To: Applicant for Permit Number 5264-W; AFIN 51-00164

From: Robert E. Blanz, Ph.D., P.E., ADEQ Chief Technical Officer

Re: ADEQ’s Notice of Final Permitting Decision, Statement of Basis, and Response to Comments

It is the applicant’s responsibility to design its own liquid animal waste management systems in accordance with state laws and Arkansas Pollution Control & Ecology Commission (APC&EC) Regulation 5. The applicant must also develop a permit record sufficient to demonstrate compliance with the requirements of APC&EC Regulation 5. It is ADEQ’s charge to evaluate the proposal for compliance with state laws and APC&EC Regulation 5. The record must stand on its own merit.

According to APC&EC Regulation 5.402:

"Designs and waste management plans shall be in accordance with this Chapter and the following United States Department of Agriculture Natural Resources Conservation Service technical publications:

(2) Agricultural Waste Management Field Handbook (AWMFH), as amended."

ADEQ denied issuance of the permit after determining that this record lacked necessary and critical information to support granting of the permit. The reasons and justification for the final permitting decision are contained in ADEQ’s Statement of Basis and the related Response to Comments. The list below is not intended to reflect all requirements of the AWMFH and it is not intended to reflect all factors that may have been considered by ADEQ during the review of the application. APC&EC’s review on appeal is of the administrative record and any supplement to the record is at the discretion of APC&EC. Therefore, submission of information responsive to these requirements is discretionary and would not guarantee an affirmative permitting decision on appeal, but may inform the review.

The applicant submitted a permit application for a new permit under Regulation 5, which was received on April 7, 2016, with additional information received on June 29, 2016, December 6, 2017, December 26, 2017, and December 29, 2017. The applicant was made aware that the permitting record was final as of December 29, 2017. ADEQ reviewed the data submitted,
including the supplemental information, and determined that the information was insufficient to support an affirmative decision. The following specific deficiencies, as noted in the Statement of Basis and related Response to Comments, prevented ADEQ’s evaluation of the facility’s compliance:

- **Emergency Response Preparedness:** An emergency action plan regarding potential consequences of failure of the waste impoundment embankments or accidental release (Citation: APC&EC Regulation 5.402, AWMFH 651.0204(a)).

- **Groundwater Assessment:** A groundwater flow direction study to determine the directional flow(s) from any waste storage ponds (Citation: APC&EC Regulation 5.402, AWMFH 651.0703(b)).

- **Geologic Assessments:** A complete geologic investigation, including but not limited to:
  
  - Borings within the pool areas to ascertain that groundwater elevation is not within 5 feet of invert of the ponds (Citation: APC&EC Regulation 5.402, AWMFH 651, Table 10-4);
  
  - Borings within the pool areas to ascertain the foundation of earth-filled structures (“For structures with a pool area, use at least five test holes or pits or one per 10,000 square feet of pool area, whichever is greater....” Citation: APC&EC Regulation 5.402, AWMFH 651.0704(b)(4)); and
  
  - Borings within the pool areas to rule out the presence of large voids in karst (Citation: APC&EC Regulation 5.402, AWMFH 651, Table 10-4).

  The same borings may be used to comply with 3(a), (b), and (c).

- **Berm Integrity Assessment:** Borings are required in the embankment centerline of the berms (Citation: APC&EC Regulation 5.402, AWMFH 651.0704(b)(4)).

- **Pond Construction Quality Assurance:** The record included one recompacted permeability test that is insufficient to determine liner integrity and would require installation of a synthetic liner or other alternative in the waste storage ponds (Citation: APC&EC Regulation 5.402, AWMFH 651, Table 10-4 and Appendix 10 E).

- **Assessment of High-Risk Areas of Land Application Sites:** A field assessment for all land application sites including, but not limited to, soil thickness and water capacity and the resulting field management plans (Citation: APC&EC Regulation 5.402, AWMFH 651.0504 (a)–(n) and Table 5-3).
• **Pond Levee Integrity and Assessment Requirements**: An adequate Operations and Maintenance Plan for the pond levee, including an inspection schedule and plan document, was not included in the record. An adequate plan should at a minimum include:

- Whether the inspections are internal or independently performed by a third party;
- The specific checklist of items for the inspection to cover;
- Recordkeeping requirements;
- Frequency of inspections; and
- How the inspection results will be reviewed and/or audited.