APPLICATION FOR A PERMIT TO CONSTRUCT, INSTALL, MOVE, RECONSTRUCT, EXTEND, ENLARGE, CONVERT, OR SUBSTANTIALLY ALTER AN ANIMAL WASTE STORAGE FACILITY 500 CU. FT. OR LARGER, AND TO COMPLY WITH MANITOWOC COUNTY CODE CHAPTER 26 ANIMAL WASTE STORAGE ORDINANCE.

COMPLETED BY SWCD

APPLICATION NUMBER_____ DATE OF COMPLETED APPLICATION _____

ANIMAL UNITS UTILIZING NEW FACILITY _____ OR INCREASED ANIMAL UNITS IF EXPANDING STORAGE _____

PERMIT FEE (CHECK ONE)
_____$100 CONSTRUCTION/MODIFICATION OF A TRANSFER SYSTEM
_____$500 MODIFICATION OF WASTE STORAGE FACILITY
_____$500 NUMBER OF ANIMAL UNITS IS FEWER THAN 300
_____$750 NUMBER OF ANIMAL UNITS IS 301 TO 1,000
_____$1,150 NUMBER OF ANIMAL UNITS IS 1,001 TO 2,000
_____$1,500 NUMBER OF ANIMAL UNITS IS 2,001 TO 3,000
_____$2,500 NUMBER OF NAIMAL UNITS IS MORE THAN 3,000

CHECK AMOUNT _____
CHECK NO. _____
DATE PAID _____
REC'D BY _____

MAKE FEE PAYABLE TO: MANITOWOC COUNTY SWCD
PO BOX 578 4319 EXPO DRIVE
MANITOWOC WI 54221-0578

PART IV - CONSTRUCTION PERMIT
PERMIT ISSUED NUMBER _____ DATE _____

PART I APPLICATION FOR PERMIT

PLEASE TYPE OR PRINT

NAME OF APPLICANT_____ DATE _____

ADDRESS _____ PHONE (___)_____

CITY _____ STATE _____ ZIP _____

OWNER (IF DIFFERENT)_____

ADDRESS _____ PHONE (___)_____

CITY _____ STATE _____ ZIP _____

LEGAL DESCRIPTION OF PROPERTY _____1/4 ____1/4 SEC ____ T ____N R_____E

TOWN OF _____

APPLICANT'S SIGNATURE _____ DATE _____

MANITOWOC COUNTY
SOIL AND WATER CONSERVATION DEPARTMENT
P.O. BOX 578 - 4319 EXPO DRIVE
MANITOWOC WI 54221-0578

NAME_____

APPLICATION # _____

DATE RECEIVED _____

PART II NUTRIENT MANAGEMENT (PAGES 2 – 4)

A. I _____ **HAVE OBTAINED THE SERVICES OF**
(LANDOWNER)

_____ **FROM** _____
(CERTIFIED CROP ADVISOR) (BUSINESS ASSOCIATION)

TO PREPARE A NUTRIENT MANAGEMENT PLAN TO FULFILL THE REQUIREMENT OF THE MANITOWOC COUNTY ANIMAL WASTE ORDINANCE.

THE NUTRIENT MANAGEMENT PLAN WILL MEET THE REQUIREMENTS OF THE MANITOWOC COUNTY ORDINANCE CHAPTERS 19 & 26. THE PLAN SHALL BE SUBMITTED TO THE MANITOWOC COUNTY SOIL AND WATER CONSERVATION DEPARTMENT NO LATER THAN MARCH 15 IF YOU PLAN TO SPRING APPLY MANURE OR AUGUST 15 IF YOU WILL FALL APPLY OF THE YEAR FOLLOWING INSTALLATION OF A MANURE STORAGE FACILITY.

THE NUTRIENT MANAGEMENT PLAN WILL BE UPDATED ANNUALLY FOR THE LIFE OF THE MANURE STORAGE. ANY UPDATED PLANS WILL BE PROVIDED TO THE MANITOWOC COUNTY SOIL AND WATER CONSERVATION DEPARTMENT UPON REQUEST.

THE RECOMMENDATIONS OF THE NUTRIENT MANAGEMENT PLAN WILL BE FOLLOWED. APPLICANTS WILL COMPLETE ITEMS LISTED ON THE NUTRIENT AND MANURE MANAGEMENT CHECKLIST ON PAGE 3 SECTION C AND FIELD FEATURE RESTRICTION CHECKLIST.

