Crossland, Ronnie

From: Mohr, Ashley
Sent: Wednesday, January 14, 2015 12:34 PM
To: Crossland, Ronnie
Cc: Fife, Greg; Delgado, Paige
Subject: FW: Emission Factor Question - M6 Open Burning (UNCLASSIFIED)

Ronnie,

I wanted to pass along this information that I just received back from Dr. Kirgan. Let me know if I need to follow-up with him on anything.

Thanks,

Ashley

THE POSITIONS or VIEWS CONTAINED IN THIS EMAIL DO NOT REPRESENT OFFICIAL EPA POLICY.

-----Original Message-----
From: Kirgan, Robert CIV USARMY IMCOM AEC (US) [mailto:robert.kirgan.civ@mail.mil]
Sent: Wednesday, January 14, 2015 10:48 AM
To: Mohr, Ashley
Cc: Delgado, Paige
Subject: RE: Emission Factor Question - M6 Open Burning (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Ashley,

My thoughts are that there are two different values for the DNT emission factor (the model and AP-42), but both of those point to a negligible amount of DNT being generated if all 15 million pounds are burned at one time. This is not the case at Camp Minden. A small amount of M6 will be burned at a time, so any difference in emission factors would have to multiple orders of magnitude, I just don't see this being the case. It would suggest that the BangBox had more oxygen available then the outside environment. Also the sample done in the BangBox were small samples and therefore did not maintain a high temperature during the burn. The higher the temperature the better the burn. This is why we observed very little, to no smoke during the test burn.

I am not sure the best way to respond, but I would say that I don't expect a multiple order magnitude difference between BangBox and outside air.

Robert

Robert Kirgan, Ph.D.
Environmental Technology Branch
US Army Environmental Command
2450 Connell Rd.
Ft Sam Houston, TX 78234-7664

Ph. 210-466-1580
BB. 210-792-6279
E. Robert.Kirgan@us.army.mil

-----Original Message-----
From: Mohr, Ashley [mailto:Mohr.Ashley@epa.gov]
Sent: Friday, January 09, 2015 10:36 AM
To: Kirgan, Robert CIV USARMY IMCOM AEC (US)
Cc: Delgado, Paige
Subject: Emission Factor Question - M6 Open Burning

Dr. Kirgan,

I am trying get gather additional information in response to a public inquiry regarding the applicability of emission factors from OBODM to real world applications, like the proposed burning at Camp Minden. The emission factors we are using, specifically for the DNT compounds, are taking from the OBODM model. According to the documentation for the model, these emission factors were derived from OBOD experiments conducted at U.S. Army Dugway Proving Ground. A majority of the data came from "experiments in Dugway's BangBoxTM facility in which small amounts of the fuel or material were burned or detonated" according to the model documentation. The question we are trying to respond to is how applicable these emission factors that were developed in a controlled type environment are to real-world applications. The inquiry we received believes that the actual consumption of the materials like DNT would not be as efficient as the BangBox trials and that our estimates of the impacts are underestimates.
Based on our past discussions, you had provided feedback regarding emission factors for burning and detonation, and I was hoping you could weigh-in on this and provide any thoughts you may have.

Feel free to give me a call to discuss. I am in the office today until 4 PM.

Thanks again for your help!

Ashley

_____

Ashley N.Q. Mohr
Environmental Scientist
Air Permits Section (6PD-R)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202
(214) 665-7289
FAX (214) 665-6762
mohr.ashley@epa.gov

THE POSITIONS or VIEWS CONTAINED IN THIS EMAIL DO NOT REPRESENT OFFICIAL EPA POLICY.

Classification: UNCLASSIFIED
Caveats: NONE