Arkansas Environmental Defense Alliance  
A watchdog organization whose goal is to preserve and enhance Arkansas’ natural resources using effective, proactive approaches to address environmental issues through collaborative, political, and legal means.

VIA ELECTRONIC MAIL  
AND REGULAR U.S. MAIL

January 28, 2016

C&H Hog Farm Comments  
c/o Cardno  
501 Butler Farm Road – Suite H  
Hampton, VA 23666  

Re: Comments on Final EA and Draft Finding of No Significant Impact Relative to C&H Hog Farm, Mt. Judea, Newton County, Arkansas, On Behalf of Arkansas Environmental Defense Alliance, Inc. (AEDA)

The Arkansas Environmental Defense Alliance, Inc. (“AEDA”) is a not-for-profit corporation organized and existing under the laws of the State of Arkansas. It consists of members who reside throughout the State of Arkansas, and is dedicated to the protection and preservation of the environment of this State. We are responding to the Notice of Availability of the Final Environmental Assessment (“FEA”) dated December, 2015, for the C&H Hog Farm (“the Hog Farm”) located near Mt. Judea in Newton County, Arkansas, and the invitation for submission of comments upon such FEA contained in that Notice.

We have reviewed the FEA for the Hog Farm, and have the following comments that are submitted on behalf of the AEDA. These comments are supplemental to, and not in substitution of, any other comments submitted by any other official or person or on behalf of any other organization or person aligned or affiliated with the AEDA.

The comments contained herein are those that have been developed to this date from a review of the FEA. At the time of submission of these comments, the matters expressed herein appear to be significant flaws, omissions or areas of concern in the FEA. Additional review of the FEA and comments from other persons, firms or organizations may disclose additional flaws, omissions or areas of concern. The failure to include any
such matters in these comments does not prohibit the undersigned or the persons or organizations named above from raising any such matters in subsequent comments or proceedings relative to the FEA. We also reserve the right to adopt and rely upon comments submitted by or on behalf of any other person, firm or entity on the FEA.

Our comments to date are as follows:

**Comment No. 1: General Observations Regarding the FEA**

NEPA requires that environmental assessments and impact statements be prepared in an *objective* manner in order to permit agency decision-makers to make informed, responsible decisions regarding the potential environmental consequences of those decisions. To paraphrase numerous judicial decisions regarding NEPA, that statute is a commitment of the United States to control “the destructive engine of material ‘progress’ caused by unrestrained development.” *Calvert Cliffs Coord. Comm. Inc. v. Atomic Energy Comm’n*, 449 F.2d 1109, 1112 (D.C Cir., 1971). The harm with which NEPA is concerned is not only harm to the environment, but also the failure of decision-makers to take environmental factors into account in the way that NEPA mandates. *Id.*, See also 40 CFR §1502.2 (“Environmental statements should serve as the means of assessing the environmental impact of proposed agency actions rather than justifying decisions already made.)

Unfortunately, the FEA was prepared with a demonstrable bias toward a finding of no significant impact, indicating that the preparers of the FEA (the U.S. Department of Agriculture Farm Service Agency and the U.S. Small Business Administration, herein referred to as “TSA/SBA”) were more intent on affirming their issuance of guarantees of the loans by the Farm Credit Services to the Hog Farm described on page 1-3 of the FEA than they were in objectively evaluating the potential environmental impacts of the presence of the Hog Farm on the human environment.

This bias is evident in the following ways, among others:

A. The FEA assumes throughout that there will be complete compliance by the Hog Farm with the terms and conditions of the NPDES General Permit (“the Permit”) issued to it by the Arkansas Department of Environmental Quality (“ADEQ”), including the Nutrient Management Plan (“NMP”), the Mortality Management Plan (“MMP”) and the other requirements incorporated into the Permit. It is unrealistic to assume complete compliance with a permit in considering reasonably possible direct and indirect impacts of a facility in a NEPA review. The fallacy of such assumption is demonstrated by the fact that several of the
waste application fields included in the Hog Farm application and certified by the Hog Farm management as being under lease were not, in fact, leased for such purposes and the owners of such fields have refused to permit the application of the hog wastes on those fields.

