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Today's webinar entitled Planning for Clean Air Act Special Environmental Concern is the eighth in the Environmental Evaluation Series No. 8 series. Previous webinar in the series are available they are really a ball they are really a ball@conservationwebinars.net under the FOTG and planning category. This webinar will assist NRCS conservation planners, partners, 's and technical service providers to understand the ecological importance of the special environmental concerns, properly analyze and document existing conditions, and the effects of planned conservation actions. Comply with environmental requirements.

Your presenters today are Greg Zwicke, air quality engineer and Greg Johnson team leader for the natural atmospheric lifting.

Primary topics that will be addressed during this webinar include the legal foundations, information and data sources, tools, mitigation measures, and documentation requirements for this special environmental concern. Including examples.

At this point I will turn it over to Greg Johnson who will kick us off with the first session on clean air.
Greg?

Great. Thanks Matthew. It is great to be with everyone this morning or afternoon. Wherever you might be across the country today. We really appreciate you taking the time to call in and look at the webinar and we hope that it is very helpful for you today.

Are topic today, the first topic is on clean air. Particularly on the special environmental concerns. Obviously there are other environmental concerns under the the air-quality arena that we typically talk about. And for those of you who have taken air training you know those are particular matter, ozone, odors and greenhouse gases.. But there are two that we call special environmental concerns. Those are because they have special significance with regard to health legislation, and their impacts on health and welfare. So that is what we want to talk about today. I will do the first portion of this. The first few slides and then Greg Zwicke will do the remainder.

The to special air-quality related special environmental concerns are criteria pollutants and regional visibility degradation. You can see the to sheet on this string -- sheets on the screen. The point is that we would encourage you to take a look at these if you have not already. And familiarize yourself with those to help you understand particularly how these things may be impacting your work in various states. It

isn't necessarily applicable everywhere but we think you should at least be familiar with it to know if it is. And if it is not now, maybe it will be at some point in the future.

So let's talk a little bit about these. In the definition side, talking about criteria pollutants. What do we mean by that? Going clear back to 1970 when the Clean Air Act was established and most recently when it was really thoroughly revised in 1990, and a lot of things have been added in recent years as well. The Clean Air Act establishes certain criteria for investigating pollutants relative to impacts on health and welfare as I mentioned. And so what the EPA did in evaluating these is they came up with a current list of six pollutants that are particularly important because of their ubiquitous nature and -- ubiquitous nature and their impact on health and welfare. Those are particulate matter, ground-level ozone, to be distinguished from stratospheric ozone which some of you may be familiar with.. Which is the good ozone, if you will that protects us from ultraviolet radiation. That is not what we are talking about. We are talking about ground-level ozone that can have sick you can health effects for those about whom you've never heard. Then there are others, nitrogen dioxide, sulfur dioxide, carbon dioxide, and lead. But with regard to the Clean Air Act in criteria pollutants and how they impact agriculture and the work that we often do within NRCS particulate. The two focal points are particulate matter and ground-level ozone. Those really are the primary pollutants of concern and particularly with regard to what we are calling special environmental concerns because of their health and welfare effects. Particulate matter can be generated as you know directly. It can be coming from dust, from roads, from field and to D's, from activities with livestock and so forth. It can be generated by smoke. From fires which contain particulate matter. And then also particulate matter can be generated in the atmosphere by chemical reactions. Such as ammonium combining with nitrates or sulfates to produce ammonium nitrate or ammonium sulfate which are considered fine particulates. That's just an example on that side.

