

Agricultural BMP Committee
***FINAL* Meeting Minutes**
February 11, 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: Brett Cameron, Clint Hickman, Colin Kaltenback, Earl Petznick Jr., Kevin Rogers, Mike Terrill, Dan Thelander (Chair), Tom Thompson, Jim Walworth, and Nancy Wrona.

Committee members absent: Wade Accomazzo, Al Lopez, David McKay, and Will Rousseau

Additional attendees: Bas Aja, Steve Barker, Phil Bashaw, Mike Billotte, Emily Bonanni, Kris Graham Chavez, Hui Chen, Sona Chilingaryan (by phone), Lindsey Collon, Jo Crumbaker, Danielle Dancho, Phil DeNee, Scott DiBiase, Jeannette Fish, Don Gabrielson, Cheryl Goar, Kazi Haque, Nicholas Kilb, Dena Konopka, Rick Lavis, Tom Luch, Corky Martinkovic, Colleen McKaughan, Steve Peplau, Frank Schinzel, Randy Sedlacek, Robert Shuler, Joe Sigg, Lisa Tomczak, Rusty Van Leuven, Jim Wagner, Sandra Wardwell, Rob Wilson, and Greg Wuertz.

Welcome

Chairman Thelander opened the meeting and welcomed everyone present.

Discussion and Possible Action on Minutes from January 6, 2010, Committee Meeting

Chairman Thelander started the meeting with the review of the minutes from the January 6, 2010, Agricultural Best Management Practices Committee (hereafter Committee) meeting. Chairman Thelander stated Dena Konopka, Maricopa County Air Quality Department (MCAQD) and Robert Shuler, Shuler Government Affairs, had provided revisions to the minutes. Nancy Wrona, Committee member, Arizona Department of Environmental Quality (ADEQ), moved to accept the revisions and approve the minutes as amended; seconded by Kevin Rogers, 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; approved. Motion carried.

Discussion of Legal Issues Regarding Senate Bill 1225

Ms. Wrona said during the last Committee meeting several issues were raised regarding Senate Bill (SB) 1225 and consultation with representatives from the Attorney General's Office to obtain informal advice regarding the bill had been completed. Some of the questions included how many programs would result from implementation of the bill; would all producers be subject to the same requirements; and will the same regulatory framework apply in Pinal County once it is designated as a nonattainment area. Ms. Wrona said farmers in a presumably moderate nonattainment area will not necessarily be subject to the same menu of best management practices (BMPs) currently in place for Maricopa County, a serious nonattainment area. Arizona Revised Statute (A.R.S.) § 49-457, however, gives the Committee broad authority to adopt BMPs by rule. This is specifically provided for in § 49-457(h), which gives the authority to adopt the general permit for an agricultural activity, which may vary between different regulated areas according to regional, geographic, or cropping patterns.

Ms. Wrona said this means the BMPs for Pinal County could start with those within the Maricopa County Program, but a different set of BMPs could be developed for Pinal County. A.R.S. § 49-457 indicates BMPs may vary within a regulated area once the designation is final but stipulates that two BMPs must be implemented per agricultural category. Even though the Maricopa County program has evolved from a moderate area where one BMP was required, once the area was redesignated as serious, the statute was changed to require two BMPs per category. The statute does not distinguish between a moderate and serious nonattainment area; therefore, two BMPs will be required throughout the program. Requirements will apply for both crop and animal agriculture.

Ms. Wrona said another issue was what constituted a quorum for the Committee. The Open Meeting Law does not define a quorum; however, case law says that a quorum is at least 50 percent of the statutory members. The Committee has 15 members, which means that a quorum will require eight members to be present.

Tom Thompson, Committee member, asked to clarify if two BMPs are required per category or if two BMPs total are required. Ms. Wrona said for all applicable farming operations, two BMPs are required per agricultural category. Chairman Thelander said during the last meeting a question was raised about public comment during the meeting or at the end of the meeting; Chairman Thelander invited the public to ask questions at this time. Hearing none, Chairman Thelander proceeded to the next agenda item.

