



Nutrient Management Fact Sheet: Oklahoma

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Nutrient Management Plans

Topic	Summary
Coverage	<p>CAFOs seeking coverage under an NPDES permit must develop a Nutrient Management Plan. In addition, any CAFO with an NPDES permit must have an Oklahoma CAFO license that includes a Pollution Prevention Plan, which contains an Animal Waste Management Plan.¹</p>
Content	<p>An Animal Waste Management Plan (AWMP) includes:²</p> <ul style="list-style-type: none"> - Schedule for liquid and solid animal waste removal, including sludge. - Date log indicating weekly inspection of wastewater level in the retention structure. - Facilities using pits, ponds, or other waste retention structures for storage and treatment of stormwater, manure, and process generated wastewater, shall maintain in their wastewater retention structure sufficient capacity to contain rainfall and rainfall runoff from a 25-year, 24-hour rainfall event. - All calculations and all factors and assumptions used in determining land application rates, acreage, and crops for both solid and liquid animal wastes. - Land application rates that must take into account the plants' available nutrient contribution of any land-applied animal wastes. <p>Under the NPDES permit, a Nutrient Management Plan must be developed in accordance with the Oklahoma NRCS Conservation Practice Standard Code 590. The NMP must:</p> <ul style="list-style-type: none"> - Ensure adequate storage of manure, litter and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities. - Ensure that clean water is diverted from the production area. - Identify appropriate site-specific conservation practices to be implemented, including appropriate buffers or equivalent practices to control runoff. - Identify protocols for appropriate testing of manure, process wastewater and soil. - Establish protocols to land apply manure and process wastewater in accordance with site-specific nutrient management practices. - Ensure application rates are determined following the linear approach or the narrative approach.
Frequency of Updates	<p>NMPs should be reviewed and updated if there are changes in the operation.</p>



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Paperwork	Under the NPDES permit, NMP will be published on the ODAFF website for public review and comment.
Planner Qualifications	Oklahoma Department of Agriculture Food and Forestry encourages the use of certified specialists to prepare NMPs.

Manure Storage and Application

Topic	Summary
Overview	<p>CAFOs with NPDES permits must have an Oklahoma CAFO License.³ Additional requirements include:</p> <ul style="list-style-type: none"> - Notice requirements outlined in the Administrative Code. - Best Management practices are outlined here.
Storage	<p>Facility Siting/Setback</p> <p>No AFO shall be established after Sept. 1, 1997, within</p> <ul style="list-style-type: none"> - One mile of 10 or more residences. - Three miles of a state park or resort, the incorporated limits of any municipality, and the high-water mark of a surface public water supply if the CAFO is located within the drainage basin for the public water supply. <p>Structure</p> <p>Under the OK License, there are several specific requirements on liners. Information can be found in the OK Administrative Code.</p>
Application	<p>Spreading</p> <p>No liquid animal waste shall be land-applied within 500 feet of the nearest corner of an occupied residence not owned or leased by the owner of the AFO. No liquid animal waste shall be land-applied within 400 feet of an existing public or private drinking water well.⁴</p> <p>Under the AWMP, the following requirements shall apply to land application of animal waste on land owned or leased by the owner:⁵</p> <ul style="list-style-type: none"> - Runoff from animal waste is prohibited where it results in a discharge to the surface or groundwaters of the State. - Animal wastes shall not be applied when the ground is frozen, saturated or during rainfall events. - Land application practices shall be managed so as to reduce or minimize the following: <ul style="list-style-type: none"> o Ponding or puddling of wastewater on the site. o Adverse conditions that invite pests, including flies and rodents. - Land application sites and irrigation equipment shall be maintained to ensure the ability to fully comply with the Pollution Prevention Plan.



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- Adequate equipment and land application area shall be available for removal of waste and wastewater as required to maintain the proper operating volume of the retention structure.
- Surface disposal of animal wastes in the 100-year flood plain or near water courses is prohibited unless protected from inundation and damage that may occur during that flood event by adequate berms or other structures.
- The land application of animal wastes at agronomic rates shall not be considered surface disposal and is not prohibited.
- Runoff from animal waste storage piles shall be retained on site.
- Timing and rate of applications shall be in response to crop needs, assuming usual nutrient losses, expected precipitation, and soil conditions.
- Land application shall not occur in areas defined as “do not apply” areas in the waste application criteria of the USDA NRCS Waste Utilization Standard Conservation Practice Standard 633 and Nutrient Management Conservation Practice Standard Code 590.
- Pollution Prevention Plans shall identify measures used to limit erosion and pollutant runoff.

Testing

Testing procedures must be outlined in the plans.

Technical Assistance

Topic	Summary
Software Tools	<p>The Oklahoma Phosphorus Assessment Worksheet assesses the potential transport and maximum rates of phosphorus when manure or organic by-products are applied to a field.</p> <p>Manure Management Planner (MMP) is a software tool created by Purdue University that includes state-specific information for Oklahoma producers to create manure management plans for crop and animal feeding operations.</p>
Guides / Handbooks	<p>Oklahoma State University (OSU) Extension provides the following nutrient and animal waste management resources:</p> <ul style="list-style-type: none"> - The Manure Application Rate Calculation Worksheet illustrates the steps of calculating the proper amount of manure needed. - Animal Waste Management Fact Sheets. <p>OK NRCS nutrient management 590 standard.</p>



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Financial Assistance

Summary

OKNRCS provides assistance through:

- Environmental Quality Incentives Program ([EQIP](#)) - offers financial cost-share assistance to farmers for the adoption of conservation practices and development of nutrient management plans.
- Conservation Stewardship Program ([CSP](#)), which gives producers financial assistance to implement new conservation management practices and enhancements.

¹ [Oklahoma Statutes §2-20-48 \(2019\) - Best Management Practices - Animal Waste Management Plans. :: 2019 Oklahoma Statutes :: US Codes and Statutes :: US Law :: Justia](#)

² [Oklahoma Statutes §2-20-48 \(2019\) - Best Management Practices - Animal Waste Management Plans. :: 2019 Oklahoma Statutes :: US Codes and Statutes :: US Law :: Justia](#)

³ [Oklahoma Statutes §2-20-44 \(2019\) - Mandatory and voluntary licensure - Designation of operations. :: 2019 Oklahoma Statutes :: US Codes and Statutes :: US Law :: Justia](#)

⁴ [Oklahoma Statutes §2-20-57 \(2019\) - Setback requirements. :: 2019 Oklahoma Statutes :: US Codes and Statutes :: US Law :: Justia](#)

⁵ [Oklahoma Statutes §2-20-48 \(2019\) - Best Management Practices - Animal Waste Management Plans. :: 2019 Oklahoma Statutes :: US Codes and Statutes :: US Law :: Justia](#)