

Agricultural BMP Committee
***FINAL* Meeting Minutes**
July 27, 2010; 1:30 p.m.
Arizona Department of Environmental Quality, Conference Room 3175 A&B
1110 W. Washington St., Phoenix, AZ 85007
Call-in Number: (800) 746-4352, pin #1828417

Committee members present: Wade Accomazzo, Brett Cameron, Clint Hickman, Colin Kaltenback, Al Lopez, Earl Petznick Jr., Kevin Rogers, Dan Thelander (Chair), Tom Thompson, Jim Walworth and Nancy Wrona.

Committee members absent: David McKay, Will Rousseau, and Mike Terrill.

Additional attendees: Bas Aja, Diane Arnst, Phil Bashaw, Lindy Bauer, Brent Billingsley, Mike Billotte, Emily Bonanni, Danielle Dancho, Scott DiBiase, Jeannette Fish, Don Gabrielson, Cheryl Goar, Kris Graham Chavez, Kazi Haque, Ken Hooker, Rick Lavis, Tom Luch, Corky Martinkovic, Allyson Moloney, Jeff Sandquist, Frank Schinzel, Randy Sedlacek, Robert Shuler, Joe Sigg, Kathleen Sommer, Marguerite Tan, Lisa Tomczak, Rusty VanLeuven, Jim Wagner and Greg Wuertz.

Welcome

Chairman Thelander opened the meeting, noted a quorum was present, and welcomed everyone present.

Discussion and Possible Action on Minutes from April 20, 2010, Committee Meeting

Chairman Thelander started the meeting with the review of the minutes from the April 20, 2010, Agricultural Best Management Practices Committee (hereafter Committee) meeting. Chairman Thelander asked if there were any comments or revisions to the minutes. Kevin Rogers, Committee member, moved to approve the minutes; seconded by Clint Hickman, Committee member. Chairman Thelander asked if there was any further discussion regarding the minutes. Hearing no additional comments, Chairman Thelander asked the Committee to approve the minutes; all approved. Motion carried.

Discussion and Possible Action on Proposed Best Management Practices (BMPs) for Beef Cattle Feedyards, Dairy, Poultry, and Swine Operations

Chairman Thelander stated that the Committee has discussed the proposed livestock BMPs during prior meetings and the Committee might be ready for motions to approve the BMPs. Nancy Wrona, Arizona Department of Environmental Quality (ADEQ) reminded the Committee that the Technical Workgroup (TWG) document with the proposed BMPs is not a definitive technical analysis. The document represents the body of work of the TWG, which will be relied upon by the Committee to assist in its review of the BMPs and act as the foundation for the technical analysis, rule development, and economic impact statement (EIS) developed by ADEQ for the rule and state implementation plan (SIP) revision. Further analysis will be conducted on the information and data presented in the TWG document. Chairman Thelander asked who will write the EIS as part of the rulemaking. Ms. Wrona said Danielle Dancho, Environmental Rules Specialist, ADEQ Rules Unit, will be developing the EIS. Chairman Thelander asked if an EIS had been done when the program was first developed. Ms. Wrona indicated an EIS was prepared for the SIP submitted in 2001 for the BMP Program.

Kevin Rogers, Committee member, said there have been a few changes to the BMPs and asked if the industry representatives would provide an overview of the revisions. Earl Petznick Jr., said one change was made to the BMP for adding water to pens. The control efficiency was changed from 70 percent to 56 percent because the lower percent was supported by published studies. Mr. Petznick Jr. said the feedlot industry hopes to do a more rigorous study in the future to determine if the control efficiency is higher. Mr. Petznick Jr. said at some point research should be conducted regarding the use of watering pens as a BMP using conditions specific to the nonattainment area.

Robert Shuler, Shuler Government Affairs LLC, (representing the poultry and swine industry) said the primary changes in the poultry BMPs were made to the emissions factors in the housing category and the animal feeding, waste handling, and transportation category. Mr. Shuler and Clint Hickman, Committee member, met with representatives from ADEQ and reached an agreement that the emissions factors should be 0.0105 lbs/head/year in both categories.