Discussion and Possible Action on ADEQ Review of Proposed BMPs

Ms. Wrona said all the narratives for each agricultural sector had been received and reviewed. The full document was revised to resolve minor inconsistencies and editorial errors. Ms. Wrona said there was no intent to alter the substance of the narrative but rather make the document flow and be consistent. The Arizona Department of Agriculture (ADA) worked on the narrative related to significant land leveling. Robert Shuler, Shuler Government Affairs, commented that on page 15, second paragraph, the second sentence states each category has an emissions factor

in pounds per head per year. He said this fails to account for the measure on the next page where an emissions factor is in pounds per vehicle per mile traveled. Mr. Shuler asked how this document related to the data request sent via email by ADEQ on January 21, which had a similar set of control efficiencies. Corky Martinkovic, ADEQ Air Quality, stated the narrative document with track changes submitted today represented the narrative portion only; a review of the accompanied control efficiencies was still in progress and the data request was tied to that review. The review of the control efficiencies is being conducted by ADEQ, ADA, and the Natural Resource Conservation Service (NRCS). The first task will be to make sure no transcription errors occurred in transferring control efficiencies from other similar programs; the next task will be to determine how the control efficiencies were obtained and if any other research or sources had been reviewed. Ms. Martinkovic said they are also checking to make sure the intent of the measure correlates to the control efficiency. Once the control efficiencies are verified, they will be ranked by reduction effectiveness using emission factors. Mr. Shuler said the main inconsistency between the tables for poultry and swine as it relates to emission factors is within unpaved access and unpaved roads categories; in the narrative for swine operations the emission factor for unpaved roads is two pounds per mile but there is no emission factor for unpaved access connections. The poultry narrative lists two pounds per mile traveled in unpaved access category but no emission factor is listed in unpaved roads. Mr. Shuler said they should all have the same emission factor. Ms. Wrona said they intended to complete the technical review for this meeting, but a thorough analysis is taking longer than expected. Ms. Martinkovic said one of the handouts for today's meeting is a table from the technical support document (TSD) for the AgBMP SIP revision for Senate Bill 1552 (2007) as an example of the type of analyses conducted.

Chairman Thelander said because ADEQ continues to evaluate the proposed BMPs, the Committee will not take any formal action at this meeting. Ms. Wrona asked for any comments on the revised (redlined) narrative to be sent to ADEQ. The final narrative and technical information will be provided prior to the next meeting so the Committee can review the information and decide to further evaluate or adopt the changes. Ms. Martinkovic said the primary reason ADEQ is being so thorough is because the information provided in the report will be incorporated into the TSD for the upcoming SIP revision.

Discussion and Possible Action on Changes to Land Leveling

Brett Cameron, Committee member, said the narrative for land leveling was developed by the Farm Bureau with assistance from ADA. Mr. Cameron asked Philip Bashaw, Arizona Farm Bureau, or Joe Sigg, Arizona Farm Bureau, to discuss the narrative. Mr. Bashaw said at the last meeting they discussed adding a new category for significant land leveling to the BMP program. They also suggested adding other BMPs for agricultural processes that move large amounts of soil, such as moving sumps or other water conveyances projects on agricultural land. After discussions with ADEQ and ADA, the category was expanded to include major earth moving activities to include ditches, canals, ponds, or irrigation lands. Mr. Bashaw said they wanted to make sure these activities were separate and distinct from cropland activities for land preparation, cultivation, and harvest. Three other BMPs for inclusion in the new category were also discussed. "Conduct significant agricultural earth moving activities in a manner to

minimize the number of passes by using equipment that is that most efficient means of moving the soil” was combined from two BMPs. “Timing of significant agricultural earth moving activities” was added.

Kevin Rogers, Committee member, asked for an example of the timing of significant agricultural earth moving activities. Mr. Bashaw said timing is central to the objective of the measure and category – specifically, minimizing the time that the soil surface is disturbed; performing the activities close to a time when you plan on stabilizing the soil surface. Mr. Bashaw used the example of a farmer who would engage in a significant land leveling activity close to or just prior to planting, so immediately after completion of the leveling the land is put into production and the soil is stabilized.

Colin Kaltenbach, Committee member, asked if the land leveling BMPs, or something similar, would supplant Maricopa County Rule 310.01. Chairman Thelander said we are addressing the potentially serious problems that can be associated with land leveling and does not think it will affect the County or whether they have jurisdiction. Ms. Wrona said some areas of the program will have to be considered in the context of the SIP revision and ADEQ will have to prepare an anti-backsliding analysis under Section 110(l) of the Clear Air Act to verify there are no fewer emissions reductions associated with this program than what are associated with those in Maricopa County’s rules. Mr. Bashaw said the intent of the land leveling category, now entitled “significant agricultural earth moving activities”, would only apply to cropland and activities occurring on cropland. Earth moving activities regulated under Maricopa County Rule 310.01 and/or other activities outside of the BMP program would not be affected.