B. PLEASE INDICATE TOWNSHIPS AND SECTIONS WHERE MANURE WILL BE SPREAD:

Township	Sections	Owned by	No. of Acres
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

C. NUTRIENT AND MANURE MANAGEMENT CHECKLIST

OPERATIONAL MANAGEMENT PLAN –FIELD APPLIED MANURE AND NUTRIENTS

(SOME OF THE FOLLOWING QUESTIONS WILL NEED ADDITIONAL SPACE TO COMPLETE. PLEASE INCLUDE ADDITIONAL SHEETS AS NEEDED.)

(1) NAME AND PHONE NUMBER OF PERSON FROM THE FARM OPERATION WHO IS RESPONSIBLE FOR MANURE APPLICATION _____

(2) EMERGENCY CONTACT AND PHONE NUMBER RELATIVE TO MANURE APPLICATION:
_____

(3) ANIMAL TYPE AND NUMBERS, WEIGHT GROUPS, AND MANURE CONSISTENCY. COMPLETE **TABLE 1 MANURE QUANTITY ESTIMATION FOR CROP PROGRAM – APPENDIX A**

(4) ESTIMATE OF TOTAL ANNUAL MANURE PRODUCED FROM FARM:
_____ GALLONS/TONS

(5) A. DESIGN CAPACITY OF THE MANURE STORAGE STRUCTURE EXISTING AND PROPOSED:
_____EXISTING _____PROPOSED GALLONS OR CUBIC FT _____

B. PLANNED STORAGE PERIOD_____

(6) IDENTIFY ALL THE VARIOUS WASTE SOURCES (I.E. MILKHOUSE, FEED STORAGE, OUTDOOR LOT…) ASSOCIATED WITH THE ANIMAL PRODUCTION AREA
_____

(7) DESCRIBE HOW YOU WILL HANDLE ALL WASTE SOURCES. (HANDLING AT THE FARM, TRANSPORT AND APPLICATION METHOD ON CROPLAND)
_____
_____
_____

(8) DESCRIBE HOW MANURE APPLICATION RATE INFORMATION WILL BE COMMUNICATED TO THOSE DOING FIELD APPLICATIONS. HOW WILL FIELD RESTRICTIONS BE MANAGED? – SOLIDS, LIQUIDS, IRRIGATED WASTES, SEPARATED PRODUCTS, IMPORTED WASTES AND FEED.
_____
_____
_____
_____
_____
_____
_____
_____
_____

(9) DETERMINE IF ADEQUATE LAND IS AVAILABLE TO SAFELY UTILIZE ALL WASTE PRODUCED.

IDENTIFY ANTICIPATED CROP ROTATIONS AND REMOVAL RATES FOR CROPS. TILLAGE AND
CONSERVATION MEASURES SHOULD BE IDENTIFIED, TO ALLOW DETERMINATION IF MANURE APPLICATION IS AGRONOMICAL AND ENVIRONMENTALLY SOUND. IF SOIL TESTS ARE NOT AVAILABLE FOR LEASE/LAND ACCESS ARRANGEMENTS, ASSUME SOIL TESTS ARE GREATER THAN OR EQUAL TO 100 PPM. PHOSPHORUS FROM MANURE AND FERTILIZER ADDITIONS SHOULD BE LESS THAN ANTICIPATED CROP REMOVAL RATES ON THESE FIELDS. SOIL TEST WILL BE UPDATED TO MEET 590 STANDARD IN THE FUTURE.

(10) PROVIDE LEASE/LAND ACCESS ARRANGEMENTS FOR LAND THAT WILL RECEIVE MANURE. AGREEMENTS SHOULD BE CURRENT. INCLUDE NAMES, ADDRESSES, PHONE NUMBERS OR LANDLORDS, OR INDIVIDUALS ACCEPTING ANIMAL WASTE.

(11) DESCRIBE ODOR PRODUCTION CONCERNS AND CONTROL STRATEGIES.

(12) **FARM AERIAL PHOTOGRAPHS OR MAPS**

- ONE SET OF MAPS THAT INDICATE FARMER OR CO-OP FIELD NUMBERS AND FIELD BOUNDARIES

(13) **FIELDS WITH MANURE AND NUTRIENT MANAGEMENT RESTRICTIONS ARE IDENTIFIED** ***(SEE ATTACHED CHECKLIST – APPENDIX B)***

- MANITOWOC COUNTY ANIMAL WASTE ORDINANCE MAP SET
- COMPLETE FIELD FEATURE RESTRICTION CHECKLIST AND MAPS OF FIELD FEATURES. CHECKLIST MUST BE COMPLETED PRIOR TO USE OF ANY FIELDS FOR MANURE DISPOSAL. 590 GROUNDWATER PROTECTION MAPS SHOULD BE INCLUDED.