Mr. Shuler stated that revisions were made to the swine BMPs' emissions factors for the housing category and the animal feeding, waste handling, and transportation category. After meeting with ADEQ, the factors were revised to 0.5 lbs/head/year in both categories. Another revision in the swine BMPs was the inclusion of the caveat that emission factors may vary based on regional variations, seasons, housing type, ventilation type, waste handling system, feed rations, feeding system type, watering system type, pen type, and management practices. This statement points out that operations in northern Arizona may be different than operations in the nonattainment area and Area A due to differing meteorological and atmospheric conditions.

Chairman Thelander asked Mike Billotte, United Dairymen of Arizona, if any changes were made to the dairy section. Mr. Billotte said there are no significant changes since the previous version, dated April 20, 2010.

Tom Thompson, Committee member, moved to accept the livestock BMPs with the current revisions; seconded by Al Lopez, Committee member. Chairman Thelander asked if there was additional discussion. Mr. Petznick Jr. asked for clarification on what type of further analysis of the BMPs that ADEQ might perform. Ms. Wrona said that the rules will require additional analysis for the rulemaking process; ADEQ will prepare a technical analysis of the BMPs to ensure their effectiveness. ADEQ will also develop the rulemaking, which will require the Committee's approval. The rulemaking will be in public noticed both as a rule and a SIP revision. There will be a notice of proposed rulemaking, a public comment period, and a public hearing. ADEQ will prepare a response to comments received during comment period and hearing and then submit the rulemaking and response to the Governor's Regulatory Review Council for review and ultimate adoption. Once approved, the rulemaking will proceed to the Secretary of State for publication in the *Arizona Administrative Code*. Chairman Thelander asked for additional discussion. Hearing no additional comments, Chairman Thelander asked the Committee to approve the proposed livestock BMPs; all approved. Motion carried.

Discussion and Possible Action on Additional BMPs for Crop Agriculture

Chairman Thelander said the additional BMPs for crop agriculture includes the new BMPs for transplanting and shuttle system/large carrier to be added in the tillage and harvest category. Mr. Thompson asked if the Committee adopted these as part of the previous motion. Ms. Wrona said the Committee should make a separate motion. Mr. Rogers moved to amend Section E of R18-2-611 to include transplanting and shuttle system/large carrier in the Tillage and Harvest category; seconded by Mr. Lopez. Chairman Thelander asked for additional discussion. Hearing no additional comments, Chairman Thelander asked the Committee to approve the additional BMPs for crop agriculture; all approved. Motion carried.

Discussion and Possible Action on Adding a New BMP Category for Significant Cropland Leveling Activities

Chairman Thelander asked Mr. Rogers if there are any revisions to the definition and new BMPs for the proposed new BMP category for Significant Cropland Leveling Activities. Mr. Rogers said Phillip Bashaw, Arizona Farm Bureau, has worked on the new category and would provide an overview. Mr. Bashaw stated there has been a slight change to the definition since the previous Committee meeting. Some activities on commercial farms may not fall under the original definition of significant cropland leveling, such as contouring livestock pens and other types of leveling outside of cropland activities. To make sure these activities are captured, the definition should be revised from significant cropland leveling activities to significant agricultural land leveling. The definition would read, "leveling activities conducted on a commercial farm that disturb the soil more than four inches below the surface." Mr. Bashaw said the intent is to broaden the definition for leveling in order to address those activities that may happen on a commercial farm that would not fall within cropland. These activities are rare in occurrence, maybe once or twice every 10 to 15 years, and a small percentage of farms conduct this activity but should be captured and BMPs applied. Chairman Thelander pointed out

this will add a fourth category to the existing program that farmers will have to address when or if they conduct leveling activities.