Mr. Rogers asked about the BMP “Performing significant agricultural earth moving activities at a time that will minimize the soils susceptibility to generate PM₁₀”, and wondered if it should be included because it appears to be repetitive. Mr. Bashaw said they borrowed language from other areas of the BMP Program for that measure, but the BMP “Reducing the time between significant agricultural earth moving activities and planting or otherwise stabilizing the soil via water delivery or seed bedding to reduce soil potential to generate PM₁₀” is more representative of the intent of reducing PM₁₀ as a result of timing operations. Mr. Cameron said part of the intent is to target the times of the day when there is no wind activity, some activities could be conducted during these times and any dust generated would likely fall back down to the ground. Mr. Bashaw said they discussed performing these activities when there is no inversion layer, which would mean the meteorological conditions are less likely to generate PM₁₀. Ms. Wrona said this is a good point and could be applied in a number of ways. The BMP could refer to several options such as the time of day, the fact you want low wind with no stagnation, the time of year just prior to rain, and the time of year when there is less wind. Chairman Thelander said it makes sense to him to consider factors like wind over 15 miles per hour (mph) in the BMP and stagnation during winter months is not a time to do major land leveling; timing of significant earth moving activities as a BMP has merit. Ms. Wrona said it speaks to the timing of operations like green chop where crops are harvested at the highest moisture content, thereby reducing emissions associated with the harvest activity.

Chairman Thelander asked if the Committee were to move to approve the Significant

Agricultural Earth Moving Activities category and associated BMPs, would ADEQ need to review it. Ms. Martinkovic said it could be approved as submitted but would need to be reviewed along with the other BMPs and have control efficiencies assigned to each BMP. Mr. Kaltenback asked if the BMP should be expanded to include some of the meteorological conditions or situations and lay them out as reasonable events to consider; including these in the language could strengthen and clarify the BMP. Mr. Rogers said if it is approved, it would be similar to existing BMPs. There could be situations when farmers know they will level a field and the work must be completed to plant alfalfa in October; they will have to ask themselves, start early and let the field linger or wait to level until August in order to minimize the wait time and time of disturbance. Mr. Kaltenback made a motion to accept the revised language of the significant land leveling as a crop category; seconded by Mr. Cameron (see action below). Mr. Petznick asked since this is a new category and there is nothing similar in San Joaquin Valley or Imperial County, how could emission reduction factors and control efficiencies be developed. Randy Sedlacek, Maricopa Association of Governments, suggested looking at some construction activities since they are similar and modifying them to fit agriculture. Don Gabrielson, Pinal County Air Quality Department Director, concurred that timing significant earth moving activities to reduce the potential to generate PM₁₀ should be expanded to include high wind conditions, low wind conditions, and stagnation events. Mr. Gabrielson also suggested addressing the same issues in the other related BMPs.

Chairman Thelander asked Mr. Cameron and Mr. Bashaw to work on refining the language of the earth moving BMPs. Chairman Thelander called for additional discussion or questions. Chairman Thelander then called for a vote to accept significant land leveling as a BMP category; approved. Motion passed.

Call to the Public

Chairman Thelander asked Colleen McKaughan, Environmental Protection Agency (EPA), to provide an overview of new developments regarding PM₁₀. Ms. McKaughan said EPA is announcing a notice of proposed rulemaking regarding the Imperial County Conservation Management Practices (CMP) Program; it is open for 30 days and is a limited approval and limited disapproval. EPA believes some, but not all, of the issues raised in the Imperial County Program are similar to those in the Maricopa County Program, such as enforceability. EPA is willing to put in writing and clarify approvability issues for the Maricopa County BMP Program to ensure the changes made by the Committee are comparable and consistent with the Imperial Program. Ms. Wrona said she was not able to fully review the NPRM and asked Ms. McKaughan to describe the issues and the relation to best available control measures (BACM). Ms. McKaughan said the program needs to be defensible and has to meet enforceability requirements. Monitoring, recordkeeping, and reporting are requirements in the San Joaquin Valley CMP Program, which are elements that EPA would like to have in the Imperial Program and most likely need to be strengthened in the Maricopa County Program. Ms. McKaughan also stressed rule implementation because when EPA is challenged there is a need to explain and show that emissions reductions are actually occurring.