(14) **NUTRIENT MANAGEMENT PLANNING – SOIL EROSION MANAGEMENT**

- SOIL EROSION RATES ARE MANAGED TO LEVELS OF "T" OR LESS. SOIL EROSION ESTIMATE CALCULATIONS MAY BE REQUIRED. WI-CPA-015 OR RUSLE II COMPUTATION PRINTOUTS.
- SOIL EROSION PLANS FOR ALL LAND INDICATED FOR MANURE USE MUST BE CURRENT. WILL CROP ROTATIONS CHANGE AS CATTLE ARE ADDED TO THE FARM?

_____ _____

APPLICANT'S SIGNATURE DATE

_____ _____

CERTIFIED CROP ADVISOR'S SIGNATURE DATE

MANITOWOC COUNTY
SOIL AND WATER CONSERVATION DEPARTMENT
P.O. BOX 578 - 4319 EXPO DRIVE
MANITOWOC WI 54221-0578

NAME_____

APPLICATION # _____

DATE RECEIVED _____
(COMPLETED BY SWCD)

PART III STORAGE FACILITY PLAN

STORAGE FACILITY PLAN REQUIRED. EACH APPLICATION FOR A CONSTRUCTION PERMIT UNDER THIS CHAPTER SHALL INCLUDE A STORAGE FACILITY PLAN. THE PLAN SHALL SHOW THAT THE CONSTRUCTED FACILITY WILL MEET THE REQUIREMENTS OF TECHNICAL STANDARDS 313, 634, 382 AND 590. THE PLAN SHALL INCLUDE:

(A) THE NUMBER AND KINDS OF ANIMALS FOR WHICH STORAGE IS PROVIDED OR DAILY GALLONS OF WASTE AND MANURE PRODUCED.

(B) A SKETCH OF THE FACILITY AND ITS LOCATION IN RELATION TO BUILDINGS AND ROADS WITHIN 250' AND HOMES WITHIN 500' OF THE PROPOSED FACILITY. THE SKETCH SHALL BE DRAWN TO A SCALE NO SMALLER THAN 1" = 100'.

(C) PLANS, SPECIFICATIONS, AND DOCUMENTATION FOR ALL COMPONENTS OF THE TRANSFER SYSTEM AND STORAGE FACILITY. INCLUDE: SITE ASSESSMENT, SAFETY FEATURES, OPERATION AND MAINTENANCE PLAN, CONSTRUCTION PLAN, CONSTRUCTION INSPECTION PLAN AND CONSTRUCTION SITE EROSION PLAN.

(D) THE LOCATION OF ANY PRIVATE WELLS WITHIN 250' AND ANY MUNICIPAL WELLS WITHIN 1000' OF THE FACILITY.

(E) SOIL BORING LOCATIONS, ELEVATIONS, AND TEST DATA OF AN ADEQUATE NUMBER OF SOIL TEST PITS LOCATED IN THE FACILITY AREA WITH DESCRIPTIONS OF A SOILS LOG INCLUDING ELEVATION OF SEASONALLY HIGH GROUNDWATER OR BEDROCK, IF ENCOUNTERED, TO DEPTH OF AT LEAST 5 FEET BELOW THE PLANNED BOTTOM OF THE ANIMAL WASTE STORAGE FACILITY. SEE NRCS STANDARD 313 DATED 12/05.

(F) A RECOVERABLE BENCKMARK WITH ELEVATION.

(G) THE SCALE OF THE DRAWING AND THE NORTH ARROW.

(H) A TIME SCHEDULE FOR CONSTRUCTION OF THE FACILITY.

(I) **NAME OF PERSON RESPONSIBLE FOR CONSTRUCTION INSPECTION AND VERIFICATION OF COMPLETED PROJECT:** _____

PART IV CONSTRUCTION PERMIT

(PARTS I, II AND III MUST BE COMPLETED PRIOR TO ISSUING THIS CONSTRUCTION PERMIT.)

