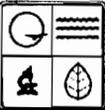


RECEIVED

MAY 04 2016



MISSOURI DEPARTMENT OF NATURAL RESOURCES Water Protection Program
WATER PROTECTION PROGRAM
FORM W - CONCENTRATED ANIMAL FEEDING OPERATION
(CAFO) OPERATING PERMIT APPLICATION

| FOR OFFICE USE ONLY | |
|---------------------|----------|
| CHECK NUMBER: | 005 |
| DATE RECEIVED | 5/4/16 |
| FEE SUBMITTED | \$150.00 |

88

Complete all applicable sections for type of permit being applied for. Instructions for completing the form are located at the end of the form. Sign, date and return the form and all requested documents along with a check for the appropriate permit fee to the Missouri Department of Natural Resources. Make a copy of this completed form and keep it with your Nutrient Management Plan.

PART 1 - PERMIT OWNERSHIP AND CONTACT INFORMATION

| | | |
|---|--|--|
| 1.1 OPERATION NAME <i>M & M Cattle & Poultry Farms LLC</i> | CURRENT PERMIT NUMBER MO- | COUNTY <i>Benton</i> |
| PHYSICAL ADDRESS <i>24146 Hwy B</i> | LEGAL DESCRIPTION Sec.: Twn.: Rng.: | TELEPHONE NUMBER WITH AREA CODE <i>660-668-3327</i> |
| CITY <i>Liscola, I</i> | STATE <i>MO</i> | ZIP CODE <i>65338</i> |
| 1.2 OWNER (PROVIDE LEGAL NAME) <i>Rodney S. Metscher</i> | EMAIL ADDRESS | |
| MAILING ADDRESS <i>23103 Hwy W</i> | | TELEPHONE NUMBER WITH AREA CODE <i>660-668-3327</i> |
| CITY <i>Cole Camp</i> | STATE <i>MO</i> | ZIP CODE <i>65325</i> |
| 1.3 CONTINUING AUTHORITY (IF DIFFERENT THAN THE OWNER) | | |
| MAILING ADDRESS | | TELEPHONE NUMBER WITH AREA CODE |
| CITY | STATE | ZIP CODE |

PART 2 - PERMIT TYPE AND PERMIT ACTION

| | |
|---|--|
| 2.1 PERMIT TYPE <input type="checkbox"/> NPDES Site Specific Permit Request review of draft permit prior to public notice. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NPDES General Permit (MOG01) <input checked="" type="checkbox"/> State No-Discharge General Permit (MOGS1) | 2.2 PERMIT ACTION* <input checked="" type="checkbox"/> New Permit <input type="checkbox"/> Renewal <input type="checkbox"/> Modification <input type="checkbox"/> Ownership Transfer _____ PREVIOUS OWNERS NAME _____ ADDRESS _____ CITY STATE ZIP CODE _____ SIGNATURE DATE |
|---|--|

*See instructions for additional requirements and documents for the request permit action.

PART 3 - DESIGN CAPACITY FOR MANURE STORAGE AND ANIMALS OF EACH CAFO FEATURE

| 3.1 STORAGE STRUCTURE TYPES, AMOUNT OF STORAGE, AND AMOUNT OF MANURE GENERATED PER YEAR | | | | | | | |
|---|--|-------------------------------------|-----------------|------------------------------|---------------------------------------|-----------------|-----------------|
| CAFO Feature | List All Manure Storage Structures at each CAFO Feature Storage Structure Type(s) | Dry Manure Handling System | | Wet Manure Handling System | | | |
| | | Design Dry Process Waste (tons/yr.) | Days of Storage | Total Storage Capacity (gal) | Design Wastewater per Year (gal./yr.) | Days of Storage | Design Flow MGD |
| 001 | <i>E - Roofed Storage Structure</i> | <i>2030 Tons</i> | <i>365</i> | | | | |
| 002 | <i>F - Secondary Storage</i> | <i>508 Tons</i> | <i>90</i> | | | | |
| 003 | <i>G - Composter</i> | <i>51</i> | <i>177</i> | | | | |
| 004 | | | | | | | |
| 005 | | | | | | | |