B. The FEA assumes throughout that the Permit terms and conditions (including the various NMP, MMP and other plans) are fully protective of the environment in the Buffalo River Watershed and other parts of the environment. It is unrealistic to make that assumption. The Permit is a General Permit whose terms and conditions were developed to apply to facilities where the risk of environmental harm is very low, and for which particularized provisions of individual permits addressing specific processes and issues are not required to be protective of the environment.

Such is not the case with the Hog Farm, which is an industrial confined animal feeding operation (CAFO) with a capacity of up to 6,503 swine, 2,500 of which are in excess of 55 pounds, and the rest (approximately 4,000) of which are nursery pigs. (FEA p. 2-1) This is not the kind of operation that a general permit is designed or adequate to regulate, and to assume that the terms and conditions of the General Permit are adequate to regulate the Hog Farm is a fallacy.

C. The required storage capacity of the ponds into which the wastes from these swine are placed is 279,436 cubic feet, or 2,090,326 gallons (FEA p. 2-1), a huge volume of wastes to place in an environmentally-sensitive watershed. The ponds are currently lined with compacted earth (Id.), although the FEA states that the Hog Farm has applied for a permit modification to line the ponds with an artificial liner and covers (FEA p. 2-6). Artificial liners are no guarantee that the ponds will not leak or fail. Notwithstanding the FEA’s sanguine position regarding the potential for breach or failure of the ponds, experience has shown that such events can happen to even the best designed ponds and levees regardless of the type of liner or construction of the levees.

Examples of such occurrences include: (i) an eight-acre hog-waste lagoon in North Carolina that burst in 1995, spilling 25 million gallons of manure into the New River, killing about 10 million fish and closing 364,000 acres of coastal wetlands to shell fishing; (ii) a 2011 spill of 200,000 gallons of manure from a hog farm in Illinois into a creek, killing over 100,000 fish; (iii) the failure of five hog manure lagoons in North Carolina and flooding of 47 lagoons in 1999 during Hurricane Floyd; (iv) runoff of hog waste from factory farms in Maryland and North Carolina that contributed to outbreaks of *Pfiesteria piscicida*, killing millions of fish and causing skin irritation, short-term memory loss and other cognitive problems in local people.
“Waste Ponds 1 and 2 are located approximately 2,200 feet west of Big Creek, which flows into the Buffalo River approximately 6.8 river miles north of the C&H barns and ponds.” FEIS, p. 3-6. If a breach or failure of these ponds were to occur, the environmental consequences to the Buffalo River watershed would be catastrophic. The possibility of such an event has not been mentioned, let alone considered, in the FEA, notwithstanding that such breaches or failures have frequently occurred at other facilities. The failure of the FEA to discuss the potential direct and indirect effects of a breach or failure of the waste storage ponds is a fatal defect.

D. As will be discussed at greater length herein, the FEA unreasonably fails to consider any alternative to the Hog Farm other than what it deems to be the “status quo” of the Hog Farm in operation.

In effect, the only two “alternatives” discussed in the FEA are (i) the loan guarantees of the FSA/SBA continuing in effect as written or modified; and (ii) the loan guarantees not being in effect. Throughout the FEA, it assumes that the Hog Farm will continue to operate as it is currently, and overlooks or ignores any alternatives in which the Hog Farm does not continue in operation, or in which that operation is altered or modified in terms of number of swine present at the facility, waste management and disposal procedures (other than the addition of the pond liners and covers). SBA/FSA’s limited alternatives are simply a means of not acknowledging additional alternatives. The consideration of all reasonable alternatives is the heart of the NEPA process (40 CFR §1502.14), and the failure to consider other reasonably possible alternatives is a fatal flaw in the FEA.

