



# Expert Panel: Overwater Modeling

12<sup>th</sup> Modeling Conference on Air Quality Modeling

Moderated by Clint Tillerson

US EPA/OAQPS/AQAD

Air Quality Modeling Group



# Background

- Currently, the Offshore and Coastal Dispersion (OCD) model is the EPA's preferred model for offshore and coastal modeling applications.
- OCD relies on older dispersion science and does not contain post-processing routines for the more recent 1-hour NAAQS or screening options for  $\text{NO}_x$  conversion to  $\text{NO}_2$ .
- The EPA is considering the eventual replacement of OCD with AERMOD.
- AERMOD does not contain key modules required for specific treatment of:
  - Marine-based meteorology,
  - Coastal/shoreline fumigation, and
  - Offshore platform downwash (elevated and porous or lattice structures).



## Panel Members

- Bart Brashers (Ramboll)
- Holli Ensz (BOEM)
- Jay McAlpine (EPA Region 10)
- Akula Venkatram (Univ. of California)



# Charge Questions

1. Please share your thoughts regarding EPA's efforts to replace OCD with AERMOD. What elements of the current science within the OCD model are in most need for improvement beyond just being incorporated into AERMOD as is?
2. In your opinion, what is the most immediate need or what should be the EPA's highest development priority with regard to addressing overwater and coastal modeling issues (e.g., shoreline fumigation, elevated platform downwash, defining a regulatory method for processing and use of marine-based meteorology for offshore modeling)?
3. Do you envision priorities related to overwater/coastal modeling issues to shift in the near future (5 years) that could require the EPA to reprioritize development efforts to address overwater modeling issues? If so, what shifts do you foresee will take place and what do you believe are or will be the drivers for those shifts (e.g., economic such as more or less offshore drilling, advancements in scientific research that would increase offshore drilling or simplify offshore/coastal modeling issues)?