| 3.2 LIST EACH TYPE OF ANIMAL IN CONFINEMENT AND THE NUMBER OF EACH ANIMAL TYPE. | | | | | | |
|---|--------------------|----------------|--------------------|----------------|--------------------|----------------|
| CAFO Feature | Animal Category #1 | Animal Numbers | Animal Category #2 | Animal Numbers | Animal Category #3 | Animal Numbers |
| 001 | <i>10 Poultry</i> | <i>156,000</i> | | | | |
| 002 | | | | | | |
| 003 | | | | | | |
| 004 | | | | | | |
| 005 | | | | | | |

PART 4 - OPERATIONAL INFORMATION

| | |
|---|--|
| 4.1 OPERATIONAL INFORMATION (SEE INSTRUCTIONS) SIC Code(s) <i>0251</i> CAFO Class Size <i>1C</i> | 4.2 Is this an "Export Only" operation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
|---|--|

Completing PARTS 5 - 11 will meet the requirements of a Nutrient Management Plan (NMP) for an export only operation.

PART 5 - MANURE STORAGE

5.1 Do all manure storage structures have adequate storage, and operated and maintained as no discharge? Yes No

PART 6 - ANIMAL MORTALITY

6.1 PERMANENT METHOD OF DISPOSING OF ROUTINE ANIMAL MORTALITIES.

Composting Rendering Send to a Landfill Incineration Other (Describe)

6.2 DESCRIBE METHOD OF MORTALITY HANDLING AND STORAGE THROUGH ALL PHASES TO FINAL DISPOSAL. (EXAMPLE: MORTALITIES ARE COMPOSTED WITHIN 24 HOURS OF DEATH AND FINISHED COMPOST PRODUCT IS STORED UNDER ROOF UNTIL LAND APPLIED). ALSO DESCRIBE THE TYPE OF COMPOST STRUCTURE USED, IF APPLICABLE.

mortalities are composted within 24 hrs of death, finished compost is stored under roof until land applied.

PART 7 - DIVERSION OF CLEAN WATER

7.1 Is clean storm water diverted from the production area? Yes No

7.2 IF YES, DESCRIBE CONTROLS AND MEASURES USED TO DIVERT STORM WATER.

Terrace on S side divert water from uphill side to grass waterway which flows down on E side

7.3 IF NO, DESCRIBE HOW CONTAMINATED STORMWATER IS CONTAINED AND INCLUDE THE STORAGE CAPACITY OF THE CONTAINMENT IF NOT PREVIOUSLY PROVIDED

PART 8 - PREVENT DIRECT CONTACT OF ANIMALS WITH SURFACE WATERS

8.1 Do the animals have access to waters of the state within the production area? Yes No

8.2 LIST MEASURES USED TO PREVENT CONFINED ANIMAL FROM HAVING DIRECT CONTACT WITH WATERS OF THE STATE.

PART 9 - CHEMICAL HANDLING

9.1 Check the appropriate boxed below to indicate method for handling and disposal of chemicals used by the operation:

- Chemicals are stored, handled, and disposed of according to manufacturer labels.
- Chemical storage and handling areas are protected from precipitation and runoff, and any spillage is contained within these areas.
- Emergency procedures and equipment are in place to contain and clean up chemical spills.
- Equipment wash areas are designed and constructed to prevent contamination of surface waters.
- No chemicals are stored or handled in the production area.