And then ozone as you will recall from our other slide sets that you have taken, ozone is a chemical that is concocted basically in the atmosphere through chemical reaction in the presence of sunlight between oxides of nitrogen which is an NO or an NO₂ combining with volatile organic compounds or what we call VOCs to combine and chemically form ozone in the atmosphere. So ozone is often the problem in areas with abundant sunlight and a mixture of those chemicals. Those are really the two that we are concerned about. What the EPA does is for these criteria pollutants they set national ambient air quality standards or NAAQS and the common name for that in the air-quality is the NAAQS. When we say NAAQS we are talking about how these standards are reflected for these particular pollutants. And to understand how this really impacts an area, they will look at pollutant by pollutant basis, an analysis to see how one area compares to the NAAQS. The NAAQS are not a stationary number necessarily. They have changed over time. And I think the general statement would be that in general standards tighten or become more restricted as we have better health research to help us understand how these particular pollutants impact particularly health. With regard to special environmental concerns that is particularly what we are concerned about. So when they had evaluate an area, say the county that you live in or your region, what they will do is they will classify that based on typically monitoring data from that area to see if they are exceeding the NAAQS or not exceeding the NAAQS. And if it is better than or equal to the NAAQS whatever the standards might be for PM or ozone line, those areas are deemed to be in

entertainment. They are typically meaning they are not the requirements in that area that are invoked when the area goes into nonattainment. Where they don't meet the NAAQS. For PM or ozone.

There are also other classifications. One is unclassifiable when there isn't enough data to make a determination and in that case the area is assumed to be in attainment. The other category is maintenance. Where an area it used to be in nonattainment but it was achieved attainment through processes, emissions were reduced, and so forth and an example is the San Joaquin Valley in California. Which was a nonattainment fork PM tent but due to a lot of efforts reducing dust and other emission sources it is now in maintenance mode. So that basically is the four classifications for the NAAQS.

To quickly go through this, there are there -- there have been these nonattainment designations. You can see the current list on this map or the map shows areas which are in serious or moderate classification of nonattainment for PM 10. The larger particulate matter particles that are regulated. The bulk of these are -- are nearly all of these except for New York City are in the Western United States due to principally two things. It a lot of dust that is generated via wind or processes other than that. That also some areas particularly in the valleys in the Northwest is due to woodsmoke in the wintertime. Spit let's take a look at aim current map of a nonattainment designation for both the 1997 PM 2.5 standard which was looser than the current PM 2.5 standard . 2006 standard. They are plotted here. You can see that for the most part we are looking at urban areas, St. Louis, Salt Lake, Atlanta, sort of it DC to Philadelphia region. Pittsburgh. These are the general areas where we have nonattainment fork PM 2..5 for the present time. We have a few small locations in the Northwest. A few parts of counties. And then the major area that is impacted by agriculture and impacts agriculture because of the designation would be the valleys of California, Sacramento and San Joaquin valleys. Particular where because of their meteorology more than anything else. They really have a nonattainment designation for PM 2.5. The final one is the eight hour ozone. They average ozone over an eight hour time period and evaluated over a year.. And then me classifications are raging from marginal to extreme.. And again you can see a lot of the urban areas are within this, certainly DC to New England, coastal area, Pittsburgh, St. Louis, Chicago, Atlanta, Houston, Dallas, Denver. But then huge areas of California, again largely due to the meteorology where you have a lot of sunlight and stagnant conditions. And enough emission sources that would lead to ozone formation. So we only show you these -- by the way the ozone and PM NAAQS are up for review. In fact ozone there are some recent negotiations and determinations being made on ozone and we should know more about what the final new ozone standards might be later this year. And more than likely it is going to be tightened again. So we may see more ozone areas than this and that would impact potentially areas of agricultural production that have not been under so much of the gun for that.

So, that closes out criteria pollutants. In the other environmental concern, special environmental concern is regional visibility degradation. This provides for additional protection for areas such as national parks and wilderness areas. Not all of them, but some. And they get classified under the class I designation. A map of this is shown here now. These are called mandatory class one areas where basically they have to meet visibility criteria because of their significance for beauty and other purposes. So if you are within say a 50 mile radius of one of these areas and you can see the proliferation of them

particularly in the West, to some extent in the southern Appalachians, as well as the Great Lakes and New England areas, you need to be paying attention. Particularly for large sources of PM and ozone precursors. You could be impacted by this. This is something to be aware of. With that, I don't want to belabor this any longer but I wanted to point out some of the situation here with our special environmental concern scheme criteria pollutants and regional visibility degradation. With that I will turn it over to Greg for talking about purpose and some other issues with the special environmental concerns.