Comment No. 2: **The Scope of the FEA is Unreasonably Limited**

The scope of the FEA set forth at page 1-4 of the FEA contains the FSA/SBA’s characterization of the issues to be covered in the FEA. That characterization is:

This EA is being prepared in response to the court’s order to take a “hard look” at the environmental impacts of the C&H Hog Farm to aid the SBA and the FSA’s decision making related to their loan guarantees. *Specifically, the SBA and the FSA have to determine whether to void their existing loan guarantees, to continue to back their guarantees, or to add additional conditions to the guarantees.* (FEA, p. 1-4, ¶1.2, italics added)

The fact that the C&H facility has already been constructed and this analysis is being undertaken after the fact, complicates the presentation of the effects of the No Action and Proposed Action Alternatives. *If the SBA and the FSA decide to void*
the loan guarantees, C&H Hog Farms and its lender, Farm Credit Services of Western Arkansas, are free to continue their financial relationship without Federal guarantees and C&H Hog Farms can continue its operation. (Id.)

In determining the scope of the FEA and the alternatives to be analyzed, SBA/FSA cites (FEA p. 1-4, 5) guidance contained in the Council on Environmental Quality’s “Forty Most Asked Questions on CEQ NEPA Regulations” (46 Fed. Reg. 18026, March 23, 1981) (herein “Forty Questions”). Based on CEQ’s answer to Question 3 (“What does the “no action” alternative include?”), SBA/FSA take the position that the Hog Farm is an “ongoing program” such as one “initiated under existing legislation and regulations that will continue even as new plans are being developed.” Therefore, SBA/FSA reason, because the Hog Farm is “likely” to continue to operate in the absence of their loan guarantees, the current conditions at the Hog Farm exemplifies an “ongoing program initiated under existing legislation and regulations,” and the “no action” alternative is no change from the current operation. The agencies further reason that, if the Hog Farm can continue to operate without the agencies’ loan guarantees, the alternative is not significantly different from the “no action” alternative.

This interpretation results in two almost identical alternatives, both of which are the continuation of the Hog Farm’s operations. That interpretation also makes a mockery of NEPA’s requirement for “rigorous exploration and objective evaluation of all reasonable alternatives (40 C.F.R. §1502.14).

The SBA/FSA’s interpretation of CEQ’s answer to Question 3 “Forty Most Asked Questions on CEQ NEPA Regulations” is completely erroneous. CEQ’s answer to Question No. 3 is based upon an operation (such as a land management plan) that has been put into place in accordance with statute and regulation, the validity of which is not challenged. The precise wording of CEQ’s Answer No. 3, in relevant part, is:

There are two distinct interpretations of “no action” that must be considered, depending on the nature of the proposal being evaluated. The first situation might involve an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases, “no action” is “no change” from current management direction or level of management intensity. (Emphasis added) (46 Fed. Reg. 18927)
That is a vastly different scenario from the one that exists in this matter. Here, the SBA/FSA loan guarantees were challenged and found by the U.S. District Court to have been given without compliance with NEPA’s requirement, resulting in the Hog Farm’s construction and operation. It cannot be assumed, and there is no evidence in the FEA to support the claim that the Hog Farm would be in existence and operating without those loan guarantees. Therefore, the justification for SBA/FSA’s determination of the “no action” alternative being the “no change” is unfounded.

It is completely irrational to claim that a project funded by an agency in violation of NEPA can be deemed to be the basis for a “no-action” alternative. The “no action” alternative should be one in which the Hog Farm does not exist. The FEA is invalid because of the failure of SBA/FSA to consider reasonable alternatives as required by NEPA.

Comment No. 3: Issues Eliminated From Consideration

Section 3 of the FEA (covering Existing Environment and Environmental Consequences) contains a subsection 3.1 - Issues Eliminated from Consideration. According to subsection 3.1, these are “issues that are not significant or that have been covered by prior environmental review.” Included in those issues were those involving floodplains and air quality.

A. The FEA Is Defective In Not Considering Issues Relative to Floodplains

The basis for eliminating floodplains from consideration was that “there were no floodplains present at the facility.” That may be true if the “facility” is considered to be only the confines of the Hog Farm barns and ponds. However, the FEA acknowledges that “[p]ortions of the application fields may be located within the floodplain of Big Creek,” but that applications of manure will not occur within 100 feet of any downgradient surface waters. This is an overly restrictive rationale for disregarding floodplains, as it is clear from the description of the operations of the Hog Farm that waste hog manure will be spread upon some 17 fields in the vicinity of the Hog Farm. See Section 2.1.2 (Land Application of Waste), at page 2-1 of the FEA. As those fields are absolutely necessary for the operation of the Hog Farm, they are just as much a part of the “facility” as the barns and ponds.

