

Mohr, Ashley

From: Peterson, Barry T. <Barry.Peterson@WestonSolutions.com>
Sent: Monday, December 01, 2014 10:08 AM
To: Mohr, Ashley
Cc: Delgado, Paige
Subject: RE: OBODM Modeling Discussion/Assistance (Open Burning Scenario)

Good Morning Ashley,

Modeling the burn pit as an area source as LDEQ did, does not characterize the source accurately. AERMOD does not currently take into account plume buoyancy when modeling an area source. There would be a great deal of plume buoyancy from the burning of the M6 propellant.

If you have modeling experience then OBODM will not be a problem. It is a basic model. The inputs are simple. It will walk you through them when you open the executable.

The burn pit will be a 0,0 origin. The model creates the receptor grid around the origin, you just enter the spacing size. I would use flat terrain. All other inputs are default.

You would choose 1-hour burn time and M6 propellant. Depending upon set-up time between burning and when burning will take place, will determine your choices for the hours of the day burning will take place. I cannot currently open the model because it does not run on 64-bit, so I cannot confirm M6 is available as a choice, but I would suspect it is. If not specifically M6, there should be a comparable propellant in the choices available.

The met-data is processed surfaced and upper air data for use in ISC. LDEQ should have this data available on their website or Yvette Olmos at LDEQ will have it. You just have to download it or ask Yvette.

If after you have played around with it, you have some questions, just call me at (b) (6)

Barry

From: Mohr, Ashley [mailto:Mohr.Ashley@epa.gov]
Sent: Monday, December 01, 2014 10:35 AM
To: Peterson, Barry T.
Cc: Delgado, Paige
Subject: OBODM Modeling Discussion/Assistance (Open Burning Scenario)

Barry,

I am working with Paige Delgado on a project in Louisiana, and we are trying to estimate emission impacts from planned open burning of M6 propellant. Originally, we were looking at modeling that LDEQ had conducted using AERMOD, and it was pointed out that OBODM would likely be more appropriate for our situation. I have experience with air modeling, but have not ever used OBODM. Heth Parnell passed along your information to myself and Paige indicating that you had experience using OBODM, and we were hoping that you might be able to provide some assistance. Currently, I have the model set-up on my laptop.

Let me know when you might have time to discuss, and feel free to pass along any information or examples that you think may be helpful. I am available today until 2:30 PM (central) and will be available tomorrow from 7:30 AM – 4:00 PM (central), with the exception of a few meetings in the late morning/early afternoon.

Thanks in advance for your help!



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Ashley

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