

State of Oklahoma Department of Agriculture, Food, and Forestry

J. Kevin Stitt Governor Blayne Arthur Secretary of Agriculture

"Draft"

AUTHORIZATION TO DISCHARGE UNDER THE GENERAL PERMIT NO. OKG010000 FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

Authorization Number: OKG010407

Pursuant to the Oklahoma Agriculture Pollutant Discharge Elimination (AgPDES) Act and the AgPDES Rules (OAC 35:45) promulgated thereunder,

Sunshine Dairy 18037 CR NS 214 Frederick, OK 73542

is hereby authorized to discharge from their concentrated animal feeding operation at Sunshine Dairy located in:

S 1/2 of the NW 1/4 of Section 23, Township 2 North, Range 18 West, Tillman County, Oklahoma

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in the General Permit No. OKG010000, and permit terms specified in the Appendix L.

The facility is located in the Suttle Creek watershed (Waterbody ID No. OK311310010070_00) of the Upper Red River Basin.

This Authorization shall become effective on _____, 2023.

This Authorization shall expire at midnight, on March 23, 2028.

Issued this _____ day of _____, 2023.

For the Oklahoma Department of Agriculture, Food, and Forestry,

James Rucker, AgPDES Director Agricultural Environmental Management Services

"Draft" APPENDIX L

TERMS OF THE NUTRIENT MANAGEMENT PLAN INCORPORATED INTO THE PERMIT AUTHORIZATION Sunshine Dairy

Permit Authorization No. OKG010407

I. PERMITTEE

In accordance with Parts III.2.b and f of the AgPDES Permit No. OKG010000, the following terms of the Nutrient Management Plan (NMP) are hereby incorporated as site specific terms and conditions of the general permit for:

Sunshine Dairy 18037 CR NS 214 Frederick, OK 73542

Type of Operation: Dairy Cattle Number of Animals: 4,000

The Sunshine Dairy facility is located at:

S 1/2 of the NW 1/4 of Section 23, Township 2 North, Range 18 West, Tillman County, Oklahoma

For the purposes of this permit, "NMP" refers to the latest version of the NMP approved by Oklahoma Department of Agriculture, Food, & Forestry (ODAFF). Any changes to the NMP must be submitted to ODAFF in accordance with Part III.A.6 of the General Permit OKG010000.

II. SITE SPECIFIC PERMIT TERMS

A. STORAGE FACILITY

Table 1. Storage Capacity

Storage Structure	Total Volume	
RRP 1	23.04 ac-ft	
RRP 2	21.56 ac-ft	
RRP 3	130.58 ac-ft	

Manure and process wastewater shall be stored and handled in accordance with Section 3.1 (Manure and Wastewater Handling Storage) of the NMP.

B. LAND APPLICATION

The permittee has selected the narrative rate approach to address rates of application. In accordance with Parts III.A.3.g.ii and III.A.7.f of the General Permit OKG010000, the permittee shall calculate the

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amounts of manure, litter, and process wastewater to be land applied on land application areas specified below per Section 5 of the NMP and the following site-specific permit terms.