Chairman Thelander asked how the Imperial County CMP Program is structured and the difference between it and the San Joaquin Valley CMP Program. Sona Chilingaryan, EPA, said

the Imperial County rule and program were developed by the Imperial County Air Quality District with assistance from the Natural Resource and Conservation Service (NRCS), agricultural groups, and members of the agricultural industry. She stated they do not have a formal committee but the groups had interactions similar to our Committee. The Imperial County CMP Program is menu based where one chooses from a list of options in different categories (e.g. unpaved roads, land prep, harvest). Ms. McKaughan reminded the group that EPA has successfully defended the menu-driven approach; problems have arisen with other elements. Mr. Rogers asked if EPA's guidance to Imperial County involves a reporting procedure to complement the implementation of CMPs. Ms. McKaughan said they are required to have a mechanism or procedure to complement the implementation of the CMPs. Ms. Chilingaryan reminded the Committee this is a proposed rule and there is a 30-day comment period; EPA will address any comments and outstanding issues in a final rule making. Mr. Rogers said if the Committee is going to take monitoring, record-keeping, and reporting into consideration it is crucial that we evaluate EPA's opinion. Ms. McKaughan asked if the Committee would like EPA's opinion in writing. Ms. Wrona said a written opinion would be helpful. She continued to say it would be better to have this opinion ahead of time before the Committee finishes their evaluation of the proposed BMPs, the rulemaking is complete, and the subsequent State Implementation Plan revision is submitted in order to assure the program is approvable. EPA could develop a written analysis of the implications of the proposed disapproval and approval of the Imperial County Program and how it relates to the structure and nature of the Arizona program. Ms. McKaughan said EPA would take that action item.

Chairman Thelander asked what would be a good timeframe to receive these comments given the Committee and ADEQ will not be able to complete the rule development process by the June 30, 2010, statutory deadline. Ms. Wrona said at least two months past the deadline will likely be required to finish the rule process. In the meantime, EPA will come forward with recommended boundaries for the Pinal County PM₁₀ nonattainment area boundaries. Ms. Wrona asked if the designation will occur prior to or at same time. Ms. McKaughan said she was not sure about the schedule but it should be around the same time. Ms. Wrona said once we complete the Maricopa County work, the proposed redesignation would likely be out and the Committee could begin the evaluating the agricultural issues in Pinal County this fall.

Mr. Gabrielson asked if the revisions to the Maricopa County Program are being driven by a deficiency notice from EPA. Ms. McKaughan said there is no deficiency notice. The Committee is working on improvements to the BMP Program since other programs (such as in San Joaquin Valley and Imperial County) have made advances in their agricultural programs. Mr. Gabrielson asked if the changes are being made to ensure that, at least from EPA's perspective, the BMP Program is approvable. He added since there are no adverse consequences to not meeting the statutory deadline, there is no compelling deadline to complete the changes to the BMP Program. Ms. Wrona said the deadline relates to the implementation of the statutory provisions relative to the controls in the additional agricultural source categories; these should be in place as quickly as possible to avoid PM₁₀ exceedances. Mr. Gabrielson said the changes should be made sooner rather than later from the public's perspective but there is no regulatory hammer to finish the revision quickly. Ms. Wrona said we have to determine how much time is needed to develop the evaluation of control efficiencies, emission factors, and the BMP effectiveness rating. Ms. Martinkovic suggested reworking the timeline into a three-way

timeline including Committee actions, technical work, and rulemaking development. Mr. Sedlacek said once all of the control efficiencies are evaluated, emission factors validated, and the data regarding agricultural activities is acquired, the results could be finished within 30 days. Ms. Wrona said it may be more realistic to allow for 45 days.

Chairman Thelander asked how long it would take to get the EPA comment letter. Ms. McKaughan said it could be completed in 30 days. Ms. Chilingaryan asked to review the information resulting from the technical analysis and everything that has been proposed. Mr. Rogers asked if reporting has to become part of the program, will we need to go back to the Legislature, or does the Committee have the authority through rule to add reporting to the program. Mr. Cameron asked Rick Lavis, Arizona Cotton Growers, to address this issue. Mr. Lavis said it could go both ways, the Committee could adopt a revised rule requesting to send the information to ADEQ; an issue may be that farmers do not want to tell ADEQ what they are doing. Mr. Lavis said if the Committee wants reporting and to protect the privacy, they could require farmers to send the information to the ADA, which would aggregate the data and send it to ADEQ. This may require statutory change and may need disclosure language in the rule. Ms. Chilingaryan said the reporting in the San Joaquin Valley CMP Program serves two functions: to make sure the measures are enforceable and to make sure the measures are implemented in a manner stringent enough to be considered best available control measures (BACM), a requirement for serious nonattainment areas. If reporting serves this purpose or if there is another way to providing the specificity in the rule, that could possibly satisfy what EPA would require for the BMPs to be enforceable and defensible at the BACM level.

