Message

From: Terriquez, Joe [terriquez.joe@epa.gov]
Sent: 3/20/2019 7:50:35 PM
To: Hackett, Shawn [hackett.shawn@epa.gov]
CC: Werner, Leslye [Werner.Leslye@epa.gov]; Green, Jamie [Green.Jamie@epa.gov]
Subject: RE: Test methods for pesticides fungicides

Shawn,
NDEQ has not sampled the biochar yet. The facility has not been able to get the biochar machine to work properly yet so NDEQ has not sampled the biochar. We are concerned that if it goes through the biochar process the pesticides will be driven off and result in air emissions.

From: Hackett, Shawn
Sent: Wednesday, March 20, 2019 1:24 PM
To: Terriquez, Joe <terriquez.joe@epa.gov>
Cc: Werner, Leslye <Werner.Leslye@epa.gov>; Green, Jamie <Green.Jamie@epa.gov>
Subject: RE: Test methods for pesticides fungicides

Joe,
I've made contact with some staff at headquarter in the Environmental Fate and Effects Division. They are looking into your question at this time. They sent to me some information on Biochar and the product really isn't burned resulting in ash. The photo in the information they sent looked more like black soil. I've attached the link to the information. My opinion is that after the distillers grain is put through the Biochar process it would have to be sampled and analyzed to verify that there are no detectable pesticides in the Biochar in order for it to be land applied.

https://regenerationinternational.org/2018/05/16/what-is-biochar/

Shawn Hackett
FIFRA Project Officer for Missouri | FIFRA Inspector
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Hackett.Shawn@epa.gov

From: Green, Jamie
Sent: Friday, March 15, 2019 2:06 PM
To: Terriquez, Joe <terriquez.joe@epa.gov>
Cc: Werner, Leslye <Werner.Leslye@epa.gov>; Hackett, Shawn <hackett.shawn@epa.gov>
Subject: Re: Test methods for pesticides fungicides

I don't know what's out there but know it's been discussed. Shawn could you help see if someone EFED can help

Sent from my iPhone

On Mar 15, 2019, at 1:50 PM, Terriquez, Joe <terriquez.joe@epa.gov> wrote:

> Jamie,
> NDEQ has a facility that is looking to take Wet Cake from an Ethanol Plant that uses seed corn that specifically states that they are not to land apply if Pesticides are above Non Detectable limits. The facility receiving the wet cake is planning to put it in a biochar machine, which brings the real question

does anyone know any research or studies that have been conducted on what happens to these pesticides, identified in the image above, when they are burned?

If you could put me in contact with someone in your group that may have some information that would be beneficial that would be great.

Joe Terriquez | Engineer | Air Compliance and Enforcement Section | U.S. EPA Region 7 | 11201 Renner Blvd | Lenexa, KS 66219 | 913-551-7105

From: Pracheil, Brad <brad.pracheil@nebraska.gov>
Sent: Friday, March 15, 2019 12:53 PM
To: Terriquez, Joe <terriquez.joe@epa.gov>
Subject: FW: Test methods for pesticides fungicides

From: Pracheil, Brad
Sent: Monday, August 06, 2018 10:12 AM
To: Ellis, Todd <todd.ellis@nebraska.gov>
Subject: FW: Test methods for pesticides fungicides

From: Merrill, Raymond <Merrill.Raymond@epa.gov>
Sent: Monday, August 06, 2018 8:59 AM
To: Pracheil, Brad <brad.pracheil@nebraska.gov>; Dewees, Jason <Dewees.Jason@epa.gov>
Cc: Terriquez, Joe <terriquez.joe@epa.gov>
Subject: RE: Test methods for pesticides fungicides

Brad
Wow, it's been a long time since I've ventured into the pesticide sampling and analysis world.
Your question may take some digging starting with EPA's web page: https://www.epa.gov/pesticide-analytical-methods.
Analysis Methods are listed for several of the pesticides you cite @ https://www.epa.gov/pesticide-analytical-methods/environmental-chemistry-methods-ecm-index

ASTM has also ventured into this area, back in the 1980's resulting in ASTM Practice D4861-17. ASTM based their ambient Pesticide method on sampling with Method TO-10A. That leads me to believe that our standard sorbent methods for stack sampling should work.

Maybe the fastest way to find out about current air and stack sampling practice for pesticides is to call one of our contacts at the major analysis laboratories we know as stakeholders.

Ray

Raymond Merrill Ph.D. (Ray)| USEPA/OAQPS/AQAD/Measurement Technology Group
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From: Pracheil, Brad [mailto:brad.pracheil@nebraska.gov]
Sent: Thursday, August 02, 2018 4:50 PM
To: Merrill, Raymond <Merrill.Raymond@epa.gov>; Dewees, Jason <Dewees.Jason@epa.gov>
Cc: Terriquez, Joe <terriquez.joe@epa.gov>
Subject: Test methods for pesticides fungicides

Hey Ray and Jason,

I hope all is well. Here in Nebraska I have an ethanol plant that is taking in expired seed corn as its feed stock. That seed corn is treated with pesticides and fungicides. The source wants to use the wet cake (byproduct from ethanol plant) and use it in a bio-char process to get rid of the wet cake or land apply it because they cannot feed to cattle because of the pesticides. I am a little concerned that in the charring process pesticides and fungicides could be emitted into the air. The charring process currently is have opacity issues right now so we are going to test them for PM/PM10 and also VOC & HAP with method 320. But was wondering if there is a certain methodology we should use to look for pesticides?

NDEQ is currently doing a sample on the wet cake right now and will take a week or so for the results but an April 2018 sample showed these guys:

Metalaxyl, Thiadendazole, Fludioxonil, imidacloprid, teduconazole, trifloxystrobin, ipconazole

Any thoughts?

Link below is what is going on
http://www.coaltecenergy.com/projects/alten/

Thanks,
Brad

Brad Pracheil
Acting Air Compliance Unit Supervisor
Air Quality Division

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<results.jpg>