PART 10 - MANURE ANALYSIS TESTING

10.1 LIST EACH TYPE OF MANURE SOURCE. (i.e. MANURE, LITTER, COMPOST, WASTE WATER.)

Dry Litter

10.2 DESCRIBE PROCEDURES FOR ENSURING EACH MANURE SOURCE IS TESTED ANNUALLY.

First batch of manure will be tested after Jan 1st of ea year

PART 11 - RECORD KEEPING

11.1 Are records of all inspections, manure transfers, discharges and land application maintained? Yes No

PART 12 - SIGNATURE

| | |
|--|-----------------------|
| NAME <i>Rodney J. Metscher</i> | TITLE <i>Owner</i> |
| SIGNATURE <i>Rodney J. Metscher</i> | DATE <i>4/5/16</i> |

Part 13 - Engineer Certification

House Bill (HB) 28, which became effective on August 28, 2013 contained provisions that changed construction permitting requirements. Construction permits are required for the construction of an earthen storage structure to hold, convey, contain, store, or treat domestic, agricultural, or industrial process wastewater. Construction of all other point source systems designed to hold, convey, contain, store, or treat domestic, agricultural, or industrial process waste must be designed by a professional engineer registered in Missouri in accordance with design regulations.

| | |
|--|--|
| Operation Name Address City | Engineer Firm Address City State Zip Code ENGINEER SEAL |
| I, Project Engineer of the certify that above described systems have been designed in accordance with Missouri CAFO design regulations in 10 CSR 20-8.300 <i>Melissa M. Planner</i> PROJECT ENGINEER SIGNATURE | |

RECEIVED
MAY 04 2016

Water Protection Program



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
FORM W - CONCENTRATED ANIMAL FEEDING OPERATION
(CAFO) OPERATING PERMIT APPLICATION

FOR OFFICE USE ONLY

CHECK NUMBER:
DATE RECEIVED: FEE SUBMITTED:

Complete all applicable sections for type of permit being applied for. Instructions for completing the form are located at the end of the form. Sign, date and return the form and all requested documents along with a check for the appropriate permit fee to the Missouri Department of Natural Resources. Make a copy of this completed form and keep it with your Nutrient Management Plan.

PART 1 - PERMIT OWNERSHIP AND CONTACT INFORMATION

| | | | |
|---|--------------------|--|--|
| 1.1 OPERATION NAME <i>MJM Cattle & Poultry Farms LLC</i> | | CURRENT PERMIT NUMBER MO- | COUNTY <i>Bedford</i> |
| PHYSICAL ADDRESS <i>24146 Hwy B</i> | | LEGAL DESCRIPTION Sec.: Twn.: Rng.: | TELEPHONE NUMBER WITH AREA CODE <i>660-668-9927</i> |
| CITY <i>Hiwale, IL</i> | STATE <i>MO</i> | ZIP CODE <i>65338</i> | |
| 1.2 OWNER (PROVIDE LEGAL NAME) <i>Rodney S. Metzger</i> | | EMAIL ADDRESS | |
| MAILING ADDRESS <i>23103 Hwy W</i> | | TELEPHONE NUMBER WITH AREA CODE <i>660-668-9927</i> | |
| CITY <i>Cole Camp</i> | STATE <i>MO</i> | ZIP CODE <i>65325</i> | |
| 1.3 CONTINUING AUTHORITY (IF DIFFERENT THAN THE OWNER) | | | |
| MAILING ADDRESS | | TELEPHONE NUMBER WITH AREA CODE | |
| CITY | STATE | ZIP CODE | |

PART 2 - PERMIT TYPE AND PERMIT ACTION

| | |
|---|---|
| <p>2.1 PERMIT TYPE</p> <p><input type="checkbox"/> NPDES Site Specific Permit Request review of draft permit prior to public notice. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> NPDES General Permit (MOG01)</p> <p><input checked="" type="checkbox"/> State No-Discharge General Permit (MOGS1)</p> | <p>2.2 PERMIT ACTION</p> <p><input checked="" type="checkbox"/> New Permit <input type="checkbox"/> Renewal</p> <p><input type="checkbox"/> Modification <input type="checkbox"/> Ownership Transfer</p> <p>PREVIOUS OWNERS NAME _____</p> <p>ADDRESS _____</p> <p>CITY STATE ZIP CODE _____</p> <p>SIGNATURE _____ DATE _____</p> <p><small>*See instructions for additional requirements and documents for the request permit action.</small></p> |
|---|---|

