

ADEQ

ARKANSAS
Department of Environmental Quality

October 29, 2010

Mr. Leon Starks, Assistant Director
Arkansas Department of Corrections - North Central Unit, IZARD COUNTY FACILITY
P. O. Box 8707
Pine Bluff, AR 71611


Re: Discharge Permit Number AR0044016 – AFIN 33-00036

Dear Mr. Starks:

During review of your current NPDES permit and your recently submitted permit renewal application, it was noted that your facility is permitted to land apply biosolids. Due to a change in policy, the Department now requires that the land application of biosolids be covered under a separate permit from the NPDES discharge permit. The forms and instructions for applying for the land application permit have been enclosed for your convenience.

Please submit the application for the land application of biosolids as soon as possible but no later than November 30, 2010. If you have any questions regarding the requirements for the land application permit, please contact Cara Hill, PE, Engineering Supervisor of the No Discharge Permits Section at (501) 682-0045. If you have any other questions, please feel free to contact me at (870) 446-5939.

Sincerely,



Marysia Jastrzebski, P. E.
Engineer, NPDES Permits

Enclosure

cc: Cara Hill, P. E., Engineering Supervisor



STATE OF ARKANSAS
DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMITS BRANCH, WATER DIVISION
5301 NORTHSHORE DRIVE
NORTH LITTLE ROCK, ARKANSAS 72118-5317
PHONE: (501) 682-0648
FAX: (501) 682-0910



Revised September 24, 2007

**APPLICATION PROCEDURES FOR A
NO-DISCHARGE WATER POLLUTION CONTROL PERMIT
WASTE STORAGE AND/OR LAND APPLICATION**

PART I
GENERAL INSTRUCTIONS

Please read the following prior to completing the application:

1. The applicant is advised to review all applicable state and/or federal regulations, including, but not limited to: Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended), Arkansas Water Quality Standards (ADEQ Regulation No. 2) and The Standards for the Use or Disposal of Sewage Sludge (40 CFR, Part 503).
2. All construction and operating information contained in the waste management plan and permit application and any change, modification or alteration of the waste management plan or permit application submitted to the Department in writing and approved by the Department in writing shall become an integral part of the permit. All information supplied to this Department shall be available for public inspection unless the information is of a proprietary nature and clearly marked confidential. Effluent data cannot be considered confidential.
3. The application should be mailed to:
Arkansas Department of Environmental Quality
Water Division
Permits Sections/No Discharge permits
5301 Northshore Drive
North Little Rock, AR 72118-5317
For telephone inquiries, call (501) 682-0648.
4. The application must be signed by the individual owner, an authorized corporate officer, a partner, a principal, or someone delegated with signatory authority by any of the above individuals. In all cases, the person signing the application should be authorized to do so by the applicant. For the purposes of this section, an authorized corporate officer is defined as: (1) a president, secretary, treasurer or vice-president of the corporation in charge of principal business function, or any other person who performs similar policy or decision-making

functions for the corporation, or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars) provided the manager has been entrusted with authority to sign documents in accordance with the corporation procedures. In the case of a partnership or sole proprietorship, the application must be signed by a general partner or the proprietor, respectively. In the case of municipal, state, federal or other public facility, the application must be signed by either a principal executive officer, ranking elected official or other duly authorized employee. For a corporation, those applications signed by an authorized person other than those described above must also include appropriate documentation delegating such signatory authority.

5. Act 817 of 1983 and ADEQ Regulation No. 9 promulgated thereto requires that, if applicable, a fee be paid by the applicant prior to the issuance of a permit, a permit modification or a renewal of a permit. Permit fees are payable by check or money order and must be received before the permit can be issued.
6. All applicants must submit a complete "Disclosure Statement" as required by Arkansas Code Annotated Section 8-1-106. A copy of the "Disclosure Statement" form may be obtained from ADEQ upon request or on the ADEQ website at www.adeq.state.ar.us.
7. Act 165 of the 1993 Arkansas Legislature and ADEQ Regulation No. 8 dictate the following **public notice requirements for permit applicants:**
 - A. A public notice must be published for all permit applications submitted to the Department. **Upon receiving a complete application, the Department will prepare a public notice of application and return it to the applicant for publication in a newspaper having general circulation in the county or counties in which the facility is or will be located.** An affidavit and proof of payment for the notice publication must be submitted to the Department.
 - B. A second public notice must be published concerning the Director's tentative decision to approve or deny the proposed permit. The Department will prepare this notice and submit it directly to the publisher.
 - C. **ACT 165 REQUIRES THE APPLICANT TO BEAR THE EXPENSE OF ALL THE PUBLIC NOTICES.** Proof of payment for the public notices must be submitted to the Department with the affidavit of publication.