Don Gabrielson, Director, Pinal County Air Quality Department, asked for a clarification between significant agricultural leveling and an open construction activity. Chairman Thelander said construction does not occur on a farm and these types of leveling activities occur on commercial farms. Mr. Gabrielson asked if farmers are excavating drainage basins, digging canals, or building roads, how are those activities different than construction activities. Chairman Thelander said if farmers are conducting these activities, they will be subject to the BMPs to control emissions from those activities. The Committee is creating a new set of rules that will cover all types of activities occurring on farms. Mr. Gabrielson said that since these activities may only take place every 10 or 15 years, a farmer may not have the capital to conduct the activity and end up hiring a contractor. He said the contractor could be the same one working on a nearby subdivision and asked if there is a distinction between in the leveling activity when the contractor is working with a farmer compared a home builder. Mr. Billotte said there is no major difference in the leveling activity itself, but the Committee is enhancing the control of the Program for unique circumstances. Mr. Bashaw said when agricultural land is leveled; there are some factors that need to be taken into account. Construction activities typically require a specific level of soil compaction. Soil compaction is detrimental to crop production, so a farmer needs to use different methods for leveling on agricultural land to limit soil compaction. Mr. Gabrielson said the concern over soil compaction should not apply when building roads or digging drainage basins. Chairman Thelander agreed and said compaction would probably not be an issue in those instances. Bas Aja, Arizona Cattlemen's Association, said the distinction between construction activities and those on a commercial farm is that construction operations result in a permanent change of land use. On commercial farms, there is not a permanent change to the landscape. Mr. Rogers added that farmers do not need a permit to trench out an old ditch and put in a cement lined ditch. Mr. Rogers said the Committee has discussed gaps in the Program. There have been instances of leveling on commercial farms and the intent of the new BMP category is make sure that farmers understand that leveling is a potential source of PM₁₀ emissions that will require implementation of a BMP to reduce emissions. Mr. Rogers added that, up to this point, a permit was not required to conduct this type of work, but the Committee is trying to make sure there is not a gap in coverage. Mr. Gabrielson said that it is good that the Committee is creating obligations and expectations where none have existed, but expressed his view that farmers are engaging in activities that are functionally equivalent to some construction activities. Mr. Gabrielson added that the standards to which farmers are held under the BMP Program are less stringent than those standards that construction companies are held to and he sees no justification for this discrepancy. Mr. Rogers said that there is a difference in the end use between farming and construction, which is why commercial agriculture should be under the BMP Program.

Mr. Rogers moved to add the new category for significant agricultural activities; seconded by Mr. Thompson. Chairman Thelander asked for addition discussion. Hearing no additional comments, Chairman Thelander asked the Committee to approve the new BMP category for significant agricultural leveling activities; all approved. Motion carried.

Discussion and Possible Action on EPA Proposal to Delete BMPs from Category G of R18-2-611

Chairman Thelander said that the Environmental Protection Agency (EPA) proposed removing integrated pest management (IPM) and precision farming from the cropland category in R18-2-611 but retaining them in the tillage and harvest category. Ms. Wrona said the reasoning behind the EPA recommendation is because farmers may be double-counting emissions reductions by having these activities in two separate agricultural categories. This will diversify the number of BMPs applied in the cropland category. Mr. Rogers moved to delete the BMPs for IPM and precision farming from Category G of R18-2-611; seconded by Mr. Lopez. Chairman Thelander asked for additional discussion. Hearing no additional comments, Chairman Thelander asked the Committee to approve the deletion; all approved. Motion carried.