Thanks, Greg. Again, to refresh your memory here, it these special environmental concerns related to the clean air act are really to be focused on the regulatory requirements.. And criteria pollutants and regional visibility degradation are really the it to Manning federal air quality requirements that we have been -- have to be concerned about in agriculture. There are plenty of others out there. But those of the two big ones. We have tried to cover those as well as some of the other stuff in the CPA-52 and environmental evaluation.

The clean air act and various federal state and local regulations that implement the act contain various requirements that have to be met. So although the state and local regulations can be more stringent than the federal rules, pretty much all sources of emissions have to comply with certain requirements for criteria pollutants and for those areas -- class one areas essentially afforded special protection under the clean air act.

So special environmental concerns again for criteria pollutants and regional visibility degradation are intended to focus on the basic federal requirements. Although we want to keep in mind the state and local requirements.. Spit the authority -- under the clean air act the agricultural producer, to give you an idea of what responsibilities are between the various entities, agricultural producer has the ultimate responsibility for complying with applicable air quality requirements but that's something we can point them in the right direction with but they are ultimately responsibly that's responsible legally. It is our responsibility to help them understand what the requirements are. Although we can expect that every NRCS employee will be an air quality regulatory consultant or expert. Ultimately if there is a question of whether a regulation requirement applies, a producer is going to have with his or her state or local air quality regulatory authority to determine what that exactly is. However, it will be beneficial for all if we at NRCS knew at least store had a little bit of a background on what those regulatory requirements might be in certain situations. And so the way that we think the ideal might be is that the national air quality change team can keep track of the new or modified federal air quality requirements and get that information down to the state level and then the state offices would then try to keep track of changes that what happened on the state level and inform the field offices of those. And then we would want the field office is to have a pulse on any sort of local air quality requirements. Things at the county level, like odor regulations and things like that. That is how we are hoping things can shake out. Again we don't want everybody to be an air quality regulatory expert but we need to have at least some sense of what may be applicable in certain situations.

The authority for the clean air related special environmental concerns is derived from the clean air act and federal regulations that codify the requirements for that. Additionally it got state and local air quality regulations who are required to develop state implementation plans and the sips are requirements that implement the federal really bash regulation image before the state and local rules can be more stringent than the federal rules. They can address other pollutants such as odors that aren't addressed to the clean air act. Additionally, contrary to what many believe are may have heard previously, agricultural operations and their emission sources are not and have never been exempt from the clean air act. Rather, EPA in the state and regulatory agencies have historically had other more traditional sources to bear missions to regulate first. So we didn't get the attention that we were starting to see now. In most air-quality issues nationally as Greg showed on some of the maps are result of the more urban sources and urban interaction. But as you get larger and more concentrated agricultural operations, you have increasing urban populations expanding into rural areas and you get increase in stringency of air-quality standards. That can really lead to a greater scrutiny of air emissions and impacts from agricultural operations. I think we've seen that here and at least the past five past 5 to 10 years.

So they NRCS policy and procedures related to the clean air related special environmental concerns are contained in the national environmental handbook. If you look at 610.21 and also in the clean air act evaluation procedure Geigy. We will walk through that as part of this presentation as well.

A couple of quick information or data sources that may be helpful to you as you go through the planning process and trying to determine whether or not you need to address are may have an issue with one of these special environmental concerns for clean air. For criteria pollutants you want to get familiar with EPA Green book for nonattainment areas. Which used to be a green book that but now it's just a website. They kept the name for it. You can see the web link there. That gets you the information about the attainment status of your county or your area that you're looking at. You can sort by state and county, you can sort by pollutant, you can do a whole bunch of different things at that website. That's a very handy resource.

For regional visibility degradation the EPA has also put together another nice website listing all the class one areas that you can determine how close you are to those. In your state or local regulatory agency, this will be a recurring theme, they are very valuable resource but it's just their job to know what requirements report apply. What the producer will have to do to make sure they are in compliance with any sort of air quality requirements. They are the primary resource for determining exactly what needs to happen in your area. And in many cases they may also have GIS files that outline the nonattainment or maintenance areas in the CIS files of any new by class one area to you can use to determine your nearby area.

