Appointment

From: Imhoff, Robert [imhoff.robert@epa.gov]
on behalf of Erik Gribbin [erik.gribbin@tceq.texas.gov]
Sent: 5/10/2019 1:07:18 PM
To: Snyder, Erik [snyder.erik@epa.gov]; Feldman, Michael [Feldman.Michael@epa.gov]

Subject: FW: Houston Exceptional Events Modeling Follow-up Call with EPA Region 6 (and possibly OAQPS)
Attachments: Draft_NRTEEM_description.pdf
Location: F-4118

Start: 5/13/2019 6:30:00 PM
End: 5/13/2019 7:30:00 PM
Show Time As: Tentative

For what it's worth, a lot of knob turning evident with fire emissions.

Increase emissions

- Which specific fires? "All fires in the modeling domain…(transport distance from fire(s) … will likely exceed 4063 kilometers (2500 miles)." This does not seem to be consistent with an exceptional event demonstration; the only limit on the fires is how big the domain is! Good thing we don't have a global model.

Increase Transport

- Fire emissions refinements? "FINN fire emissions were re-mapped to **simulate more realistic (rapid) NOX to NOY conversion**." Since NOy can be efficiently transported while NOx converted to ozone is less efficiently transported, they changed at least some **emissions** from NOx to NOY. We need to check this out, they give a TX AQRP reference.

Increase Both

- Vertical layer apportionment? "The *virtual* area … determines the values used to … the heights of the plume bottom and top for each hour of the day. Since the FINN fire inventories consist of fires that are always less than or equal to 1 km in size, fire points that are within 5 km of one another are … summed together so they have characteristics of a larger fire." This would have the effect of increasing both the emissions (bigger fires = more emissions) and transport (bigger fires = higher injection). A pollster went door-to-door and found only two homes on the street that would answer the door. Both homes said they would vote for his candidate. He records that all the homes in between are also going to vote for his candidate – a landslide!

-Bob
-----Original Appointment-----
From: Erik Gribbin <erik.gribbin@tceq.texas.gov>
Sent: Tuesday, May 7, 2019 3:57 PM
To: Erik Gribbin; Donna Huff; Stephen Davis; stephanie.shirley@tceq.texas.gov; Sue Kemball-Cook - Environ International Corporation (skemballcook@ramboll.com); Kim Herndon; Terry Salem; Laurie Barker; Tonya Baer; Robinson, Jeffrey; Verhalen, Frances; Sather, Mark; Feldman, Michael; Snyder, Erik; Gibson, Benjamin; Evangelista, Mark; Baker, Kirk; Timin, Brian; Imhoff, Robert
Cc: Jeremiah Johnson; Rohit.Sharma@lyondellbasell.com; Liz Hendler (ehendler42@att.net)
Subject: Houston Exceptional Events Modeling Follow-up Call with EPA Region 6 (and possibly OAQPS)
When: Monday, May 13, 2019 1:30 PM-2:30 PM (UTC-06:00) Central Time (US & Canada).
Where: F-4118

EPA has agreed to a call on May 13, 2019 from 1:30 to 2:30 PM (CDT). Call-in information to follow.

Here are some information requests/questions/needs EPA has identified regarding modeling:

"Also, we have some requests for which we would appreciate a discussion in the demonstration document. We can provide information on the call if you don't understand our requests.

1. We recommend that you review multiple ozone precursor and particulate species monitoring data, which could include CO, NO, NO2, speciated VOC and speciated PM monitoring data, as you embark on your analysis of each exceedance day.
2. We are asking which fires are being modeled as this will be a requirement for the demonstration. (see next question)
3. Information on the air quality modeling platform:
    a. Modeling systems used
    b. Description of the generation of meteorology and model performance analysis
    c. Emissions generation
        i. Anthropogenic, especially local sources
        ii. Source of original fire emissions
        iii. Any refinements to fire emissions
            1. Species emitted
            2. Amounts as function of fuel, moisture, intensity, size
        iv. Which specific fires are being modeled. This is needed to link the quantitative modeled impact and the fires which are stated in the demonstration.
        v. How are emissions from fires being modeled spatially (vertical layer apportionment) and temporally (assumptions about emissions in time).
4. As part of modeling, analysis will be beneficial to compare concentrations and ratios of other primary and secondary modeled species (in addition to ozone) to measurements especially PM, NOy, black carbon, and CO."

Your conference has been scheduled using the Avaya conferencing system. If you are not the Moderator, please appoint someone.

Moderator Dialing Instructions

1. Moderator Dial-in Number: 512-239-3446
2. Enter Moderator's Collaboration code: 190108 #

Participants Dialing Instructions

1. TCEQ Staff Access Number: 512-239-3446
2. Toll Free (for external customers ONLY): 844-368-7161
3. Participant's Collaboration code: 920874 #