Tips to Avoid Common Emissions Spreadsheet Errors

These tips are provided to assist you in avoiding common air quality reporting errors and thus facilitate the quickest possible review of your plan:

- 1. Review the instruction documents for BOEM Forms 0138 and 0139, prior to using the DOCD or EP spreadsheets. Review the instructions documents regularly to check for updates.
- 2. The emissions estimates should be based on and reflect the activity description and schedule required as part of the plan.
- 3. The emissions calculations are required to be worst-case estimates for the facility.
- 4. Actual emission factors and actual equipment horsepower should be used whenever they are known. If the drilling rig is not known, the maximum horsepower rating for the type of rig (jack-up, submersible, platform, barge, semi-submersible, or drillship) must be used. Default emission factors are provided in the spreadsheets.
- 5. Production equipment should be shown as running 24 hours a day, 365 days a year, unless you provide documentation with the plan certifying an alternative to the maximum activity for the equipment. You must also provide a quantifiable method of verifying compliance with this alternative maximum activity limit. For example, verification can be achieved by maintaining a log of the actual fuel used by a piece of equipment, or by maintaining a log of the actual hours a piece of equipment was used. These certifications and verifications must be in writing. The documentation or certifications must be included in the plan. The verifications must be documented at least monthly and a copy must be maintained at the facility involved. Additionally, copies of these verifications must be provided upon request or as directed by the Regional Supervisor.
- 6. Emissions from all vessels directly related to the proposed activity must be included for the duration of their activity within 25 miles of the facility. This typically includes crew boats, supply boats, work boats, tug boats, anchor handling vessels, lift boats, pile drivers, standby boats, construction barges/vessels, etc.
- 7. The fuel sulfur concentration for diesel fuel should be 0.05% weight (low sulfur) since this factor drives both the prime mover and the vessel emissions. Only if you can prove ultra-low sulfur is used for both can you revise the fuel sulfur concentration for diesel fuel to 0.015% weight.
- 8. Emissions from the installation of lease term pipelines must be attributed to the facility from which the product it carries originates. For gas lift pipelines, the construction emissions for the pipeline are attributed to the well which is produced using the lift gas, in other words, the well to which the lift gas flows.
- 9. If the production is first processed at the receiving (terminus) platform of a lease term pipeline, the incremental increase in emissions at the receiving facility will also be included in the spreadsheets covering the producing well.
- 10. Emissions associated with workovers, recompletions, equipment swapouts, etc. must be included in spreadsheets for DOCDs. For workovers and recompletions, a few weeks of drilling allotted to future years precludes the need for a revised DOCD each time you need to work over a well.
- 11. For any plan involving subsequent activity at an existing facility, emissions data must be provided for the proposed activity and for the facility total (proposed plus existing emissions). This should be depicted

in two separate and clearly labeled sets of spreadsheets. Any emissions from activities in previously approved initial, revised and supplemental plans for the EP or DOCD must be carried forward into the most recent revised or supplemental plan.

- 12. If platforms are bridge connected, they are considered to be one facility for air quality purposes, and development plans must include the emissions from all of the connected platforms as one facility. Each structure should have its own set of spreadsheets, but remember it is the total for the facility which is used for determining exemption or significance.
- 13. For purposes of calculating the BOEM exemption level, the distance to shore should be expressed in tenths of a statute mile up to 20 miles, and in whole statute miles for distances beyond 20 miles. The nearest point of any land should be used. This is defined as the distance from the facility to the mean high water mark of any State, including barrier islands and shoals.
- 14. Verification of non-default emission factors: If you use any air emission factors that are less than the default values in your calculation of the projected emission amounts, provide documentation supporting the use of the smaller emission factors. Documentation must be submitted with the plan every time. If documentation is not provided, verification of these reduced emission factors will be required upon start-up and occasionally thereafter to prove that the reduced emission factors are actually being achieved and maintained. If the actual emission factor is known to be greater than the default emission factor, use the actual emission factor. You may use updated emissions factors from AP-42, Compilation of Air Pollutant Emissions Factor. You can use the United States Environmental Protection Agency's (EPA) online database called WebFIRE to search for emission factors.
- 15. Emission reductions: describe any proposed emission reduction measures, including a description of the affected source(s), the emission reduction control technologies or procedures, quantity of reductions to be achieved, and the monitoring system you propose to use to measure emissions.
- 16. Include miscellaneous emissions sources due to production for DOCDs, such as, but not limited to, fugitive, tank, flare, and process vent emissions for DOCDs.
- 17. If the activity includes a boom for emergency use, be sure to include a description of its usage in your description of equipment and processes. Indicate whether it will be used as a vent or flare and the conditions under which it will be used (e.g., compressor downtime, equipment upset, accident). Include estimates of flaring or venting in the spreadsheets.
- 18. If the activity includes compressor(s), indicate intended action during compressor downtime (e.g., shut-in, flare, vent).
- 19. If the activity includes a continuous flare, describe why it is needed (e.g., to incinerate harmful levels of H₂S).
- 20. If the activity includes a glycol reboiler that is operated using waste heat or electricity, indicate this in a statement.
- 21. If H_2S is expected, indicate the expected concentration on the factors tab in the Sulphur Content Source table.
- 22. If the specific drilling unit has not yet been determined, please submit only one BOEM–0138 or BOEM–0139 form for the type of drilling unit that has the highest potential emissions. Please clarify the

multiple rig types on the title page in the BOEM-0138 or BOEM-0139 form (example: drillship or DP semisubmersible). 23. If available, please provide same on-site identification code used for equipment in the BOEM Forms 0138 and 0139.