Looking at mitigation measures. A couple years ago we worked with programs to help implement the national air quality initiative that was put forth under the 2008 farm bill. And in doing so we started taking a look at the different conservation practices that NRCS has. And trying to figure out which ones of these can be used for addressing air-quality emissions. So we have come up with a list of 49 of those that are currently approved for addressing PM or ozone emissions. For each of those practices we have assigned a ranking of either high, medium, or low or in some cases not for their effectiveness on either particulate matter or the emissions that can result in particulate matter being formed in the atmosphere as well as for those emissions of NAAQS that Greg mentioned. More organic compounds that can form ozone. We have also tied those rankings in with the CP PE. So that you can get a better feel for what sort of impact each of those practices may have. Another -- we have also added a table of these practices is included in the air-quality handouts as list -- listed under today's handouts section on your screen. Another document that we have put in that air-quality handout is NRCS helped EPA put together a handy reference guide for air-quality conservation systems. It cannot Desha can be accessed from the website and it is included in the air-quality handout document listed there. We are expecting to work with EPA in the near future to put together a similar document for livestock and poultry systems. Hopefully, that will be out and we will have a couple of good reference documents to use in our planning efforts.

So, given all of that, let's jump to what do we have to actually do his planners when they go through the environmental evaluation for clean air for the special environmental resource concerns. So really what we have come up with there are a couple key questions you need to answer. We put these into the evaluation procedures. But I wanted to put these a little more generally so that you can walk through what they actually mean and how to go about them. First you need to know the attainment status of the area around your farm. Is the farm in a nonattainment area? If so you will have extra requirements. Is it in the maintenance area, if that's the case, there may be some other requirements you need to watch out for or you may want to be a little more careful or observant of emissions of whatever pollutants that area is in nonattainment for originally. You also want to know is the air-quality generally good question if you're in attainment or unclassifiable you may not have anything to worry about what you can take stock of that move on. The next thing you want to know where the nearest class one area is. If that area is nearby, within approximately 50 miles or so, you probably need to think about whether its emissions from the farm may impact air-quality from the class one area. Take a look at those impact visibility. Next you want to determine whether the practices included in the planned action or the proposed conservation plan will increase the emissions of any regulated air pollutant. Here is where we get little bit of a departure of the definition. The definition can be different -- it really depends on how the state or local agency has defined these two terms. And so you've got to be somewhat familiar with what that definition is. The CP PE can also be used to determine whether or not you have an increase in emissions and it should be able to point you in the right direction. Again if there is any question as to whether emissions are increasing because of the planned action, your best option is to consult with the state legal air-quality officials to determine it's likely to be the producer making that contact you want to point them in the right direction.

If you do have an increase in emissions of a regulated air pollutant, the producer may need to obtain an air quality permit for whatever that planned action is.. That may delay things. As far as implementing our

practices. But that is something that needs to happen before any action starts.. The state or local agency is who makes that determination. If you do have an increase in air emissions or potential increase in air emissions, you can use one or more of the 49 conservation practices data are identified were trying to mitigate that increase in emissions.

Next if you are in a nonattainment area, and whether the practices you have included in your proposed conservation plan will result in a decrease in criteria pollutant emission and essentially the criteria pollutant for which that areas nonattainment the producer might be able to participate in emissions reduction credit-rating. That might be able to provide an additional income opportunity for the producer. However, we also want to be careful about recommending participation in one of the training programs because there could be some restrictive requirements and permitting involved in the quantification of registration and maintenance of the emissions reduction. Tread very carefully there. But it is a potential area where a producer might be able to participate and have an extra income stream from reducing emissions on their farm. And if the producer still does have interest in pursuing that credit-rating program, they're going to want to talk with the state or local air quality regulatory agency to figure out how to go about the process. In some cases I've seen where agriculture is exempt him from doing that. I guess this is that this is quite different from the greenhouse gas training arena where they are looking at a lot of cases for agricultural contribution. We are talking about the criteria air pollutants here. So you do run into some situations where agriculture it has been left out because of the magnitude of Aggie emissions versus everybody else's emissions.

