C&H Hog Farm

March 25, 3014

It's very confusing to me why we're having a public meeting about this one modification when there are more serious things to be considered about this original permit, but I will try to respect the limitations that ADEQ has set on this particular meeting. I oppose this modification for a number of reasons, I'm not going to go through all them, I've submitted those online, which kept bouncing back, I want you to know. I don't know why. It might have been the user. I did send it to you directly, Theresa, do you if you received it or not? No I didn't have any exhibits. There were no pictures. Alright, fine. So I oppose the decision for several reasons, but I want to concentrate on two. One is that field seven is, my understanding, is not excessive in its phosphorous, but it is high in its phosphorous and that this modification also entails taking from the pond which will also have a high phosphorous content. And in relation to that, again, you're always going to have, whether it's from tanker truck or from spray, you're still going to have the noxious problem of air quality. I respectfully ask that ADEQ begin to monitor field seven, for air quality, you have the monitors to do that. And I think that that would be really in the best interests of Arkansans to do so, it's particularly the children at Mount Judea School. Field seven's close to Mount Judea, within 250 feet of the school. There are known and well documented health risks associated within several miles of swine CAFOs and I just want to talk about those, just a little bit. I'm going to only talk about a few. And these are just from a much larger body of evidence. This is a type of technology, if you want to call it that that more and more were going to find that we have a large body of evidence that it's a broken system. And it's unfortunate that the State of Arkansas continues to approve this kind of system. The Pew Commission on Industrial Animal Production, in a two and a half year intensive study found that the system imposes unacceptable risks to public health, the environment and the welfare of animals themselves. A National Academy of Sciences study released in 2002 concluded that air born pollution from CAFOs is as much a concern as the animal waste that ends up in our streams. This study has made it clear that these pollutants from factory livestock facilities are a serious environmental and health concern. The report requested by EPA and USDA recommended regulators find better ways of measuring air born pollutants and the manner that they are dispersed. My understanding is that you don't use, that Arkansas doesn't use your air monitors for agriculture. This isn't agriculture, this is factory industrialized farming. Public health science now recognizes that hydrogen sulfide is a potent neurotoxin and that chronic exposure to even low ambient levels cause irreversible damage to the brain and central nervous system. Children are among the most susceptible to this poisonous gas. It is unacceptable for communities to have to continue suffering the ill effects of hydrogen sulfide when the technology to control the emissions is affordable. That's from the Journal of Environmental Science. And finally, the people exposed to hydrogen sulfide for prolonged periods show chronic neuro, behavioral impairment, lost balance, memory, and reaction time, months to years afterwards. That's from the Southern Medical Journal. I think that's enough, there's a lot more to support that. I understand too that the ADEQ now has the underground studies of the University of Arkansas water team, is that right? You have those in your possession, you do not? Alright, I'm finished. Thank you.

I'm Gordon Watkins; my mailing address is HCR 72, Box 34, Parthenon, Arkansas and thanks for coming and allowing us to speak and listening to comments. I'm sure you'll take them under appropriate consideration. I have a number of comments as well, but I have submitted them through the website and I'll limit my comments tonight to one primary one and that is in regards to field seven, eight, and nine. I think that field seven, eight, and nine should be required to be included in the Big Creek research study as a condition of the requested modification. Field seven in particular is problematic in several regards, including the fact that it is adjacent to Big Creek. It is occasionally flooded; it is in close proximity to the Mount Judea K-12 School and town center. It is above optimum in soil test phosphorous levels and has no P index assigned to it. And it is high use and representative of the fields used in the farm. It should be included in the Big Creek study. I have a recording to public record certain fields, including field seven, are quote "off limits" to the research team. According to the memorandum of agreement, ADEQ has the responsibility to quote "assist the university with attaining access to conduct the study" end quote. Therefore ADEQ should facility the inclusion of fields seven, eight, and nine in the Big Creek study. The study should include pre-application ground penetrating radar studies, ground water monitoring, surface water monitoring, and adjacent Big Creek and air quality monitoring at the Mount Judea School. Now in respect to property rights, if the landowners of those fields do not wish their property to be included in the study, if they don't want monitoring wells dug in their fields, if they don't want their cattle disturbed, that's perfectly understandable and their feelings should be respected. However, if they do not wish to be included in the study, those fields should be removed from the Nutrient Management Plan and should be disallowed for C&H waste applications. I'll respectfully request that ADEQ deny the requested permit modification until these conditions have been met. Thank you.