PART 3 - DESIGN CAPACITY FOR MANURE STORAGE AND ANIMALS OF EACH CAFO FEATURE

3.1 STORAGE STRUCTURE TYPES, AMOUNT OF STORAGE, AND AMOUNT OF MANURE GENERATED PER YEAR.

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|--------------|--|-------------------------------------|-----------------|------------------------------|--------------------------------------|-----------------|-----------------|
| | | Design Dry Process Waste (tons/yr.) | Days of Storage | | Design Wastewater per Year (gal/yr.) | Days of Storage | Design Flow MGD |
| 001 | <i>E - Roofed Storage Structure</i> | <i>2,030 Tons</i> | <i>365</i> | | | | |
| 002 | <i>F - Secondary Storage</i> | <i>508 Tons</i> | <i>90</i> | | | | |
| 003 | <i>G - Composter</i> | <i>51</i> | <i>177</i> | | | | |
| 004 | | | | | | | |
| 005 | | | | | | | |

3.2 LIST EACH TYPE OF ANIMAL IN CONFINEMENT AND THE NUMBER OF EACH ANIMAL TYPE.

| CAFO Feature | Animal Category #1 | Animal Numbers | Animal Category #2 | Animal Numbers | Animal Category #3 | Animal Numbers |
|--------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|
| 001 | <i>10 Broilers</i> | <i>156,000</i> | | | | |
| 002 | | | | | | |
| 003 | | | | | | |
| 004 | | | | | | |
| 005 | | | | | | |

PART 4 - OPERATIONAL INFORMATION

4.1 OPERATIONAL INFORMATION (SEE INSTRUCTIONS)
SIC Code(s) *0251* CAFO Class Size *LC*

4.2 Is this an "Export Only" operation? Yes No

Completing PARTS 6 - 11 will meet the requirements of a Nutrient Management Plan (NMP) for an export only operation.

PART 6 - MANURE STORAGE

5.1 Do all manure storage structures have adequate storage, and operated and maintained as no discharge? Yes No

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Day Litter

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Final batch of manure will be tested after Jan 1st of each year

PART 11 - RECORD KEEPING

11.1 Are records of all inspections, manure transfers, discharges and land application maintained? Yes No

PART 12 - SIGNATURE

NAME *Rodney J. Metzger* TITLE *Owner*

SIGNATURE *Rodney J. Metzger* DATE *4/5/16*

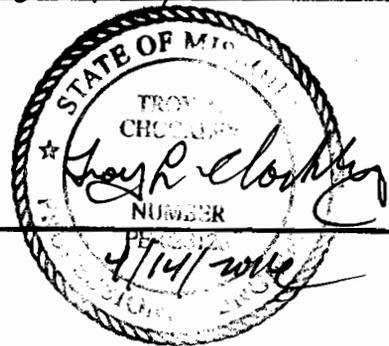
Part 13 - Engineer Certification

House Bill (HB) 28, which became effective on August 28, 2013 contained provisions that changed construction permitting requirements. Construction permits are required for the construction of an earthen storage structure to hold, convey, contain, store, or treat domestic, agricultural, or industrial process wastewater. Construction of all other point source systems designed to hold, convey, contain, store, or treat domestic, agricultural, or industrial process waste must be designed by a professional engineer registered in Missouri in accordance with design regulations.

Operation Name *Wxm Cattle & Poultry* Engineer Firm *URE S*
 Address *Parcode Center*
 City State Zip Code *Columbia, MO 65203*

I, Project Engineer of the certify that above described systems have been designed in accordance with Missouri CAFO design regulations in 10 CSR 20-8.300

Tracy Chockley
 PROJECT ENGINEER SIGNATURE



*6 Buildings Complete 4/14/2016
 Composter/stackshed not complete*

FACILITY NAME: M & Cattle and Poultry

Benton County, Missouri

PRODUCTION:

This system is planned to manage the waste from 6 broiler houses with a total capacity of 156,000 birds. Annual production will be 5 flocks. Flock life is approximately 7.71 weeks. Average daily litter production (manure and bedding) is estimated at .63 cu. ft. per 1000 pounds of animal capacity or 2,030 tons annually. Bedding used is straw, softwood shavings, sawdust, and/or rice hulls. At 34 lb. per cu. ft, volume of manure and bedding is approximately 119,410 cu. ft. annually. No wash water or other fresh water enters the waste management system. 6 broiler houses with 26,000 broiler = 156,000.