And finally, we need to know whether there are any of the federal, state, or local air quality regulations that might apply to the agriculture operation. Or to any changes that are included in the planned action. Pretty much on the federal air-quality side, the main requirement that might apply really deals with stationary combustion engines such as irrigation pumps and emergency generators terse. If there are any of those emissions on the farm or any type of those engines on the farm or is may be installing a new engine as part of a pumping plan installation or something like that, you are going to want to check on the compliance status if there is an existing engine. An anti--- and any requirements for those new engines for this with a state or local agency. You can also have other state in local quality air-quality for odor that might also apply. The state or local agency is the one to make that determination. Close cooperation there is a necessity.

Now let's jump into an example CPA-52 for the clean air related special environmental concerns. So here we have shown the evaluation procedure guide sheet for air under the CPA-52. It essentially includes the same questions we just went over. The key questions. Although they are worded a little differently here and set up a little differently. This is essentially intended to point that planner and producer in the right direction. As we jump into an example, let's assume that we have a 1000 had very in Weld County Colorado. It also includes 300 in Weld County Colorado. It also includes 320 acres of in irrigated and corn and alfalfa rotation. This dairy has a free stall barn with them in your scrape system that is been to an open anaerobic lagoon. There is a dry lot exercise areas for the cows. On the cropping side the farm uses conventional to tillage with a central pivot. In a 100 horsepower diesel engine for pumping water. To

start out let's walk through our key questions. First question is related to the attainment status of the area. Using that green book website from EPA we see that Southern Weld County Colorado is included in the Denver, Boulder, Greeley, Fort Collins, Loveland, Colorado eight hour ozone nonattainment area. We can also find that a portion of wealth County was previously nonattainment for the old historical totals this bended particulate standard that has been replaced by the Hal Gordon to put five standers Greg talked about earlier. It has been completely replaced but again there were issues related to larger dust and other particular matter. We probably want to be more careful with recommending practice that may increase emissions of oxides and nitrogens in volatile organic compounds as they relate to ozone because you are in an ozone nonattainment area as well as dust and other particles.

The second question is intended to determine location of the dairy in relation to any nearby class one areas. If you take out a map and look at it, you essentially find that the dairy is about 30 miles Dewey's of Rocky Mountain national Park which is a class I area. In addition to being careful about emissions of visibility of particular matter and nitrogen or volatile organic compound which can impact the particulate concentration, we are also going to be aware of Rocky Mountain national Park is having issues with nitrogen Dep position. We are going to have to be concerned with emissions of ammonia as well.

The third question relates to whether the proposed conservation plan or action will increase emissions of any regulated air pollutant. Essentially step one of that evaluations procedure guide sheet. Colorado regulations define regulated air pollutants pretty broadly. We've got to be careful of the practice we propose in the conservation plan. The regulations do also include some exemptions from permitting at least for some relatively minor increases in emissions. That will potentially come into play. We can have some increases as long as you don't exceed these permitting requirements. Again that is something we'll have to talk with a state or local agency. In kiss case there is no local air quality for air -- for this County pick will talk to the state about this. The determination of whether there will be an increase in emissions of the regulated air pollutant depends on what the planned action is. Looking at a couple of different options, if the producer is replacing the old teaser engine with a new electric pump, you will see a decrease in all emissions from the existing enter. If the producer intends to add solid separation and a composting operation to decrease volatile organic compound and ammonia compounds in the lagoon but you might also have new particular in the solid handle and ammonia as well is the ammonia in volatile organic emissions from the composting operation. And if the producer simply as an interest increasing size of the dairy which we may not be involved in, but that's the only thing are doing, you are likely to see an increase in several regulated air pollutants because of the scale. However the producer is looking to increase the operation size and coupling that with adding anaerobic digester to replace the open lagoon, although there may be an increase of summer missions related to having more cows in the dairy, you might also see a decrease in emissions of volatile organic compounds and methane related to the digester. But you also might see an increase in the emissions of particulate matter and outside of nitrogen if you add on a flare to essentially combust the methane or if you added an internal combustion engine to burn the methane to produce electricity. A couple of different options. Again it really depends on what the planned action really is.