My name is John Meyer, I live, a Newton County resident; I live south of town at HC31 and as I stated in the meeting at the Carroll Electric Coop I'm a retired wildlife biologist, forester, and safety engineer. I spent 30 years working in the environment, I've written environmental studies, I've written environmental analysis, I've participated in environmental impact studies. Everything that I saw about this permit is way above and beyond anything that should be required for environmental protection. It is a masterful piece of cooperative study, there's no reason that any limits on this changing of the permission to apply effluent from a sewage lagoon, which I must emphasis is treated effluent, it's been treated, it's in a sewage lagoon, this is not raw sewage, being put out on these fields. All we're talking about here is an application change; the application change should no way affect the chemistry or the biology of any of the environment where these fields are. Also, I truly believe from the history that I've had and the past studies that I've done that this C&H Farm project, is not only going to be the most watched and monitored project in the United States, the way it looks like, they are our neighbors and they are not going to be doing things to destroy the environment that we live in, I truly believe that. I also believe that the matter of the chemical runoff, the smell, whatever you want to call it, is nothing at all compared to what we when we have a big weekend of floaters on the Buffalo. When you get 5 or 6,000 people floating this river where do you think they are going to the bathroom, where do you think they are using for an outhouse, they are using the river, and the river is being polluted on weekends. And I'm a floater, I've floated, I live in West Plains, MO for 15 years and I have worked in saw mills all down here, at Harrison, around this country, so I know the timber, I know the country and I know that

floaters don't wait until they get to an access point to go the bathroom. So I think this is all over blown, I see nothing wrong with changing a method of application, which is what I understand this is about. We're changing the method of application, which should have no influence on the fields that are being treated. Thank you.

My name's Theresa Turk, I live in Fayetteville, AR. I love the Buffalo River; I've floated this river for probably the last 35 years. It's a wonderful treasure, and we should take the precautionary approach to this situation, environmental precautionary approach. Which in my mind, as well as a huge body of literature, suggests that you don't apply manure on a field that floods often. And we have pictures of just a week ago when that two inches of rain came through, it's a typical spring storm, we have them every year, it's nothing abnormal, out of the question and those fields were flooded. The Big Creak was flooded. Where do you think that manures going to go? So really, we should not even be applying manure on field seven or any of the fields, field six or field five that are adjacent to Big Creek. That being said, there is no phosphorous index calculation that is publically available to look at field five, six, seven, or nine. If that calculation has been done, it's nowhere on your website, it's not been provided to the Big Creek research team, and that to me invalidates this whole discussion that we're having here tonight. It invalidates your Nutrient Management Plan because information is missing. Secondly, if I understood section M correctly, the change will also be which waste storage pond the slurry is coming from. I believe that there should be no manure slurry from waste storage pond number one. That has much higher phosphorous in there, it's really use is a settling pond and should be treated like that. Only slurry, if you're even going to ever apply it, which I disagree with, should come from waste storage pond number two, not number one. And I believe that's in the change to Section M. So, I highly recommend and respectfully request to not change the permit at all and to reopen the broader issue of the permit, the broader problems and omissions that you have right now. And finally, I want to really ask you, how much does public opinion count? If you go on your website, there's not one group or person that supports changing this permit, not one. So does public opinion, does any of this that we're talking about today, does it really matter? Or is it just a show. You said you get back to us once you made your decision, but I'd like to know how much our opinion, our facts, our analysis influences your decision. Thank you very much.

Carol Bidding, HC73, Box 182A, Marble Falls, Arkansas. ADEQ's mission is to protect the air, water, and land from the threat of pollution. ADEQ depends on and responds to citizens' concerns, since citizens are the first to witness environmental problems, and I took that off your website today. So I just want to say, that due to the proximity of the fields seven and eight to the Mount Judea School and community and the Big Creek that I suggest, instead of modification, that I recommend none of the liquid swine waste be applied to these fields, due to the runoff into Big Creek and to the odor and air pollution in conjunction with the Mount Judea School and the community. And since we do not have cell phones and computers and internet in all areas of this county, it would be really nice if we had a local number that we could submit complaints to, call in the Newton County area. If you would provide that to this audience, I'd appreciate that. Thank you.