PART II
PROCEDURAL INFORMATION

1. Department staff will review the submitted application materials for administrative completeness. The Department will not process any application until all information required to properly classify the application as complete has been received. During the review, the Department may contact the applicant for clarification or to request additional information. If an application is severely lacking in detail or requested information is not submitted in a timely manner, the application may be returned.
2. After determining that an application is administratively complete, the Department will prepare a public notice of application and submit it to the applicant for publication in a local newspaper (See Application Procedures, Part I.6.A). Act 165 requires the applicant to bear the expense of all public notices.
3. Upon receiving an affidavit of publication for the public notice of application, the Department will conduct a technical review of the waste management plan.
4. Following the technical review, the Director will make a tentative decision to issue or deny a draft permit. A second public notice will be prepared and forwarded directly to a local newspaper for publication by the Department regarding the Director's decision. A 30-day comment period must follow publication of this notice. Act 165 requires the applicant to bear the expense of all public notices.
5. After the expiration of the 30-day comment period, the Director will make a final decision to issue or deny the permit. In instances where significant public interest has been expressed, the Director or the APC&EC may decide to hold a hearing to obtain public comments.
6. If the Director makes a final decision to issue the permit, the applicant may commence construction once the permit becomes effective. The facility must be constructed, modified and/or operated in accordance with the final design plans and specifications approved by the Department. After construction is complete, the consultant must submit a **construction certification** to the Department stating that the facility was constructed according to the final plans approved by the Department. The consultant must justify any modifications made to the facility during construction.
7. After receiving construction certification, the Department will issue a letter of authorization to commence operation of the facility. If the plan does not include any type of construction, the authorization to commence operation will be issued in conjunction with the Director's final permit decision. **Operation of the facility shall not commence until the Department has issued a letter of authorization to operate.**
8. Prior to implementation of any changes in operational procedures of a permitted facility, the operator must request Department approval, in writing, describing the proposed changes. A change in operational procedures includes, but is not limited to, the following:
 - A. A change in waste source, composition or volume. (This change may require a permit modification.)

- B. A change in land application sites. (This change requires a permit modification.)
 - C. A change in waste treatment, handling or disposal. (The Department may require a permit modification, construction plans and specifications, an amended waste management plan or any other information as needed.)
9. Permits are issued with a 5-year expiration date. An application to renew an existing permit must be submitted no less than 120 days prior to the expiration date for continued operation of the permitted facility. Operators applying for a renewal must go through the same process as obtaining a new permit as listed in Items 1-8 above, including fee and public notice requirements. If any operational changes are to be made, or have been made, to the permitted facility (as described in Item 8 above), a revised waste management plan must be submitted to the Department for approval.
10. If a change of ownership or control of a permitted facility occurs, the permit may be transferred to the new owner(s) by submitting a completed "Request for Permit Transfer" form. A permit may be automatically transferred if the applicant for transfer notifies the Department thirty (30) days in advance of the proposed transfer date and submits a completed "Disclosure Statement" form. The required forms are available from the Department upon request.

PART III
TECHNICAL REQUIREMENTS

1. Design and implementation of waste management plans shall be in accordance with all applicable State and Federal regulations and Department guidelines and policies.
2. All waste management plans, construction plans, specifications and design calculations must be signed and approved by an Arkansas registered professional engineer, or where applicable, an authorized Natural Resources Conservation Service (NRCS) engineer or technician.
3. A waste management plan that includes the following information must be submitted for all applications:
 - a. Description of the waste-generating process, including the daily and yearly volumes of waste production.
 - b. Description of storage facilities, including location, volume and construction drawings showing design details.
 - c. Waste transportation and application methods, including whether or not the waste will be incorporated into the soil.
 - d. Analysis of the physical and nutrient properties of the waste. The analysis must contain all parameters listed in Table 1, unless otherwise noted. All results should be reported on a dry weight basis in mg/kg unless indicated otherwise.