The fourth key question is related to determining the potential for emission credit trading. We already determined that the dairy is located in the ozone nonattainment area, any decreases in emissions of oxide or nitrogen or or -- might be eligible for credit generation. Depending on what the proposer planned action is. If you are looking at replacing the older teasing engine you might get reductions in Dino -- diesel emissions. That might be an opportunity for creating credits that might be so. If you add solid separation and composting you may see a decrease in the emissions from the lagoon by you might see an increase in the composting operation. Unit change might not work out very well there. If you are just increasing operation sizing you are likely to increase emissions across the bar. But if you couple that with adding an anaerobic digester you might be looking at a decrease in related to the digester. You might increase oxide of nitrogen in the flare. In any case we need to be very careful about promoting producer participation in a nonattainment area and admission emissions credit trading program. If the producer wants to investigate in a program, you put them that point them back to the state or local air quality agency for further information.

So next the final key question is a sort of catchall type of determination for other air quality regulatory requirements but this is a pretty broad brush sometimes difficult to navigate. We have to rely on working with the local agency. Again we don't want our votes to become air-quality consultants or regulatory's, we should have some idea about the sources and anything that might trigger regulatory review and/or permitting pics so we can help point producers in the right direction. For this example we need to pay particular attention to the irrigation pump engine. There are federal standards and requirements related to stationary engines. Additionally there are Colorado regulations three needed to composting operations. If that something the producer has put as part of the planned action we will need to know that. There are also regulations for odors. We may want to keep those in mind as we look and see what the planned action is going to be.

I'm looking at the CPA-52 environmental evaluation worksheet for the clean-air. Let's assume the producer wants to improve the area of maneuver harrowing to improve recycling of solids. The existing condition is that the lagoon has excessive solid build up which is leading to odor issues. The dairy is having locating prospect of source of replacement bedding and would like to use some of the recycled solids. Additionally an older pump is having issues and the producer was to see what he can do about that. The in the no action alternative it's likely the ammonia from the overloaded lagoon will contribute to odor and ozone impacts in the case of the volatile organic compound. And the older diesel Angela will continue to emit particular matter and. On again none of those omissions are grave considering where the operation is at an its relation to Rocky Mountain national Park. So in looking at alternative one, we are going to be looking at implementing solid separation and installing a composting facility to improve the lagoon solid loading and best. And to create an on-site source of replacement bedding. The other thing was will improve the irrigation water delivery system by doing some work on the pumping plan. These changes should reduce ammonia and oxides and nitrogen from the existing diesel pump by up improving its efficiency and water delivery. If we take it a step further and look at alternative to to essentially implement the same solid composting, in addition to improving the irrigation water delivery system, we will replace the older diesel pump with combustion system improvement and replace it with a near -- new tier 4, which is that new cleanest certified diesel engine. In applying irrigation water

management to that. Emission changes observed from the solid separation composting and the new changes to the air station engine and overall system under alternative to should result in significant reductions in particulate matter. If we select alternative to, it should address the producer's objectives by making sure it can reduce particulate matter, organic compounds and ammonia. It should be beneficial to the air quality in the vicinity of the dairy and the nonattainment of the ozone set this to standard. As well as visibility impacts in Rocky Mountain national Park with pretty much all of those emissions as well as ammonia deposition that they are seeing in the park.

So in summary, there are two clean-air related special environmental concern criteria pollutants and regional disability degradation. And it is NRCS's role to assist agricultural operations in complying with their requirements.