Hello, I'm from Fayetteville, Arkansas and I've come here to speak out against this whole pig project, we shouldn't even be here, I have to admit I'm very disappointed with you Ms. Marks, I've spoken when we had to save Lee Creek from people wanting to dam and develop and I watched your handling of that and it really made me nervous. This has confirmed, I have no faith in you running this department ma'am, and I have no faith in the ADEQ to protect us and Arkansas river, water, all of it, air. You are not doing your job ma'am. And here's the deal, I had a little protest sign outside, but the police told me I was not allowed to hold my sign on public property. My sign did say "What was Don Tyson afraid of?" Well, I did know Don Tyson, my husband worked for Don Tyson and I know personally what Don Tyson was really, one of the few things, afraid of, pig manure disease. I was late for the protest up at the convention center, where the governor came out and gave us a little ambiguous statement. But for this thing here tonight, I'd like you to know that two days after that, if I can refer to Thursday March 13, business informed by the Arkansas Democrat Gazette, deadly pig virus closes in on state. I think everyone should research this article, if it doesn't scare you like it scared Don Tyson, then you are just not here on earth with us. There's another wonderful article that Mr. Mickleson, of course from Tyson, was able to refute and it was from Nicholas Kristoff and it was a fabulous article and it is in Saturday, March 15's Arkansas Democrat Gazette. Now, I say little pig farms are good, big pig farms are bad. There's a lot of things in life that are simple to explain and understand. And there is a huge difference in the impact to everyone. This is not just about the Buffalo; this is just not about floaters. Let's even leave them out of it, let's think of the land, the people and everything. So again, little pig farms are good, big pig farms are bad, please check these two articles if you have not seen them. In fact, I'd like to quote "the cause of the virus is unknown; researchers do know that the virus spreads through transport of the animals and ingesting contaminated manure." That's from a veterinarian, of the American Swine Association. Again, if you haven't smelled a pig farm, or been around, I've been to feed lots out west, I've been around a lot of chickens, you don't know what a big bad nasty pig farms smells like and how deadly it is to your other farming neighbors, it's not just about the canoers. You got to understand that, it is that bad and it does go through the, it's going to go all the way, it's so simple. I have a neighbor's septic system running in my yard in Mount Sequoya in Fayetteville, it's so simple to look at it going downhill and where's it going to end up. Where is all this going to end up? It's a very simple question and before my time runs out, I hope folks know that it's very strange that when this process was allowed to slip through, it slipped through folks, because I believe there are mutual government entities in the same government building that didn't even seem to know, and somehow Ms. Marks and her department failed to inform other people in their building and next thing you know here we all are stuck with something we can't get out of it, we need to get out of it. And those of ya'll that are supporting it, that farmer doesn't care about ya'll, he cares about money. You think Cargill, and trust me; the only reason why Don Tyson got into the pig business was because John wanted in the pig business and 'cause he knew he had to control it, he knew he could control it. Trust me; I know personally, Don Tyson was scared to death of pig manure. Have a good day.

My name is Bill Lloyd; I live in Parthenon, AR, at PO Box 162. My comments take a little different avenue than most of those previously. Most of my experience for the last 21 years has been in the solid waste industry, permitting solid waste facilities, landfills, transfer stations, and those sorts of things. We are required in that industry to be very specific about water runoff, ground water, storm water; all those

kinds of things are required to be heavily monitored and very heavily regulated. We have to know where the ground water is before you get a permit for a landfill; you have to know how the groundwater moves beneath that landfill. You have to drill wells all away around that landfill and the owner of that landfill has to monitor those wells on a regular basis several times a year. You also have to put up a certain amount of financial assurance, in other words it's a bond or an insurance policy or something that guarantees that if you have problems with that facility that you are, there's money and financial resources to go out and clean up what's there. And I would suggest that in permitting these confined animals operations that you look at this particular model that's being, not only in the solid waste industry but throughout the water division and these other areas of permitting all seek to see that the public and the public lands and public air is protected from industrial activities. And this is a similar situation so my suggestion would be that the department look at establishing things for these fields or other fields when they do the confined animal operations, at least closely approximate some way to understand what the water is doing beneath the facility and require the owners of those facilities to monitor and regulate them. And thank you Ms. Marks for yourself being here tonight and I'll submit the rest of my comments in writing.