Table 1	
Total Solids %	Nitrate Nitrogen
φ Volatile Solids %	Nitrite Nitrogen
Kieldahl Nitrogen	Ammonia Nitrogen
Phosphorus	Potassium
PH Standard Units	Arsenic
Cadmium	Chromium
Copper	Lead
Mercury	Nickel
Selenium	Zinc
ψ Aluminum	ψ Iron
λ BOD	λ Oil & Grease %
ψ Weight Lost on Ignition (IOI) %	ψ Total Organic Carbon (TOC) %
ψ Calcium Carbonate Equivalency (CCE) %	

φ Not needed for water treatment solids analyses.

ψ Needed for water treatment solids analyses only.

λ Needed for food processing waste (i.e. DAF, grease trap, etc.) analyses only.

- e. A copy of both (8 ½" X 11") of **both** USGS topographic map(s) (quad sheet) and county map(s) showing the location of the facility, the nearest potentially affected streams, the land use designations for adjacent properties and nearby lands, and the distance and directions from the nearest State Highway intersection or community. All features (such as buildings, ponds, etc.) in existence but not shown on the map(s) must be noted. A legal description by Quarter Section, Section, Township, and Range must be provided for the waste-generating facility. Location by latitude and longitude (deg, min, sec) of the waste-generating facility must also be provided. Maps may be obtained from the Arkansas Highway Department and the Arkansas Geological Commission in Little Rock. The name of the USGS topographic map(s) used for each map submitted in the waste management plan must be indicated.
- f. A site management plan must be developed for each waste application area and must include the following:
 - i. Waste Application Rate Calculations: Application rates must be based on nutrient loadings, elemental loadings and soil conditions.
 - ii. Soils Analysis: At least one (1) soil sample must be taken for every thirty (30) acres of waste application area. Soil samples must be analyzed for the parameters listed in Table 2. Analysis results must be reported in pounds per acre (lbs/ac), with the exception of pH, cation exchange capacity and salt content.

Table 2	
Phosphorus	Potassium
PH Standard Units	Nitrate Nitrogen
Cation Exchange Capacity	Arsenic
Cadmium	Chromium
Copper	Lead
Molybdenum	Mercury
Nickel	Selenium
Zinc	
ψ Aluminum	ψ Iron

ψ Only needed for water treatment solids application areas.

- iii. Application Area Map: A copy (8 ½" X 11") of **both** a USGS topographic map(s) and county map(s) which show the location of each waste application site, the nearest potentially affected stream(s), the land use designations for adjacent properties and nearby lands, and the distance and directions from the nearest State Highway intersection or community. All features (such as buildings, ponds, etc.) in existence but not shown on the map(s) must be noted. In addition, approximate soil series boundaries, water supplies, streams, ponds, property lines, dwellings, roads, prevailing wind direction,

field slopes, buffer zones and any other information deemed relevant by the applicant. The name of the USGS topographic map(s) used for each map submitted in the waste management plan must be indicated.

- iv. Legal Description. The legal description of each application site must be provided to the nearest quarter section.
 - v. Nearest Stream. Name and distance to the nearest receiving stream. For multiple sites, the name and distance to each receiving stream must be included for each site.
 - vi. Cover Crop. The proposed cover crop and/or use of each application site must be provided, including the corresponding nutrient uptake rate.
 - vii. Harvesting Method. The proposed method of harvesting cover crop must be given, including frequency and duration of harvest.
 - viii. Land Use Contract. A land use contract between the applicant and landowner granting authority to apply waste must be submitted for each application site not owned by the applicant (See Attachment 1).
- g. Calculations used in the design of the proposed waste disposal system, including flow rates, storage volumes, waste application rates, nutrient application rates, elemental application rates, size(s) and location of pump(s) and residence time(s), must be submitted. Detailed drawings of any proposed construction must also be submitted.
- h. For **land application of municipal or industrial wastewater** (excluding any solids), monthly water balance and nitrogen balance calculations must be submitted.
- i. For **land application of municipal wastewater biosolids**, the following must be submitted and/or addressed in the waste management plan:
- i. The quality classification of the biosolids proposed to be land-applied, i.e. Exceptional Quality (EQ), Class A or Class B, as defined in 40 CFR Part 503, as amended, must be indicated. Justification for the selected classification must be provided with references to pollutant concentration limits, pathogen reduction alternatives and vector attraction reduction options.
 - ii. For Class A or B biosolids, the permit applicant must provide written notification of the proposed activity to all adjacent or abutting landowners, residents, occupants, etc., of all proposed land application sites. The Department must receive copies of all such letters before the Draft Permit can be issued.
 - iii. A wetland determination must be provided for each land application site. The wetland determination must be performed by a District Conservationist from the Natural Resources Conservation Service or any other individual certified to perform wetland determinations. All the wetland determinations