Also, we need to be sure to rely on her state or local air quality regulatory agency if there any questions whatsoever about what regulatory requirements apply. It's their job and their role in the whole process for clean air. If there is a need to mitigate emissions from the plan actually, we have 49 NRCS conservation practices for available for use as well as more in-depth reference guide for cropping and land management systems. Those are included in the attachments to the presentation today. And finally remember to ask the five key questions. Those will help you answer the questions in the evaluation guide. For the clean air environmental concerns.

Without I believe we are done with the air session. And I think Matthew, you will go ahead and take questions.

We would like to remind everybody if you have a question, enter that question into the Q&A pod . And we will address those as they come in. We did receive one question very early on. And I will go ahead and ask that one. The question was is there any concern of [Indiscernible] emitting an ode to are Esso too?

I will take that. There are more concerns about [Indiscernible] emitting an ode to then Esso too. Esso to is primarily a combustion related emission. So you if you have a capo that has an engine burning some type of fuel that burns sulfur in it. Primarily your sulfur emissions if you have any will come off as reduce sulfur like hydrogen sulfide. Once hydrous and sulfide moods into the atmosphere, it will convert to sulfuric acid. And then participate in some of the chemical reactions in the atmosphere. Again, not a big issue associated with livestock operation. For an ode to, there is really not a whole lot of data out there. Primarily when you get oxidize emissions from agricultural operations, primarily it will be nitrous oxide. Once it hits the oxygen it converts. Your an ode to will be primarily combustion related emission as well. Again, if you've got a nitrogen input to livestock production systems, you can get some N NO -- primarily you will be concerned with ammonia or N2O. Nitrous oxide or greenhouse gas. Those are going to be more likely than an OR an ode to. Although the will be some emissions there.

Another question is for our non-treat bash non-NRCS participant . What is the CPPA?

Conservation practices physical effects. It's it essentially a compilation of the effects related to the various NRCS resource concerns . The impacts to those resource concerns by implementing a practice.

And his that available outside of the agency?

That I do not know. I have seen internal versions of it. I have not looked to see if there was an and Desha external version of the CPP eat. -- I can answer that question. It is available on the electronic feel office guide. That is available off of each NRCS state web page another question here is what tools are there to quantify air quality improvement? From an agricultural standpoint there aren't a whole lot of tools out there to help us quantify those just yet. ARS has been working on a couple of tools that are more process based types of tools. Mainly related to greenhouse gases and ammonia. But they are starting to incorporate some of the other admissions. A lot of the tools we are seeing now are more qualitative than quantitative. And again, the research on quantifying emissions is not in its infancy but still riding pretty far behind where I think the regulatory community would really like it to be. EPA's put together a big project a few years ago to try to develop a missions quantity Tatian methodologies for a bunch of livestock operations and it has taken them a long time to come to grips on how to exactly do that. They've gone through a few rounds with their science advisory Board and a special panel that the board put together. And it is really difficult to get a repeatable accurate quantification of emissions now. We can measure emissions but again we are dealing with biological systems that don't exactly behave the same way every time it's like the saying of herding cats, your trying to herd microbes. It's a difficult thing to do. There really aren't that many good quantification tools available. They are more quantitative.

I would just point out that as well Matthew that one of the things that we included were a couple of handouts. One of those is -- has a title of approved NRCS practices and associate effects on PM and ozone. For many of our NRCS practices it shows whether a given practice would have a low, medium, or high impact on basically improving PM, PM pre-courses are ozone preset -- pre-coursers. Although it is in that affinity of process model approach, it's nevertheless probably where we are right now. Where we can help in guiding producers to those practices that would be beneficial in terms of managing a missions if that is a concern.

And I do have one final comment. It says in the seat -- CP example I would say there is no effect. Rather there are continued emissions from the existing sources at the eggs the stingrays.

That is correct. There are emissions coming off there. And again because they are continuing essentially at their existing rate that there is no effect, there is no effect on changing that. So yes you still are having degradation but it is no effect from what the current situation is.

So again, that is all the questions we have at this point. But feel free to enter in additional questions as they may come to mind. So with this, once again I will thank you for part participating. That will conclude our webinar for today. Have a great day.

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