Discussion on Fallow Fields in Maricopa County and Area A

Chairman Thelander said EPA has expressed concern regarding fallow fields and wants to investigate the effect of fallow fields in the PM₁₀ nonattainment area and Area A because Imperial Valley, California, has a large amount of fallow fields and did not completely address PM₁₀ emissions from those fields. Mr. Rogers said that EPA asked ADEQ to evaluate how many acres of fallow fields are in Maricopa County. A program in El Centro, California, allows farmers to sell their water to nearby urban areas, thus intentionally fallowing thousands of acres. There are approximately 40,000 acres in Imperial Valley that are fallow by design. EPA is wondering if there is potential for this to occur in Maricopa County. Tom Luch, rule writer for ADEQ Air Quality, said research conducted by the Arizona Cotton Research and Protection Council (ACRPC) indicated there are approximately 8,959 acres of fallow fields in Maricopa County and Area A, which is different from the Farm Service Agency (FSA) estimate of 80,000 acres. The ACRPC, Arizona Cotton Growers, Arizona Department of Agriculture (ADA), and ADEQ discussed the issues of fallow fields and agreed to use 8,959 acres as the amount of fallow fields in Maricopa County and Area A. This includes only the acreage in the PM₁₀ nonattainment area and Area A, as opposed to all of Maricopa County. One of the primary reasons to use this estimate is because the acreage was ground truthed; someone traveled to each parcel to physically evaluate each site. The Maricopa Association of Governments (MAG) indicated that FSA included acreage slated for additional or changed use such as transition to commercial or residential use, which never occurred. ADEQ is going to conduct additional analyses to determine if emissions from the 8,959 acres of fallow fields will approach the significant source threshold level for PM₁₀ emissions of five micrograms per cubic meter, which would trigger a BACM analysis requirement. Chairman Thelander asked for a clarification of the significant source threshold. Ms. Wrona said that EPA sets a threshold of five micrograms per cubic meter as a significance level to determine if a source needs to implement control measures. The threshold is small but considering the diversity of the sources and the difficulty reaching the PM₁₀ standard, it is a good trigger. The Committee needs to make sure that it understands the issue of fallow fields in terms of the acreage in the Valley relative to the acreage in Imperial Valley, since it was the lack of control on fallow fields in Imperial that was one of the reasons EPA did not concur with exceptional events in Imperial Valley. Ms. Wrona explained that exceptional events are those events covered under EPA rule allowing regulatory

agencies to flag exceedances believed to be caused by exceptional events. Imperial Valley flagged several events and submitted documentation; however, EPA did not concur with the determinations submitted by Imperial Valley.

Mr. Luch said Imperial Valley identified 64,000 acres of fallow fields, and fallow fields in Area A are less than a sixth of that amount. Chairman Thelander asked how many acres were in each category of fallow field, given that Imperial Valley has two types of fallow fields. Mr. Luch said Imperial Valley has 32,000 acres in an optional fallowing program through their irrigation districts. Ms. Wrona said there is one category that includes these deliberately fallow fields and there is another category of fallow field not associated with the irrigation district.

Rick Lavis, Arizona Cotton Growers, stated he asked the ACRPC to map all existing croplands in the PM₁₀ nonattainment area and Area A and to break out fallow fields and map those separately. Since many farmers planted late cotton this year, the total amount of cropland increased from 185,000 acres to 203,000 acres, so some of the fallow fields on the map may be in production at this time and no longer fallow. The maps provide a visual representation of how many fallow fields exist, and they do not appear to be a significant source of PM₁₀ requiring the implementation of BMPs. Mr. Lavis clarified that the fallow fields on the map are in the PM₁₀ nonattainment area and Area A; there are very few acres of fallow fields in Area A. Mr. Petznick Jr. asked if there is a definition of fallow field. Mr. Rogers said there is not a uniform definition and the definition used by the Committee is different than the definition used by FSA. The Committee's definition is "a field out of production that is normally in production, but could go back into production at some point." After a period of time a field could be considered abandoned or converted to commercial development. It depends on how long it has been out of production, such as when irrigation ditches fill with debris and a field remains unimproved. Ms. Wrona said the ACRPC considers land to be abandoned and no longer fallow when debris begins to fill irrigation ditches and infrastructure, such as water pumps or electrical lines, are removed.