must be received by the Department before the Final Permit can be issued.

4. An emergency containment structure is required for all facilities utilizing above ground waste storage tanks. The emergency containment structure must be able to contain 1.5 times the capacity of the largest above ground waste storage tank to be used. The emergency containment area must be lined in accordance with the requirements of the most recent "Ten States Standards" to prevent seepage of spilled waste into the groundwater. Disposal of accumulated rainfall and erosion control must also be addressed.
5. Top elevations of waste storage structures and emergency containment structures shall be twelve (12) inches above the Federal Emergency Management Agency (FEMA) designated 100-year flood elevation. If the proposed site for waste storage is in or near the designated 100-year flood plain, the design must indicate the 100-year flood elevation and the top elevation of the berms, both with respect to mean sea level.
6. Proof of ownership or control of land must be submitted to the Department for all land to be permitted for waste utilization under the waste management plan.
 - a. For land owned by the applicant, a copy of the deed (or other legal document proving ownership) must be submitted.
 - b. For land leased by the applicant, a copy of the lease agreement with the landowner granting control of the land for the purpose proposed in the application must be submitted.
 - c. For land that is neither owned nor leased by the permit applicant, a land use contract (Attachment 1 to the application) must be submitted.
7. All land application sites included in the application must be located in the same county. Land application sites located outside that county must be submitted in a separate permit application.
8. Applicants for new permits or permit modifications to add land application sites must notify the Arkansas Department of Health and Human Services (ADHHS) Division of Engineering that a permit application has been submitted to the Department of Environmental Quality. This notice must include a complete set of maps (**as described in Part III.3.e.**) indicating the location of the facility and all land application sites and a description (type, size, etc.) of the operation. The notice should be mailed to:

Arkansas Department of Health
Engineering Division, Slot # 37
4815 West Markham
Little Rock, AR 72205

A copy of the letter transmitting the above documents to the Arkansas Department of Health must be submitted to the Department with your application.

PART IV
DEFINITIONS

”Act”: The Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

”Commence Construction”: A continuous physical, on-site construction program. Surveying and drawing of plans are part of the design process and do not constitute commencement of construction. Likewise, it is not sufficient to begin erection of auxiliary buildings unless there is clear evidence (through contracts or otherwise) that construction of the entire facility will go forward in a continuous manner (with no interruptions greater than 18 months).

”Department”: The Arkansas Department of Environmental Quality.

”Director”: The Director of the Arkansas Department of Environmental Quality or his designated representative.

”Site management plan”: A plan prepared by the USDA Natural Resource Conservation Service, an Arkansas Natural Resources District water quality technician, or a professional engineer registered in the state of Arkansas which includes a detailed map of the land application site showing all buffer zones, a description of the land use and the crops grown on the site, and a land use agreement if the site is not owned by the permittee.

”Waste management plan”: A plan prepared by the USDA Natural Resource Conservation Service, an Arkansas Natural Resources District water quality technician, or a professional engineer registered in the state of Arkansas detailing the management and disposal of liquid wastes generated in a confined animal operation.

”Waters of the State”: All streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or borders upon this state or any portion of this state as defined by the Act.

PLEASE SUBMIT ONLY THE FOLLOWING APPLICATION (Pages 10-12)
DO NOT RETURN THE PROCEDURES (Pages 1-9)