Good evening, my name's Laura Timbey. My address is PO Box 25 Gilbert, Arkansas. I'm a retired county health nurse and I also worked in the vocational school in Leslie, teaching medical professions. My comments are as follow and they pertain just to the permit modification. I have a lot of other feelings about this but tonight I'll stick to that subject. So for the record, I'm stating my opposition regarding ADEQ's decision to consider a modification, C&H Farms, CAFO Permit, due to the following. One of the requirements of the general permit, which is ARG590000 is that the NMP, which is the Nutrient Management Plan, am I correct, be developed in accordance with the Arkansas NRCS Conservation Practice Standard Code 590, which is the nutrient management. The code states that to address air quality concerns caused by the odor nitrogen sulfur and air particular omissions, the source timing amount and placement of nutrients must be adjusted to minimize the negative impact of these emissions on the environment and human health. Due to the close proximity of field 7 to the Mount Judea School and community and due to the known and I must say documented health risks of chronic exposure to swine waste, such as ammonia, hydrogen sulfide, airborne particulates, and other components of swine waste, known to be hazardous to human health, particularly among children and the elderly. ADEQ must consider the effects to public health and the impacts on the local community. Field seven is within 250 feet of the school grounds, within 1,100 feet of school buildings. Field seven is within 3 to 400 feet of at least two local residences and a cemetery. It is west of all these occupied buildings, the direction from which prevailing wind comes. For these reasons, it is highly likely that the Mount Judea School, students, and staff with be subjected to air quality conditions posing serious health risks for a large portion of the calendar year. The same is true for neighboring families and the community at large. I feel that ADEQ would be negligent in their duty to allow the permit modification, given the very obvious concerns regarding field number 7. I respectfully request that ADEQ deny the requested permit modification and I go on record as saying that the sprinkler spraying system is also very inadequate. Thank you.

My name's Chuck Bidding, I live in Newton County, HC73 Box 182A, Marble Falls. I'd like to welcome Director Marks and her staff to Jasper, a place I've called home for 15 years or so. It's a wonderful area, I'm glad you could make it up here, sorry it's for this reason, but I'm glad you finally came up, again, and we're having a meeting. My comments will stick strictly to the modification. First of all, I think the modification should not be allowed. The Nutrient Management Plan is incomplete, there's no phosphorous index for fields seven and nine in the Nutrient Management Plan. Setbacks as are required under Standard Code 590 are not shown in the mapping in the Nutrient Management Plan. Nutrients from waste storage pond number one are much higher from those from waste storage pond number two. There's nothing in the revision of the Nutrient Management Plan that indicates whether waste for the vac tanker will be drawn from waste storage pond number two or waste storage pond number one. These higher nutrients will pose a greatly risk of water pollution to Big Creek and the Buffalo River if they come out of waste storage pond one. Also, the phosphorus index may be a good risk management tool but it only looks at fields individually, it never looks at the cumulative impact of all the fields along the creek, nor does it taken into effect, or to account, the existing conditions of the water quality of the creek. The only thing that seems to matter is whether the creek was on the 303d list for impaired water quality, which Big Creek is not yet. That will be my comments; I've submitted the rest of my comments in writing. Thank you.

