TENNESSEE DEPARTMENT OF AGRICULTURE

Water Resources Program

The following individual has submitted all required elements of an NMP/CNMP as required to obtain a CAFO permit. Their Nutrient Management Plan (or CNMP) has been reviewed and approved by this office.

Name of Owner/Operator: Steve Harrison

Operation Name: Harrison Dairy Inc.

Address of Operation: 215 Harrison Rd., Loudon, TN 37774

Phone Number: (865) 256-6420 County: Loudon

Date application was initiated:

RECEIVED
JAN 14 2014

Date approval forwarded to TDEC:

MAR 24 2014

NMP/CNMP Approval Date:

THE APPROVAL SHALL NOT BE CONSTRUED AS CREATING A PRESUMPTION OF CORRECT

MAR 24 2014

OPERATION OR AS WARRANTING THAT THE APPROVED FACILITIES WILL REACH THE DESIGNED GOALS

Date approval received by TDEC

TDA Reviewer's Name: Heidi McIntyre-Wilkinson

TDA Reviewer's Signature: Heidi McIntyre-Wilkinson 03/24/14
Date

Nutrient Management Plan (NMP) and CAFO Permit Application Checklist for SOPCD0000

Facility Name: Harrison Dairy

Form Completed by: Heidi McIntyre-Wilkinson

Name of Owner: Steve Harrison

SOPCD Requirements*			Citation of Requirements in CNMP/ NMP			
			Completed by producer or TSP		FOR TDA USE ONLY	
Required Element	**Permit Page #**	**Citation**	**Item Addressed in (C)NMP on Page #**	**Initials**	**Comments**	**Completed (Yes/ No)**
Notice of Intent form	4	1.6.1		HMW		Yes
Declarations Page, which addresses the following items:				HMW		Yes
Prevents direct contact of confined animals with waters of the State.	9	3.1.E				
Ensures chemicals or other contaminants handled on-site are handled (including spill clean-up) and disposed of properly.	9, 13	3.1.F, 4.10.1.A, 4.10.1.C				
All sampling of soil and manure/litter is conducted according to protocols developed by UT Extension.	9	3.1.H				
A copy of the most recent nutrient management plan (NMP) will be kept as part of the farm records and will be maintained and implemented as written.	9	3.1.J				
If applicable, all waste directed to under-floor waste pits shall be composed entirely of wastewater (i.e., washwater, animal waste) and precipitation runoff from the CAFO areas.	13	4.10.1.B				
Notify TDEC of any significant wildlife mortalities following land application of animal wastes.	13	4.10.1.D				

** Effective November 1, 2010*

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Address employee training for proper operation and maintenance of facility where employees are responsible for activites that relate to permit compliance.	13	4.10.1.E				
There shall be no land application of nutrients within 24 hours of a precipitation event that may cause runoff. The operator shall not land apply nutrients to frozen, flooded, or saturated soils.	15	4.10.2.F				
Topo Map with Property Boundary	8	2.3.1	212-214	HMW	Revised topos submitted 02/13/14.	Yes
Ortho Map with Property Boundary showing location of animal barns/ houses, compost bins, litter storage bins, manure lagoons/ holding ponds, nearby roads, fields to which manure/ litter will be applied, sinkholes, neighboring wells, wetlands, etc.			205-211	HMW	Revised orthos submitted 02/13/14.	Yes
The NMP addresses Best Management Practices (BMPs)/ conservation practices necessary to manage production area.	9	3.1.A	14-15	HMW		Yes
The NMP contains BMPs used (i.e. buffers) to control runoff of pollutants from land application.	9	3.1.G	36	HMW		Yes