Without question, most, if not all, of those fields are in the Big Creek and Buffalo River watersheds. See FEA p. 3-6: “Nutrient management fields, 3, 5, 6, 7, 8, 9, 10 and 12 are located adjacent to Big Creek. Fields 1, 2 and 4 are located near two unnamed tributaries of Big Creek. ... Big Creek flows into the Buffalo River approximately 6.8 river miles north of the C&H Barns and ponds.” Big Creek is
well-known for flooding into the fields that are adjacent to it, and such floods will wash wastes downstream. A 100-foot buffer along the creek bank will not prevent the adverse impacts of flooding and migration with storm water.

In other words, the floodplain of Big Creek will be coated periodically with swine wastes from the Hog Farm, and those swine wastes will leach or be swept downstream by rainfall or flooding into the Buffalo River watershed. It is a serious omission in the FEA that analysis of the potential direct and indirect impacts of disposal of swine wastes in floodplains along Big Creek that are to be used for swine waste disposal were not included in the FEA.

B. The FEA Is Defective In Not Considering Issues Relative to Air Quality

The FEA refuses to consider issues relative to air quality because “air quality is controlled through compliance with operation and maintenance requirements defined in the Permit, which prevents significant air quality impacts.” (FEA p. 3-2) It is insufficient to comply with NEPA’s requirements of consideration of direct and indirect impacts to simply state that various environment impacts will be controlled by a permit. The environmental assessment must consider the potential impact of a violation of a permit limitation or condition.

Further, it is well-recognized that a permit to emit various pollutants is not a license to commit trespass or nuisance. In other words, a source of pollution, such as a hog farm, does not gain immunity for committing air or water pollution simply because a permit issued by a regulatory agency allows the emissions. Environmental assessments under NEPA are required to assess the potential direct, indirect and cumulative impacts on the human environment, and there is ample evidence that the Hog Farm is directly impacting the human environment through air emissions in Newton County, notwithstanding permit conditions, management plans and best management practices. It is a major shortcoming of the FEA that it does not consider the impact of the Hog Farm on air quality.

Further, the FEA fails to substantially discuss another source of air pollution, which is the odor and potential surface and ground water pollution from the disposal of the carcasses of swine that die. A 1,200-sow farm (roughly one-half of the size of the Hog Farm) that produces 2.2 litters per sow per year and sells weanling pigs may need to dispose of 36 sow carcasses and 7,920 stillborn and other dead piglets annually. (Composting for Mortality Disposal on Hog Farms, Allen F. Harper, Extension Animal Scientist-Swine, and Mark J. Estienne, Swine Research Physiologist, Virginia Tech Tidewater Agricultural Research and Extension Center, May 1, 2009) The mortality numbers could increase
significantly in the event of overheating, freezing, or other event that could cause a mass kill-off of the swine.

Disposal of carcasses of dead swine is a serious issue that is not adequately discussed in the FEA. It is not adequate to dismiss the issue by simply stating that the disposal of dead swine is controlled by the Mortality Management Plan [FEA p. 3-2], and to assume that that Plan will be complied with at all times by the Farm management.

Comment No. 4: The FEA Fails To Consider Reasonable and Feasible Alternatives

SBA/FSA considered the only alternatives to be whether the loan guarantees remain in place, are modified, or revoked. While SBA/FSA mention the operations of the Hog Farm in the most complimentary terms in the FEA, serious consideration is not given to any alternative other than the continuation of the loan guarantees and continued operation of the Hog Farm, while no consideration is given to any alternative that includes discontinuance or modification of the operations of the Hog Farm. It is questionable whether the alternatives considered are the only choices at which the Federal Court intended the SBA/FSA to take a “hard look,” but they were the choices that are the easiest and most self-serving for SBA/FSA to review.