Mr. Petznick Jr. said all of these definitions seem to cover one or more growing seasons and are either defined as fallow or abandoned. Chairman Thelander said the definition depends on what is occurring on the ground. There are barren lots in the county that have nothing to do with agriculture. There is also agricultural land that was recently taken out of production and is no longer farmed; there may be some survey stakes for streets, but with the downturn in the economy construction has not progressed. There is land that is reverting back to desert landscape and will likely not be farmed again; this may be some of the abandoned land identified by the ACRPC. Some fallow land might not be planted for the majority of the year but farmers may plant occasionally; the land can still be irrigated but farmers may decide that it will cost more money than it is worth to plant. This land is still part of their farm and does not mean that it is fallow for a portion of the year, because fields are routinely fallow in between crops. This definition means an area of land that is routinely planted, cultivated, and harvested and is unplanted for one or more growing seasons or planting cycles but is intended to be placed back into agricultural production is fallow. Chairman Thelander said the ACRPC, ADEQ, and Arizona Cotton Growers have researched this topic, and there is not a lot of land that is considered fallow. Colin Kaltenback, Committee Member, asked if the Committee should ignore the issue of fallow fields. Chairman Thelander said that ADEQ will need to conduct more analyses on fallow fields at this point. Ms. Wrona that ADEQ will evaluate fallow fields to

determine if the total acreage will trigger the five micrograms per cubic meter threshold. If it does, the Committee will have to agree on the methodology and results. EPA will also have to review and agree with the estimation methodology. Chairman Thelander said one thing to note is that the ACRPC determined there are about 13,000 abandoned acres, according to their definition and classification of abandoned land. Abandoned land is land that has clearly not been farmed for a while and the desert is growing back in; these acres are clearly not in agricultural use and there is a hard crust on the soil, so PM₁₀ is controlled.

Mr. Gabrielson asked if the abandoned acres are being disked for weed control. Chairman Thelander said the abandoned acres had desert grass and bushes growing on it and is not farmable. Chairman Thelander asked for additional discussion. Hearing no additional comments, Chairman Thelander directed ADEQ to conduct the technical analysis to determine the significance level of the fallow fields in the PM₁₀ nonattainment area and Area A.

Call to the Public

Mr. Gabrielson said during the Committee meeting on April 20, 2010, the Committee mentioned a comment letter from EPA and that they going to meet with EPA to discuss the issues contained in the letter. Mr. Gabrielson asked if this meeting occurred and what were the results of the discussion. Chairman Thelander said the Committee discussed the contents of the letter with ADEQ and addressed portions of the letter. At this point, the agricultural industry is still trying to assess other issues and does not have anything further to discuss regarding the EPA comment letter.

Mr. Gabrielson said given the recent notice of rule docket opening for the BMP rule, which starts the formal rulemaking process, he wanted to make sure that his comment letter dated today and previous comments were incorporated and available for the rulemaking process. He also said there are some publications required for the rulemaking process, and he wants to make sure that those documents are referenced in the preamble for the rule. Mr. Gabrielson also asked the Committee to clarify in the rulemaking that the BMP Program, as it is current established, will not “mechanically apply” to Pinal County when or if a PM₁₀ nonattainment is designated in Pinal County. He also wants to make sure there will be an opportunity for discussion on regional issues and case-by-case analysis when it is determined which, if any, portions of Pinal County will be subject to the BMP statute. Mr. Gabrielson also requested that the Committee consider a BMP category for the stabilization of disturbed surfaces. The current program has options for controlling windblown dust, but they are not mandatory. There are many practical consequences for controlling windblown dust, such as statutory policies stating that the air quality regulatory program protects public safety and meets the National Ambient Air Quality Standards (NAAQS). The NAAQS include a primary standard addressing public health and a secondary standard addressing public welfare, which includes hazards to transportation. Pinal County has many issues with dust affecting transportation and risks to public health from windblown dust. Mr. Gabrielson said he understand this is not all due to the agricultural industry, but it has some involvement and responsibility for those issues. A new category should be created to stabilize surfaces in disturbed areas with mandatory measures to address windblown dust, in his opinion.

