

Ron J Buchanan
11/06/2001 07:07 AM

To: Roger J Zipfel/AE/DuPont@DuPont
cc: Robert F Pinchot/DEV/AE/DuPont@DuPont, John A Wilkens/AE/DuPont@DuPont
Subject: Re: Mult Media Consent Order APFO data requirements

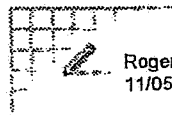
Thanks for the info Roger, could you send an excel spreadsheet showing the isotherm data and data plots you have?? John and I plan to assemble all isotherm data we have, plot out the isotherms on excel graphs, and then forward the compiled data/charts to Rob. Also, the conditions under which the tests were run will be included (ie. starting concentrations, temperature, test type-shaker flasks, etc, duration, analytical technique).

Below is the outline of a brief activated carbon isotherm report John Wilkens and I developed. We will send this info to Rob soon.

APFO Isotherm Report Format

1. Objective: to present APFO isotherm data and the methods by which it was generated
2. Materials analyzed (sorpitive materials and waters treated)
3. Laboratory methods, including analytical
4. Results (descriptive text, graphs, spreadsheets of data)

Thanks again.Ron
Roger J Zipfel



Roger J Zipfel
11/05/2001 03:45 PM

To: Ron J Buchanan/AE/DuPont@DuPont
cc:
Subject: Mult Media Consent Order APFO data requirements

Ron, I have adsorption data for C-8 on "trade" carbon done by Calgon carbon. It gave a isotherm at 0.224. This led Calgon to give an estimated adsorption efficiency of 0.15 in practical application. Results to date seem to give an adsorption coefficient in the field in the range of 0.15-0.2. This latter range is only an estimate done by myself on very rough data to see if I was close to design carbon usage levels. I have not done more definitive data, and probably will not, as need is not there from my point of view.

Roger.

----- Forwarded by Roger J Zipfel/AE/DuPont on 11/05/2001 03:42 PM -----

Robert F Pinchot 11/05/2001 03:02 PM

To: Debbie J Mulrooney/AE/DuPont@DuPont, Steven L Grise/AE/DuPont@DuPont, Mary A Kaiser/AE/DuPont@DuPont, Ron J Buchanan/AE/DuPont@DuPont, Roger J Zipfel/AE/DuPont@DuPont
cc: Ta-Wei Fu/SE/DuPont@DuPont, Bernard J Reilly/AE/DuPont@DuPont, David M Rurak/AE/DuPont@DuPont, Chris E Shoop/AE/DuPont@DuPont, Robert L Ritchey/CL/DuPont@DuPont, Charles J Zarzecki/AE/DuPont@DuPont, Stephen T Breske/AE/DuPont@DuPont
Subject: Mult Media Consent Order APFO data requirements

JAW003654

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It looks like we are getting close to agreeing on the requirements for a Consent order between the WV Dept. of Environmental Protection, the WV Department of Health and Human Resources, and DuPont. This order, as many of you know, will require us to submit a lot of data concerning APFO and our emissions of APFO to the state agencies. To make sure that we all understand our role in getting these data put together and submitting it to the State in the time stated in the order, a lot of coordination needs to be in place. Though the final wording of the order isn't known yet, the following table outlines the requirements, responsibilities, and the tasks to be completed. All items except the Mary Kaiser's analytical work will need to be supplied to the State within 30 days of the effective date of the Consent Order.

Summary Requirement	Tasks	Lead Responsibility	Other Responsibility
Building dimension parameters that have a significant impact on air dispersion	Confirm existing data are complete and accurate	Mulrooney	Shoop, Fu, Zipfel
Permitted allowable emission rates, actual emissions 2000, stack parameters	Confirm existing data are complete and accurate	Mulrooney	Shoop, Fu, Zipfel
Phase of APFO at Stack Conditions	Determine mass fraction particles and mass fraction vapor for each stack emitting APFO	Zipfel	Grise, Fu, Mulrooney
Particle Characterization	Determine appropriate particle size classes for modeling based on experimental data collected by Zipfel in 1996	Mulrooney	Zipfel
	Estimate particle density	Mulrooney	Zipfel
Particle Scavaging Coefficient	Develop technically sound basis for the use of the scavaging coefficients in the ISC users Guidance which are based on particle size.	Grise	Mulrooney, Zarzecki
Vapor Scavaging Coefficient	Develop technically sound estimate (and document methodology) for the vapor scavaging coefficient of APFO as a function of droplet size	Grise	Others in DuET
Phase Diagram of APFO	Develop phase diagram for the range of operating conditions. Include critical properties, and phase transition temperature ranges	Grise	

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APFO in water information	Report, with references, the solubility and Krafft Point of APFO in aqueous solutions and measured pK value.	Grise	
Head Space GC measurements	Develop analytical method to detect APFO in gas phase above an aqueous solution of APFO. Measure the concentrations at operating conditions.	Kaiser	Pinchot (I'll provide the operating conditions to be analyzed in a separate note)
Henry's Law Constant	As a function of Temperature and a discussion of its dependence on pH	Grise	
Carbon Absorption Data	Any isotherms for the absorption of APFO onto carbon from aqueous solutions	Buchanan	Breske, Zipfel

Since we don't have a lot of time, I will be checking on progress weekly. Please get all the data to me and I will work with our legal representation to develop the communication package(s) that we send.

I will let you know when the effective date of the consent order as soon it is signed by all parties.

If there are any questions, please do not hesitate to call.

Thanks,
Rob

JAW003656

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