Mr. Lavis said an issue the agricultural community has is the lack of specificity about what EPA wants them to do regarding reporting. Farmers in San Joaquin Valley work with the local Air Resources Board and file a CMP plan each year. The plan indicates field locations, activities conducted in each field, and payment of a fee – which is pretty much a fee to grow a crop because if the CMP is not implemented, the farmer may not be able to grow the crop. Farmers retain their records because the CMPs and CMP plan are subject to a five year review. Mr. Lavis said the Maricopa County Program was in effect before the San Joaquin CMP Program and at that time EPA determined agriculture contributed to PM₁₀ emissions and required a reduction in emissions. At the same time, some farmers indicated they did not want EPA to run the farms in Maricopa County and EPA did not want to run the farms either. Mr. Lavis said EPA approved the menu-based BMP program, giving farmers individual choice in the BMPs they would use and allowing them to retain records at the farm. If a complaint was made an agency representative would discuss with the farmer how to fix the issue and most of the time this process worked. Mr. Lavis continued to say the agricultural community understands that EPA needs to determine the reduction in emissions but it is a struggle between farmers retaining their choice and how they operate their farms, their privacy, and the information needed by EPA.

Chairman Thelander asked if there were any additional comments on this issue and asked when Ms. McKaughan could complete their comments. Ms. McKaughan said EPA could finish the comments in three weeks and will be as specific as possible. Ms. Wrona said ADEQ will send out the EPA's proposed rule along with the technical review work, which should be done in six weeks. ADEQ will also include the clarified language to the timing of significant agricultural earth moving activities in the category for significant agricultural earth moving activities.

Chairman Thelander asked when the next Committee meeting could be held; since the other documents will be finished in about two months, a meeting could be held in early to mid-April.

Chairman Thelander then asked for additional comments from the public. Phil DeNee, ADEQ, stated he has been working on the land leveling emission factors and has found so far, using construction numbers, that it is about 400 pounds per acre per month and it can take about one to four hours per field for leveling. Ms. Wrona said ADEQ will vet this number with the Committee and the agricultural community to make sure this is realistic. Mr. Gabrielson said all of the analyses use tons per year but since there is a 24-hour ambient standard and, as it was just pointed out, a field can be leveled in 4 hours. Mr. Gabrielson asked if it is appropriate to spread the emissions out over a month or if it is possible to discuss emission factors in terms of tons per year given a lot of agricultural emissions are seasonal or even occur within a two week time period; or should the calculations be done at the 24-hour level. Ms. Wrona said she is not sure if that kind of analysis is possible. Mr. Sedlacek said in the TSD, tons per year was used for comparison purposes to show potential emissions reduction with various land uses. Modeling in the manner suggested could be challenging because of how data is averaged; it is not easy way to go from an annual standard to a 24-hour standard, but he would look into it. Mr. Gabrielson agreed it is challenging because the Committee is trying to put numbers on things not directly measured and trying to figure out how to achieve compliance. Mr. Gabrielson said he is looking beyond this discussion to a SIP inventory discussion in Pinal County in order to avoid asking the same questions at a later date. Ms. Wrona said the current effort is for Maricopa County and at this time the Committee does not need to show a numerical reduction from these revision, which we will have to do for a Pinal County attainment demonstration and SIP.

Chairman Thelander asked about the timeline for the Pinal County nonattainment boundaries and what are the steps for determining those boundaries. Ms. Wrona said ADEQ has met with stakeholders (City of Maricopa, Game and Fish, State Land Department, and Tribes), is continuing to synthesize the comments, and will provide a recommendation to ADEQ Director Grumbles by the week of February 22, 2010. Chairman Thelander asked how the boundary determination is made once Arizona sends the recommendation to EPA. Ms. McKaughan said EPA performs a technical evaluation; nine factors must be considered to determine the nonattainment area boundaries using data provided by EPA Headquarters (these are the same factors considered by ADEQ). EPA must respond to the State, either agreeing or disagreeing with the recommendation and provide the State with the rationale for the decision in writing. Once the State receives the decision, it has the opportunity to respond. Ms. McKaughan was not sure of the exact deadline because EPA has streamlined the dates for PM₁₀ and PM_{2.5}. Ms. Wrona said in the meantime EPA has received notice of intent to sue on the issue of the PM designations from the Sierra Club and Wild Earth Guardians.

Action Items and Next Steps

- 1) ADEQ to schedule a Committee meeting for some time in mid-April.
- 2) EPA to send ADEQ comments regarding Imperial County CMP Program.
- 3) EPA to develop comments regarding approvability issues related to proposed changes to Arizona AgBMP Program compared to EPA's proposed rule for the Imperial County

- 4) Comments to be sent to ADEQ for the redlined narrative portion of the TWG Report; and a fully reviewed Report to be sent to the Committee prior to the next meeting.

Adjournment

Chairman Thelander asked if there were any further items for discussion. Hearing none, Chairman Thelander adjourned the meeting at 3:05 p.m.