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Ensures adequate waste storage. For liquid waste systems this would include: documentation of the total volume for solids accumulation, design treatment volume, total design volume, and approximate number of days for storage capacity.	9, 17	3.1.B, 5.2.G	15-17	HMW	Design information for the liquid waste system was previously reviewed/approved by TDA. Archived plans are on file at TDA.	Yes
Proper Management of Mortalities (also to be identified in Closure Plan).	9, 16	3.1.C, 4.14	6, 16, 18-19, 220	HMW	Revised information sent 02/13/14. Management = landfill	Yes
Clean water is diverted from production area.	9	3.1.D	7	HMW		Yes
Follow latest UT guidance for appropriate testing methods for manure.	9	3.1.H				
Identify methods used to land apply litter, manure, or process wastewater.	9	3.1.I	7-8, 123-168	HMW	Spreader, Drag Line, Not incoporated.	Yes
Nutrient budget or balance sheet of all	9	3.1.I	167-187	HMW	Revised nutrient balance provided 02/13/14.	Yes
Expected crop yields	17	5.2.I	103-112	HMW		Yes
The NMP addresses facility maintenance.	9	3.2.C	222-223	HMW		Yes
Closure/rehabilitation plan for waste system storage/treatment structure(s) and mortalities that addresses facility maintenance until proper closure to be completed within 360 days.	5, 16	1.6.4, 4.13	220	HMW		Yes

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Includes field specific assessment of potential for N and P2O5 transport from field to surface waters. Must address form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals (TN P Index must be provided for each field).	14	4.10.2.A.i	mmp w/P-index provided	HMW		Yes
Current manure/litter analysis for N and P_2O_5 (from within last year).	14	4.10.2.B	Addtl. Info. Recd.	HMW	New analysis rec'd 02/13/14. Date of analysis = 01/17/14	Yes
Provide results of soil test conducted at a minimum of once every five years for all	14	4.10.2.B	Addtl. Info. Recd.	HMW	Duplicate/unused soil test results removed in 02/19/14 submission.	Yes
Application of waste is no closer than 100 ft. to any down-gradient surface waters, open tile line intake structures, sinkholes, ag. wells, or other conduits to surface waters unless 100 ft. setback with a 35 ft. wide vegetated buffer is substituted or it is demonstrated that a setback/buffer is not needed due to use of alternate conservation practices or where field conditions would provide equivalent pollutant reductions.	14	4.10.2.D	66, 94	HMW	Revised table rec'd 03/24/14.	Yes
New CAFOs located adjacent to high quality stream (Exceptional TN waters) leave in place a 60-ft natural riparian buffer between stream and land application area.	14	4.10.2.E	N/A	HMW	N/A; existing CAFO.	N/A
Liquid Waste Management System Requirements						

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If liquid waste management system was constructed, modified, repaired, or placed in operation after April 13, 2006, it must meet or exceed NRCS FOTG standards. This should consist of pertinent engineered drawings (i.e. schematic of system) accompanied by a descriptive narrative.	15	4.11	Archived plans at TDA	HMW		Yes
Any new or additional confinement buildings, waste containment/ treatment structures constructed after April 13, 2006 shall be located according to NRCS Practice Standard 313.	15	4.11.A	Archived plans at TDA	HMW		Yes
Information used in the design of open storage area including minimum storage period, minimum storage for rainy seasons and chronic rain events, prohibition of land application to frozen, saturated, or snow-covered ground, dewatering schedules, and additional storage capacity for any manure intended to be transferred offsite or any other information that might affect the sizing of the open storage area.			Archived plans at TDA	HMW		Yes
Design of open storage structure as determined by most recent version of NRCS Animal Waste Management (AWM) software or procedures approved by the Director of Water Resources			Archived plans at TDA	HMW		Yes

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All inputs used in open storage structure design including climate data for 30 previous years with monthly precipitation and evaporation values, the number and types of animals, anticipated animal sizes or weights, any added water and bedding, any other process wastewater, size and condition of outside areas exposed to rainfall and contributing runoff to the open manure storage area.			Archived plans at TDA	HMW		Yes
Documentation of the total volume for solids accumulation, design treatment volume, total design volume, approximate number of days for storage capacity.	17	5.2.G	14-15	HMW		Yes
If any earthen structures were constructed or modified after April 13, 2006, a subsurface investigation is provided.	15	4.11.B	N/A	HMW	N/A; tank is not earthen construction.	N/A

Comments: The permit type is SOP Individual; the SOPCD checklist was used since as of the date of review (01/29/14), no checklist has been approved for the Individual SOP permit application review. In addition to the criteria above, the NMP must be written in linear or narrative form, with an appropriate permit terms document. Permit terms for this application applies maximum nitrogen = BESS Info #100 recommendations for each alternate crop and maximum phosphorus = crop removal rate/per unit yield/acre for each alternate crop.