The FEA leads the reader to believe that, in the absence of the SBA/FSA guarantees, the Hog Farm will definitely continue to operate, and that Farm Credit Services will continue with its loan to the Hog Farm, making the loan guarantees superfluous. However, a careful reading of the FEA casts doubt upon that premise. It is frequently stated throughout the FEA that “C&H Hog Farms and its lender, Farm Credit Services of Western Arkansas, are free to continue their financial relationship without Federal guarantees and C&H Hog Farms can continue its operation,” and that without the guarantees, “the [Hog] farm will likely continue to operate . . .,” (FEA, p. 1-5). Thus, the FEA does not state as a fact that the Hog Farm will continue operations without the loan guarantees, but only expresses an opinion that it is likely to do so.

Contrary to SBA/FSA’s argument, it is equally, if not more, reasonable to assume that Farm Credit Services required the loan guarantees from SBA/FSA as conditions for its loan to the Hog Farm, and that the loan would not or could not be made without those guarantees. It is equally reasonable to assume that Farm Credit Services would not want to continue the loan without the guarantees from SBA/FSA. Otherwise, why were the guarantees required and made?
If it cannot be said that the Hog Farm will continue operations without the loan guarantees, then the alternative of the Hog Farm discontinuing operations, or operating in a more modified manner (e.g., fewer hogs, different operating systems, wastes generation and management systems, etc.) are relevant alternatives that must be considered in the FEA. The failure to consider those alternatives in the scope of the FEA is a violation of NEPA, and a fatal flaw.

40 CFR §1502.14 describes the alternatives analysis as “the heart of the [environmental impact] statement.” It requires that environmental impacts of the proposal and alternatives be presented in comparative form, and that the agency shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

None of these requirements were met in the FEA. There was no “rigorous” exploration and evaluation of all reasonable alternatives, such as cessation of operations of the Hog Farm or modification of its operations. There was no “substantial treatment” of any alternative other than the present status quo. The importance of including such discussions is impossible to overstate considering the weight placed upon consideration of all reasonable and feasible alternatives in the regulations implementing NEPA, and the judicial decisions interpreting NEPA and its regulations.

Comment No. 5:   The FEA Lacks Analysis Regarding Direct Impacts

40 CFR §1502.16 requires that the environmental assessment discuss the environmental effects of the alternatives and the proposed action. Included in those “effects” are (a) “direct impacts,” which are defined as those impacts that “are caused by the action and occur at the same time and place” 40 C.F.R. §1508.8(a); and “indirect impacts,” defined as “caused by the action and are later
in time or further removed in distance, but are still reasonably foreseeable.” (40 CFR §1508.8(b))

The FEA contains a considerable amount of information regarding the location, topography, geology, hydrology and other natural characteristics of north-central Arkansas, and a considerable amount of effort in attributing the potential for contamination of the Buffalo River watershed to sources other than the Hog Farm. For example, the FEA states: “There is evidence to indicate that nitrate contamination may be coming from sources outside the [Buffalo] river’s surface water drainage area” [FEA p. 3-7]; “land use and development occurring in these sub-watersheds (or portions of) are contributing to the concentrations of nutrients and bacteria sampled at the BUFT06 monitoring site. Thus, any change in concentrations of nutrients or bacteria recorded at the BUFFTO06 sampling site cannot be directly attributed to the C&H Hog Farm” (Id.); “Because much of the Bull Shoals watershed is covered by agricultural land, consisting mostly of livestock operations, it is possible that nutrient contaminants from these agricultural activities reach the Buffalo River by interbasin transfer of groundwater” [FEA p. 3-11] The FEA even speculates that, in an area widely known for its karst geology, the Hog Farm may be located in a non-karst “island.” [FEA, p. 3-10]

Notwithstanding the vast amount of useful information regarding location, topography, geology, hydrology and other natural characteristics of the area, there is a total lack of analysis in the FEA regarding the potential direct, indirect and cumulative effects that the Hog Farm would have in the event of a failure or breach of the waste pond levees or other spill or release. As noted above, the potential for such a release, as catastrophic as it would be, is simply not recognized in the FEA.