SOIL BORINGS COMPLETED BY _____ DATE _____

CONSTRUCTION PLAN PREPARED BY _____ DATE _____

PLANS APPROVED BY _____ DATE _____

NUTRIENT MANAGEMENT PLAN COMPLETE _____ YES _____ NO
***SEE NOTE BELOW**

***NOTE: IF A NUTRIENT PLAN HAS NOT BEEN PREPARED, THE APPLICANT MUST PROVE THAT THEY HAVE SUFFICIENT LAND AVAILABLE FOR MANURE SPREADING TO MEET THE REQUIREMENTS OF MANITOWOC COUNTY ORDINANCE CHAPTER 19 & 26 AND IN THE FUTURE SUBMIT A PLAN AS REQUIRED UNDER PART II. SWCD MAY PROVIDE A COMPLIANCE SCHEDULE FOR ANY DEFICIENCIES.**

- THE OWNER MUST PROVIDE SWCD WITH WRITTEN CERTIFICATION WITHIN 30 DAYS FOLLOWING COMPLETION OF THE CONSTRUCTION, INSTALLATION, OR ALTERATION OF THE ANIMAL WASTE STORAGE FACILITY OR TRANSFER SYSTEM. THE CERTIFICATION MUST BE SIGNED BY AN AGRICULTURAL OR CIVIL ENGINEER OR BY A DATCP OR NRCS ENGINEERING PRACTITIONER; PROVIDE AN AS-BUILT DRAWING OR PLAN; AND STATE THAT THE ACTIVITY WAS COMPLETED IN ACCORDANCE WITH THE APPROVED STORAGE FACILITY PLAN AND COMPLIES WITH ALL PERMIT CONDITIONS.
- THE WORK TO BE PERFORMED IS DESCRIBED IN THE ATTACHED PLAN.
- THE APPLICANT AGREES TO PROVIDE FIVE (5) WORKING DAYS NOTICE BEFORE BEGINNING CONSTRUCTION AND THAT ALL SUCH WORK SHALL COMPLY WITH ALL STANDARDS REFERENCED IN THE MANITOWOC COUNTY ANIMAL WASTE STORAGE ORDINANCE AND ALL OTHER APPLICABLE COUNTY ORDINANCES AND LAWS AND REGULATIONS OF THE STATE OF WISCONSIN. THE APPLICANT IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS, I.E. SETBACK AND BUILDING.
- DEVIATIONS FROM THE ORIGINAL PLAN MUST BE APPROVED BY THE SOIL AND WATER CONSERVATION DEPARTMENT PRIOR TO INSTALLATION.
- SOIL AND WATER CONSERVATION DEPARTMENT PERSONNEL HAVE THE RIGHT TO CONDUCT SITE INSPECTIONS DURING OR FOLLOWING CONSTRUCTION TO DETERMINE THAT THE FACILITY IS INSTALLED AS PLANNED AND DESIGNED.
- THE SOIL AND WATER CONSERVATION DEPARTMENT MAY REVOKE ANY PERMIT ISSUED UNDER CHAPTER 26 ANIMAL WASTE STORAGE ORDINANCE IF THE HOLDER OF THE PERMIT HAS MISREPRESENTED ANY MATERIAL FACT IN THE PERMIT APPLICATION OR ANIMAL WASTE STORAGE FACILITY PLAN, OR IF THE HOLDER OF THE PERMIT VIOLATES ANY OF THE CONDITIONS OF THE PERMIT. THE PERMITEE SHALL BE IMMEDIATELY NOTIFIED OF THE REVOCATION IN WRITING AND SHALL BE INFORMED OF THE REASONS FOR REVOCATION.

Manitowoc County
Soil and Water Conservation Department
P.O. Box 578 - 4319 Expo Drive
Manitowoc WI 54221-0578

NAME _____

PERMIT # _____

DATE ISSUED _____
(COMPLETED BY SWCD)

PART IV **CONSTRUCTION PERMIT**

APPROVED / DENIED (CIRCLE ONE)

SOIL AND WATER CONSERVATION DEPARTMENT'S
AUTHORIZED AGENT SIGNATURE: _____ DATE _____

THIS PERMIT IS VALID ONLY WHEN SIGNED BY THE AUTHORIZED AGENT AND IS VALID FOR TWO (2) YEARS FROM DATE OF ISSUANCE. EXPIRATION DATE _____