	Phosphorus Assessment ⁽²⁾		Planned Application				
Field (spreadable	Rating	Maximum Allowed Phosphorus Application Rate	Main	Estimated	Types of Waste (Manure/Wastewater)	Maximum Amount of Nutrients Derived from All Sources ^{(3),(5)}	
area)	(lbs P ₂ O ₅ /acre/year)	Crop/Use ⁽⁴⁾	Yield Goal	to be Land Applied	Nitrogen (Ibs N/ac)	Phosphorus (Ibs P ₂ O ₅ /ac)	
LMU 1	Moderate Risk	Crop Removal Rate ⁽³⁾	Corn Silage	25 Ton/Acre	Wastewater	350	. 100 ⁽⁶⁾
123 Acres	High STP		Wheat Silage	30 Ton/Acre		185	
LMU 1a	Low risk	Full Rate ⁽³⁾	Fallow	N/A	Solids	0	200 ⁽⁶⁾
21 Acres	Moderate STP		Wheat Silage	30 Ton/Acre		185	
LMU 2	Low Risk	Full Rate ⁽³⁾	Corn Silage	25 Ton/Acre	Wastewater	350	300 ⁽⁶⁾
123 Acres	Moderate STP		Wheat Silage	30 Ton/Acre		185	
LMU 2a	Low Risk	Full Rate ⁽³⁾	Fallow	N/A	Solids	0	200 ⁽⁶⁾
28 Acres	Moderate STP		Wheat Silage	30 Ton/Acre		185	
LMU 5	Low Risk	Full Rate ⁽³⁾	Corn Silage	25 Ton/Acre	Solids	350	200 ⁽⁶⁾
117 Acres	Moderate STP		Wheat Silage	30 Ton/Acre		185	

Table 2. Land Application (1)

⁽¹⁾ Details of land application information can be found in Section 5.2 of the NMP.

- (2) The maximum amount of phosphorus shall be based on the field-specific phosphorus risk assessment, which must be evaluated annually using the most recent soil test results. Documentation of annual phosphorus risk assessment performed for each land application field must be kept on site and made available to ODAFF inspectors upon request.
- ⁽³⁾ In accordance with the NRCS Code 590, application rate of phosphorus varies depending on application method (i.e. surface spreading, irrigation, injection below ground level ...). When more than one type of waste is applied to a field, the most stringent application rate based on phosphorus assessment will apply to that field.
- ⁽⁴⁾ Crop/Use should be either specific for each year as shown in the table above or alternated with other crop(s) shown in the Alternative Crop List provided in Section 5 of the NMP.
- ⁽⁵⁾ Based on the maximum rates provided in Section 5 of the NMP. These values may vary depending on actual crops grown, yield goals, and annual phosphorus assessment.
- ⁽⁶⁾ The full rate is 300 lbs P₂O₅/acre/year when wastewater is applied by sprinkler irrigation and managed to prevent runoff from field. The full rate is 200 lbs P₂O₅/acre/year when injected below the surface or incorporated within seven (7) days. When wastewater application is not incorporated within seven (7) days, the full rate limitation is 200 lbs P₂O₅/acre/year when not managed to prevent runoff. The full rate for manure not injected or incorporated within 7 days is 200 lbs P₂O₅/acre/year. The application rate shall not exceed nitrogen requirement(s) of the actual crop(s) grown.

Other Requirements:

- 1. Manure and/or wastewater application shall not exceed the maximum allowed P₂O₅ application rate and the Nitrogen requirement of the crop.
- 2. Wastewater application rates shall not exceed field capacity for the soil, shall not create runoff, and shall minimize ponding.
- 3. In all other respects, land application shall be accomplished in accordance with the Oklahoma NRCS Code 590.
- C. MANURE TRANSFER

Manure not utilized by the facility for land application will be transferred off-site each year. All transfer records shall be kept on-site and made available to ODAFF inspectors upon request.

D. SITE SPECIFIC CONSERVATION PRACTICES

Conservation practices must be implemented in accordance with Section 4 of the NMP. Setbacks shall be implemented in accordance with Section 4 of the NMP.

E. PROTOCOLS FOR APPROPRIATE TESTING OF SOIL, MANURE, AND PROCESS WASTEWATER

Soil and manure/wastewater sampling shall be done in accordance with Section 7 of the NMP, respectively.

F. MORTALITY MANAGEMENT

All mortalities shall be disposed of in accordance with Section 3 of the NMP.

G. CLEAN WATER DIVERSION

Clean water shall be diverted from the production area in accordance with Section 3 of the NMP.

H. CHEMICAL HANDLING

Chemicals and other contaminants shall be handled in accordance with Section 3 of the NMP.