Comment No. 6: Failure to Adequately Identify and Discuss Indirect Impacts

40 CFR §1502.14 also requires that the environmental assessment discuss the indirect effects of the proposed action and their significance. Indirect impacts are those caused by the Project and are later in time or further removed in distance, but are still reasonably foreseeable. (40 C.F.R. §1508(b)) Examples would be the potential long-term effects of the poultry houses upon surface and ground water resources in the area, particularly from the migration of nutrients from the Hog Farm site to Big Creek and the Buffalo River; and the potential for the development of more hog farms in the area due to the presence of the Project.
The presence of other hog farms in the area may have been a catalyst for construction of the Hog Farm, and, likewise, the presence of the Hog Farm may be a catalyst for construction of other such farms. Producers of meat, poultry and other concentrated animal farms encourage the development of farms in a concentrated geographic area to achieve economies of scale. Thus, the development of the Hog Farm could be used as a rationale for the development of more hog farms in the same area, thus adding to the cumulative adverse effect of the Project. This issue was not considered in the cumulative impacts discussion of the FEA.

Comment No. 7: The FEA Fails to Analyze the Cumulative Impact Of the Hog Farm with Other Sources of Water Pollution

40 CFR §1508.7 defines “cumulative impacts” as the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The omission in the FEA of analysis of the effect of a release of contaminants into groundwater or surface waters by the Hog Farm is particularly significant, in part because of the FEA’s effort to place responsibility for any contamination that may be found in surface or ground waters in the Big Creek/Buffalo River area on sources other than the Hog Farm. NEPA requires that the potential cumulative impacts of possible contamination from those other sources, combined with potential contamination from the Hog Farm, be analyzed. However, there is absolutely no discussion in the FEA about those potential cumulative impacts.

The FEA discusses the Buffalo River Liquid Waste Management System Demonstration Project (Swine Demonstration Project) [FEA p. 4-3] that ADEQ conducted in the Buffalo River watershed during the 1990s. According to the FEA, there were 39 confined animal operations in the watershed at that time, and there were “slowly increasing fecal coliform bacteria levels within the main channel of the Buffalo River. However, the FEA fails to discuss the number and status of confined animal operations subsequent to that study to current date, the levels of the fecal coliform bacteria in the river to current date, and the cumulative impact of the Hog Farm on those bacteria levels in conjunction with the other confined animal operations in the watershed.
The FEA also fails to mention the potential direct, indirect and cumulative environmental impacts of the Project upon ground or surface water supply sources in the vicinity of the Project that may be needed to provide production water for the Project, or environmental impacts of the Project upon the quality of surface and groundwater resources in the area due to discharges, spills and other releases of wastes and wastewaters from the Project.

These omissions are fatal to the validity of the FEA.

Comment No. 8: Mitigation Measures are Not Sufficiently Developed.

NEPA requires that, to the extent possible, appropriate mitigation measures not already included in the proposed action or alternatives be discussed in an environmental assessment, and implemented. The FEA simply states that "No significant impacts to water resources are anticipated, and no mitigation measures are required." FEA p. 3-25. The same is also stated for impacts to soils or geology. FEA p. 3-29. Instead, the FEA relies upon the Arkansas Department of Environmental Quality General Permit issued to the Hog Farm, and the NPDES Storm Water general permit, the Nutrient Management Plan and the Mortality Management Plan to require best management practices. "Mitigation" should not include those things that an entity is already obligated to do as a result of law, regulation or a permit.

Comment No. 9: Request for Public Hearing.

My clients request that a public hearing be held on this application. Reasons for this request are to answer questions of the public about more details about the Project, and to fully develop the issues on which there is lack of information and knowledge about the consequences of the proposed Project. The Project has potentially serious environmental consequences. There is considerable public interest in preserving the current air and water quality in this area. Therefore, the public should be interested in a hearing in which they can submit their comments and opinions.

The comments contained herein are those that have been developed to this date from a review of the FEA. At the time of submission of these comments, the matters expressed herein appear to be significant flaws, omissions or areas of concern in the FEA. Additional review of the FEA and comments from other persons, firms or organizations may disclose additional flaws, omissions or areas of concern. The failure to include any such matters in these
comments does not prohibit my clients from relying upon the comments of others, and raising any such matters in subsequent comments or proceedings relative to the FEA or a final environmental impact statement.

If you have any questions concerning these comments, please give me a call.

Sincerely,

Arkansas Environmental Defense Alliance, Inc.

By: [Signature]

Richard H. Mays, President

cc: Mary Anne Salmon, Ex. Dir.