4/2008

Table 1. Manure Quantity Estimation For Crop Production

Version January 16, 2003

Animal	Size	Daily Manure Production To Apply						Annual Manure Production To Apply					
	Lbs	Solid		Liquid				Number of Head	= Daily Total Tons or Gal.	x 365 Day Total	x % Collected	= Total Collected Tons or Gal.	
		Lbs/day	ft³/day	MWPS ft³/day x WI dairy & beef dilution factor	ft³/day & WI dilution	MWPS gal./day x WI dairy & beef dilution factor	gal /day & WI dilution						
Dairy													
Calf	150	13	0 200	21*1 8=	37	1 53*1 8=	2.80						
Calf	250	21	0 320	33*1 8=	.60	2 47*1 8=	4 50						
Heifer	750	65	1 000	1 03*1 8=	1 85	7 70*1 8=	13 8						
Lact Cows	1000	106	1 700	1 71*1.8=	3.07	12.7*1.8=	23 0						
	1400	148	2 400	2 38*1.8=	4 28	17 7*1 8=	32 0						
Dry Cows	1000	82	1 300	1 30*1.8=	2 35	9.7*1 8=	18 0						
	1400	115	1 820	1 82*1 8=	3 33	13 6*1.8=	25 0						
Beef													
Calf	450	26	0.420	.415*3 2=	1 3	3 1*3.2=	9.9						
High Forage	750	62	1 000	1 00*3 2=	3 2	7 5*3 2=	24 0						
High Forage	1100	92	1 400	1 48*3 2=	4 8	11*3 2=	35 0						
High Energy	750	54	0 870	.87*3.2=	2 7	6 5*3 2=	20 8						
High Energy	1100	80	1 260	1.27*3.2=	4 1	9 5*3 2=	30 5						
Beef Cow	1000	63	1 000	1 00*3 2=	3 2	7 5*3 2=	24 0						
Swine													
Nursery Pig	25	2 7	0 040	.04		.30							
Grow-Finish Pig	150	9 5	0.150	17		1.20							
Gestating Sow	275	7 5	0.120	14		1.00							
Sow & Litter	375	22 5	0.360	.42		3 00							
Boar	350	7 2	0.120	.14		1.00							
Poultry / Other													
Layers	4	0 26	0 004	.004		.03							
Broilers	2	0.18	0.003	003		02							
Turkeys	20	0 9	0 014	.015		.11							
Duck	6	0 33	0.005	.006		04							
Sheep	100	4	0 060	055		.40							
Horse	1000	50	0 800	827		5 98							

Source: Midwest Plan Service publication number MWPS-18 "Manure Characteristics" Section 1, copyright 2000. Solid volumes are as excreted The liquid dairy and beef values are computed from the MWPS daily production and have approximately equal nutrient values annually as solid manure MWPS liquid dairy and beef factors are multiplied by 1 8 and 3 2 respectively Dilution on your operation may be substantially different. **Use manure analysis and manure storage volumes** to determine manure production whenever possible

Manure quantities are likely to be more accurate estimated from storage size:

What is the manure storage pit size? _____ gallons or tons?

Multiply pit size x Number of times emptied/yr? _____ = Total annual manure collection

AWO FIELD FEATURE RESTRICTION CHECKLIST ***APPENDIX B***

(Make copies as needed)

FIELD NUMBER _____
Streams, ditches, lakes, ponds and setbacks
Concentrated Flow areas (small waterways, ditches, concentrated flow is evident, flowing springs)
Wells in use
Wells not used
Tile Surface inlets (pipes, French, blind, gravel, rock, curtain, blowouts)
Sinkholes (rock holes, swallets, fractures open to surface)
Exposed Bedrock
Shallow Bedrock (<20 in to bedrock)
Gravel pits/quarries
Shallow water table (<12 in to apparent water table) identified via soil survey.
Excessively permeable Soil
Slope restrictions (>6% slope)
Other areas restricted
Soil Erosion Management Plan is Current?

FIELD NUMBER _____
Streams, ditches, lakes, ponds and setbacks
Concentrated Flow areas (small waterways, ditches, concentrated flow is evident, flowing springs)
Wells in use
Wells not used
Tile Surface inlets (pipes, French, blind, gravel, rock, curtain, blowouts)
Sink holes (rock holes, swallets, fractures open to surface)
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Gravel pits/quarries
Shallow water table (<12 in to apparent water table) identified via soil survey.
Excessively permeable Soil
Slope restrictions (>6% slope)
Other areas restricted
Soil Erosion Management Plan is Current?

FIELD NUMBER _____
Streams, ditches, lakes, ponds and setbacks
Concentrated Flow areas (small waterways, ditches, concentrated flow is evident, flowing springs)
Wells in use
Wells not used
Tile Surface inlets (pipes, French, blind, gravel, rock, curtain, blowouts)
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Shallow Bedrock (<20 in to bedrock)
Gravel pits/quarries
Shallow water table (<12 in to apparent water table) identified via soil survey.
Excessively permeable Soil
Slope restrictions (>6% slope)
Other areas restricted
Soil Erosion Management Plan is Current?

Signature of evaluator_____ Date _____