it





*Thank you!!*

Questions?



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