My name is Brian Thompson, 3428 East Wyling Road, Fayetteville, Arkansas. I'm retired from Tyson Foods. I have two comments, my first one was submitted in writing and I want to reread it. Since it's come to light that fields 5, 12, and 16 called out in the original Nutrient Management Plan are actually not available for application, this indicates to me that heavier concentrations will need to be applied to seven through nine, as will the remaining fields. And so Ms. Marks, it seems inappropriate to make a modification to these fields; it just seems that we're doing things out of sequence. We want to make modifications to fields where the original plan wasn't really correct. A more appropriate sequence would be to reopen and resolve the original permit and then address this new modification. My second comment is just something I was thinking of tonight. That is with using the tanker to apply to these fields you're going to be, I'm thinking I mean, I'm not a farmer folks, but you're going to be using a tractor to regularly drag the tanker across the fields to apply the effluent and I know that on my own land soil compaction is going to result in more runoff and I think that's a concern. So until I understand what the results are of that, I would recommend that this be disapproved, thank you.

Well, I'm a total layman on all this stuff, I've only heard about it in the past few months. I didn't even know this thing was happening until about an hour ago when I was walking my dog. When I walked in you were talking about spraying this stuff on the karst land as opposed to dumping it out of tanks, either way even not being a geologist, I'm a caver, and I know what comes down through the soil, the karst soil into our water systems, into our aquifers, and into our wells. I know that there's rain down into the creeks, down into our Buffalo River. And the gentleman here says tourists are crapping all along the river, that doesn't make any difference, if we didn't have any tourists 100s and 100s of more people would lose their jobs and their businesses. So by you guys letting them do this, I understand there are seven more permits pending in Newton County alone, for hog farms that are being kept secret. And I'm wondering if that's true and if that's true, why is it being kept secret from us. That's all I have to say.

My name is Tyler Stayton, PO Box 66, Jasper, Arkansas. It's no use lying, I'm from South Louisiana. I moved here three years ago for 3 or 4 different reasons, one for the beautiful forests, the pristine atmosphere, and the beautiful river. I bear no ill will against farmers and I like bacon, as you probably can see. There's something that's just not right here. I'd like for ya'll to go home tonight and Google the Tangipahoa River in Louisiana, it pops right up, Tangipahoa T-A-N-G-I-P-A-H-O-A, it's an Indian word. A biologist professor gave students, just go out and sample rivers and the Tangipahoa River is very similar to the Buffalo River, it's not as beautiful, but it is. The little lady went out there, she was a college student, she sampled the river, chloroform bacteria went off the chart. Tangipahoa River is surrounded by farms, dairy farms, mass dairy farms. It was a lack of knowledge or whatever, but that river was so polluted it shut down the whole tubing industry, it shut down the whole canoeing industry, it shut down three or four gas stations, it shut down three or four mom and pop motels, it shut down bus drivers that would ferry the kids back and forth on the river, very similar to what's happening here. That was 30 years ago, it's still shut down. The industry went away. Folks you're shooting yourself in the foot, you really are, you got a pristine place here and you're putting a pig farm there. That stuff is going to get into the ground water sooner or later; it's going to pollute people's wells. What happens when the first child gets sick in one of those schools? It's just a no brainier. I worked for Shell Oil Company for 32 years; I know what happens to ground water. It gets in the ground water. It's going to get into the river. We might say that Newton County and Northwest Arkansas is not subject to earthquakes, let's just look at what happened in Oregon with the mudslides over there. You can say, well that doesn't happen here, if you look on Highway 7 South and if you look on Highway 7 North, we just had two earth movements over the last couple years since I've been here. There was another one in Compton, the earth moves. Those ponds up there don't have concrete liners in them. I'm going to close with this. Please look at Tangipahoa River, Google it tonight and just see what happened to that river. There's a number of rivers like that, but that's the one that's the biggest example. That river goes into Lake Pontchartrain, it's polluted, nobody swims in Lake Pontchartrain because of the farms. They've spent millions of dollars cleaning it up but it's still not clean yet. So I would ask ya'll to look at that. If you run a hog farm, I'm not against hog farms, put concrete liners in the holding tanks, put aeration chambers, put a full treatment system in, put monitoring wells around it, do it right. Don't put it into the Buffalo River. Don't do it around the Mount Judea School. Thank you.