Ms. Wrona said that the current program applies to the PM₁₀ nonattainment area and Area A, where other air pollution control measures have been enacted by the legislature. At this time, there is no PM₁₀ designation for Pinal County. There are proposals by EPA and the Governor Brewer regarding the boundaries for a PM_{2.5} nonattainment area in Pinal County, but the Governor has stated the boundaries for a PM_{2.5} nonattainment area are redundant because controls for PM₁₀ emissions will address PM_{2.5} emissions. There has been no response from EPA regarding boundaries for a PM₁₀ nonattainment area. At this time, the actions taken by the Committee pertain to the Maricopa County BMP Program. This may be a starting point for a program in Pinal County, but the controls would not automatically apply to Pinal County. Mr. Aja asked if the provisions in the statute mean that the Maricopa County BMP Program will apply if a new PM₁₀ nonattainment area is designated in Pinal County. Ms. Wrona said that the statute does contain that language but the question is if the BMPs, developed specifically for Maricopa County under the conditions in Maricopa County, apply across the board to conditions in Pinal County. If this is the case, the Maricopa County Program could be used as a starting point using the same structure, but with BMPs specific to conditions in Pinal County. Ms. Wrona said if or when a nonattainment area is designated in Pinal County, a state implementation plan (SIP) will be developed to show how the area will be brought back into compliance, and BMPs will have to be developed relative to that SIP as opposed to the BMPs that contribute to attainment in Maricopa County. Mr. Aja said that if or when Pinal County is designated, the county will not be without a regulatory program; the one for Maricopa County will apply immediately according to statute. The SIP is a federal Clean Air Act requirement, not a statutory requirement or provision under the Committee. Once Pinal County is designated as nonattainment, specific conditions will be considered in the SIP process but the BMP rules will apply immediately so Pinal County will be regulated right away. Mr. Thompson said Mr. Aja is referring to Section 6 of Arizona Revised Statute (A.R.S.) 49-457 discussing any other PM₁₀ area designated after June 1, 2009. Ms. Wrona said that the nonattainment designation process is not quick; EPA makes a proposal for boundaries and the Clean Air Act requires 120 days of consultation with the governor relative to the appropriateness of the boundaries and once the nonattainment boundary is finalized and published in the record the SIP is developed. The Committee has discretion under the statute to consider if all of the BMPs for Maricopa County are appropriate for a program in Pinal County. Ms. Wrona said there will be time to modify the BMPs prior to final designation. Mr. Gabrielson said he is referring to the non-delegation doctrine where the legislature cannot give away law making authority. The statute gives law making authority to EPA since it is up to EPA to draw the geographic boundaries of a nonattainment area once the program is defined. Mr. Gabrielson said he wants to make sure the Maricopa County BMP Program does not “mechanically apply” to Pinal County. The Committee may reconvene but if it does not, there will be no discussion of how the BMP Program will affect Pinal County.

Chairman Thelander asked Ms. Wrona to clarify the next steps and action items for the Committee. Ms. Wrona said that ADEQ will commence the rulemaking for the new BMPs for livestock operations, the new cropland BMPs, the new agricultural category for significant agricultural leveling activities, and the deletion of the BMPs for IPM and precision farming. The Rules Unit will collaborate with Planning staff on the language of the rule as well as the preamble. Ms. Wrona said ADEQ will analyze the data provided by the ACRPC to determine if PM₁₀ emissions trigger the five micrograms per cubic meter regulatory significance threshold.

Action Items and Next Steps

- 1) ADEQ will analyze the data regarding fallow fields provided by the ACRPC to determine if PM₁₀ emissions trigger the five micrograms per cubic meter regulatory significance threshold.
- 2) ADEQ will continue the rulemaking process to revise R18-2-610 and 611 to incorporate the requirements of Senate Bill 1225 and the motions adopted by the Committee.

Adjournment

Chairman Thelander asked if there were any further items for discussion. Hearing none, Chairman Thelander adjourned the meeting at 2:40 p.m.