

Greenhouse Gas Toolkit General Guidance

The BLM needs the following GHG emissions information in order to provide analysis of direct and indirect GHG emissions from the proposed action.

When reviewing APDs for completeness in accordance with OO No. 1, the following information should be requested as necessary information in the 10-day letter. Where an APD has been determined to be complete, a 30-day deferral notice should be sent and the following additional information should be requested in order to complete NEPA analysis.

Direct Emissions

1. Calculate annual emissions for the Federal well using the below referenced Emissions Inventory (EI) toolkit. The use of this EI will provide necessary consistency between projects across BLM managed lands in Wyoming, allowing for an “apples to apples” comparison. There are no default values in the existing EI. While equipment horsepower may be pretty standard as an example, the majority of the values are not going to be. We encourage operators to utilizing existing information from their DEQ Air Quality permits to the extent feasible.
2. The EI toolkit can be found at the following website location:
<https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/wyoming>
3. You must **fully UNZIP the folder** and enable Macros.
4. The proponent should complete the relevant tab within the EI (i.e. Oil for oil wells, Gas for gas wells), and provide BLM with the completed EI tab, and the appropriate output located in the Summaries folder that is included as part of the EI package.
 - a. The EI is only for the current proposal; no other information regarding existing wells is necessary. For example, if the project is a single well, only information regarding that single well should be input.
 - b. Once the folders are unzipped and macros enabled, users will open the *Input Interface Revised 08-2019.xlsm* file.
 - c. On the very first tab labeled “Alternatives”, select one alternative.
 - d. Navigate to the appropriate tab and begin filling out the relevant information; any fields that do not apply should be zeroed out. Make sure you select one alternative and “Alternative Evaluation Period” should be set to Base.
 - e. Once the relevant project tab is finished, make sure the relevant line item on the “Alternatives” tab says complete. Once it says complete, go back to the relevant project tab and press calculate. This will result in a pop-up menu that will cycle through and automatically check-off the boxes as the model is completed.
 - f. Once all of the boxes have been checked by the program, navigate back to the EI toolkit and click on the SUMMARIES folder. Open the relevant project folder and make sure that the emissions have been calculated and appear reasonable.

- g. Print the EI toolkit tab (be sure to set the print area and page layout should be landscape) and the relevant Summaries output Excel file to Adobe Acrobat and submit to the BLM.
5. In general, the project applicant may utilize information from existing wells in the project area to complete the EI if necessary; if an existing well is used, please identify this well and any assumptions that were made in order to fill out the EI form(s).
6. For larger projects which may include non-Federal wells, these activities should also be accounted for in the EI. Any non-Federal action emissions should be provided to the BLM for cumulative impacts analysis.
7. Unless BLM is analyzing an alternative that would reduce infrastructure or the total number of wells, only one alternative will be necessary.
8. Project Proponents should “lock” their alternatives and maintain the file with their records in accordance with Federal regulations.
9. As new Federal projects are proposed, project proponents should create a new copy of the toolkit.
10. If there is no new surface disturbance, all construction related values will be zero.
11. All assumptions should be documented in Column U.
12. If the proposal is for a wildcat well, two inventories will be necessary. One assuming economic production, and one assuming a dry hole.

Indirect Emissions

1. Within the Activity_data_needs folder, please fill out the O&G_Production_Schedule_Calcs.xlsx (ex. bbls of oil, mcf gas) for the projected life of the well. Proponents must provide appropriate documentation describing how production was calculated, including any assumptions made.
2. Production estimate should be provided on a per well basis if the Proposed Action includes more than one. BLM will aggregate these per well numbers if the proposed action is for more than one well.
3. If the well(s) will produce from multiple mineral estates, the project proponent should indicate on an annual basis the percent that will be Federal production (i.e. Fee/Fee/Fed well). Percent Federal acreage may be used as a proxy.
4. Operators may utilize the average annual production divided by average number of days the well will produce to fill out lines 24-28 on the input sheet, as appropriate.
5. Production estimates can be obtained from existing nearby wells assuming there are producing from the same reservoir, or existing production from that same pad where the proposed action is an infill. If using an existing well, please provide us with the well's API number to verify that it is representative of the proposed action.
6. The assumption for analysis is that 100% of the product will eventually be combusted.