My name is David Druding, and I live in Fayetteville, Arkansas and I really appreciate your coming tonight and hearing comments about this. I have enjoyed the Buffalo River since 1974 in Newton County in general, I have a lot of friends here and I'm an avid caver. And my first thoughts when I heard about this after you had already permitted it was I gave thought to, I think it was the second time I was in Fitton Cave, which is right along the Buffalo River, beautiful cave. And it was starting to sprinkle as we went into the cave and the National Forest Service said, look if it starts to rain you can't stay in that cave, I said really and he said yeah, you'll see if it's starting to rain. And as we went in it was sprinkling and I guess it started to rain more because within about 40 minutes of us being in the cave there was just enormous amounts of water coming through the karst lime stone into the cave and there's a river inside it and the river was rising and rising. And I thought of that experience with the idea that we're going to spray an effluent pig waste onto fields up above, in that same kind of geology. And how quickly it will migrate into the Buffalo River, into the water supplies of all the people around here and how much of a

mistake it was. I understand that's not what we're here to talk about tonight and really what I want to mention, and I've already presented you with a written comment sheet and all I'm going to do is real quickly point out, because the people who've already come forward and spoken have really addressed the concerns that I have. The fact that the U of A's monitoring, the study that they did wasn't allowed on field seven, really, I have to agree with Mr. Watkins and Laura and Theresa Turk and Jenny Musullo that alone should eliminate this permit as it was originally set up from going forward because what we're dealing with now is a situation where the original permit isn't, no longer applies to the area that this is going to be applied. And so, this whole process has to be reopened, we need to re-look at what actually the fields are that it's going to be applied to and the earlier permitting application doesn't apply to what's going to be done anymore. There's also the concerns about the phosphorous levels not being addressed and one other issue, just the proximity to Big Creek and to school systems and houses being a few hundred feet from this one field that now is going to be applied more of this effluent to it. There really needs to be, this whole thing needs to be reopened and reconsidered based on what the facts are now that we have in hand. And I presented you with the written comments and I think that's all that I need to say. But I really appreciate you being here, what I'm asking you to do is withhold permission until these changes have been taken into consideration and the conditions have been met that would allow it to be permitted. Thank you.

Shelia Rolenflet, PO Box 97, Ponca, Arkansas. I also oppose the modification of the permit that is before you, for several reasons. My concern is air quality, water quality, environmental impact on Mount Judea, on the land, on Big Creek, on the Buffalo River, on the tourism, and on the citizens of Arkansas. I feel that the due diligence was not done with the original permit, so I request that you do take the time and do the due diligence that's needed for this. I'm not a farmer, I have no problem with hog farms, I have a problem with hog factories or any type of factory of animals and especially where this was placed. This was put in the wrong place and I ask that, not only will you look at this permit and reevaluate it that you either request that Cargill spend money and get an appropriate waste system in place. I own a business which is on a tributary of the Buffalo and I have to have it assessed twice a year by your agency. I have human waste that's nothing compared to hog waste, hogs produce ten times the amount of waste a human does and I'm under regulations that I don't see you're requiring this factory to be under those regulations, so I ask that in this permit process that you even go back further and take time and energy and money and let's do this right. People spent money and tenures to protect the Buffalo River and I think we need to be proactive in making sure that we don't have something that is going to be a national news tragedy after the fact that people can look back and say boy, this should have been done right, this should have been done right, this should have been done right. I don't want to see that happening in our state and I certainly don't want to see that happening along the Buffalo River. As a business owner, when something happens on one spot on the Buffalo River, people think it's happening all along the 150 miles of that river. And there's businesses and homeowners and people who live here year round that are affected by that and the recent article about revenue that was generated by businesses along the Buffalo River are all going to be affected if we don't do this right. And I beg you to please look at this permit, not only this one, look at the original permit on all these things that these people have stated. We need to do this right. Thank you.

Thank you for letting us submit our oral comments this evening. I'm here on behalf of the Buffalo River Watershed Alliance. As you are already aware of, we've submitted our comments, written comments, but I'm here to provide a follow up, additional comments that I would like to see reflected in the record. Field seven, located directly downhill from the production facility and designated for waste application originally by a traveling gun, has a soil test P of 356 pounds per acre. Well in excess of any P requirement for a crop. As these areas are used for waste application, field seven will continue to build up soil test P because the hay crop is limited by nitrogen and available moisture. Consequently, most of the nitrogen will be removed, but the crop will leave behind a lot of phosphorous, which it cannot consume every year that waste is applied. Much of the P left behind becomes part of the mineral soil, not readily available to plants or to runoff and not detected in the normal soil test analysis. However, as much as 20% of the excess P will be added to the soil test P in later seasons, increasing the runoff concentration of P. Field seven which is also designated as the field to use for emergency pumping, has so much soil test P, 237 pounds per acre, based on four inch sample or 356 based on a six inch sample, that no further P should be applied. Also, this field is in the flood plain of Big Creek and may be unavailable in such an emergency. In regards to field seven and two of the other fields at issue here, the API is a good tool for promoting good management of animal waste application fields as it gives incentive for controlling erosion and installing best management practices but it provides a means for producers to continue applying manure and wastewater to fields that have way too much P already. Another concern for field seven is that the Arkansas Phosphorous Index considers only transport through surface runoff. It gives no weight to subsurface transport of P through buried gravel deposits that are frequently found in Ozark flood plains or solution channels in the karst limestone of the area. Also in relation to the fields at issue here, the nutrient management plan is supposed to specify waste application rates that will utilize the nutrients to achieve realistic production goals. This is also the requirement of the Clean Water Agricultural Stormwater Exemption, which requires that manure and process water waste be applied to utilize nutrients at agronomic rates. The application rates in this plan are completely out of balance for the crops selected and should be considered waste disposal not agronomic utilization. The plan is presented as designed for waste disposal rather agronomic waste utilization because the application rates exceed crop nutrient requirements. For these fields, in particular field seven, rates of both nitrogen and P application, exceed the recommended rates for agronomic utilization, a rapid increase in soil test P and long term water quality impacts are to be expected. ADEQ requires evidence that the nutrient management plan will be protective of adjacent and downstream waters. It is almost impossible for ADEQ to have determined if this nutrient management plan was protective when no P index was performed for field seven. Where the field for this, which the P index was not performed, lies in the flood plain of Big Creek and where the existing levels of phosphorous levels in this field was already above optimum. The applicants and ADEQ's failure requires a new submittal to correct the nutrient management plans glaring deficiencies. I respectfully ask that ADEQ review the nutrient management plan in regards to this specific modification request and field seven and determine if it is in fact protective of Big Creek and the Buffalo River and that the public be allowed to participate in this review and submit public comment and request a public hearing if required. Thank you very much.

Thank you Director Marks and staff of ADEQ. I didn't come here prepared to speak tonight, but I think we've heard a lot of comments tonight that, sure I will, I'm sorry. I'm Jerry Masters; I live in Dover,

Arkansas. I'm the Executive Vice President for the Arkansas Pork Producers Association: I've held that position since 1990. Let me tell you, I'm proud to be the executive of Arkansas Pork Producers. I represent every pork producer in the state and I'm especially proud to represent C&H Hog Farm. I've gotten to know this family very well and I'd hate to wake up to what this family wakes up to every morning. Wondering whether their name's going to be in the paper, where they're going to be attacked, where they're going to be harassed because they followed the law. They followed every bit of the regulation for their CAFO permit. You may not agree with how the CAFO permit is done, but this hog farm followed every part of that regulation and they went over and beyond. If you look at their permit, they have extra steps in that permit; it's larger than it's supposed to be on the waste handling facility, they went over and beyond for the protection to the environment. This family is a very honest, God fearing family, they follow the rules and they don't want to affect the Buffalo River, I'll assure you that. When we look at what we're in today, the scope of what we're at today on this regulation, there's zero scientific proof from going from an irrigation system to the tanker truck. That question was asked at Fayetteville when we were up there for the, when they talked about the research study for C&H and Dr. Vandevender answered that question to the crowd. That there was no, zero scientific proof that one was better than the other. So what we're looking at here today, there's no scientific proof to change that and as an industry, we like to operate in sound science, not in sound bites. Not in fabrications, not in mistruths, not in emotion, not in fear. That's why we're here today. I'm glad that we're here today to be able to discuss this. Let me tell you folks, there's no reason why this permit needs to be changed from the modification that's been requested. So I would like to ask ADEQ to please do this modification as quickly as possible so this farm can go ahead and operate the way it's designed to operate. Thank you.