COLLECTION:

Birds are confined in buildings at all times. Waterers are the dry types, so liter remains dry. Buildings have compact earth floors. Litter accumulates fairly uniformly on floors. All manure and litter from the operation is collected in the houses. Dead birds will be removed at a minimum of daily to the composting facility.

STORAGE/TREATMENT

Litter will be stored inside the houses between clean outs and removed at the end of the year. Storage period is approximately 365 days. Areas around the houses are graded so all storm water drains away from houses. An additional run off barrier is provided by one-foot concrete stem walls that hold the wall trusses. Some decomposition takes place during storage due to the composting action that reduces volume to some extent.

| Separation Distances: (ft) | <u>Storage</u> | <u>Soil Plant Filter</u> |
|----------------------------|------------------|--------------------------|
| Property Line | <u>145 ft.</u> | <u>50 ft.</u> |
| Well | <u>150 ft.</u> | <u>300 ft.</u> |
| Stream | <u>100 ft.</u> | <u>150 ft.</u> |
| Non-owned Dwelling | <u>1,000 ft.</u> | <u>300+ft.</u> |
| State/County Roads | <u>440 ft.</u> | <u>50 ft.</u> |
| Soil Plant Filter | <u>270 ft.</u> | |

Well(s) are properly cased and sealed per operator statement.

Dead bird carcasses will be composted using straw and litter in layers in proportions recommended by Maryland research. A composting facility will be constructed according a roof and impervious floor. After the composting process is completed, the compost will be stored in the facility until sold.

Compost from dead birds maybe hauled by tractor and manure spreader if needed and as time permits.

UTILIZATION:

Houses will be cleaned once per year. Normally, houses will be cleaned in March or April. Small amounts of caked litter are sometimes used in operation of the composter.

Litter of owners will be spread on his land and any access will be sold.

No chemicals will be stored in or outside of the chicken houses.

OPERATION AND MAINTENANCE:

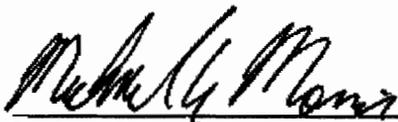
The owner of the facility is responsible for safe operation and maintenance of this waste management system. Concerns include health of the poultry flock and safety in the environment. Poultry companies, through their field person, may also have policies or recommendations concerning operations. The owner is responsible for safe management for his or her litter. Some litter will be applied on farm and some litter will be sold. Records will include the name of person sold to, date, and field number of application, volume and tons/acre, acres and type of cover or forage crop. These records should be kept of visual inspection, corrective actions, mortalities, manure transfers and discharges. These records must be maintained on site for five years. Each manure source is to be tested annual for nutrient content. Copies of manure results will be given to all buying the litter. Recordkeeping requirements are part of regulations for nutrient management plans whether or not an operation is export only. Regulations also require that protocols are identified for the appropriate testing of manure, litter, process wastewater and soil. Referring to the Missouri concentrated Animal Feeding operations Nutrient Management Technical Standards (NMTS)

Operation of the composter will be in accordance with NRCS and/or University of Missouri recommendations. Monitoring of temperatures is essential to proper operation of the composter. A dial thermometer with a 36" probe may be the most practical method of checking temperatures. Temperatures of 140 to 150 degrees should be reached in primary and secondary bins. Careful observation of the composting process will help develop skill in mixing proportions; moisture content and bird placement for best carcass break down.

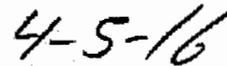
A Comprehensive Nutrient Management Plan has been developed for this system and has been reviewed and signed by the owner and planner.

PROJECT PLANNER CERTIFICATION:

I certify that I am familiar with the information contained in the application and attachments and that to the best of my knowledge such information is true, complete, and accurate.



Project Planner



Date

1. DESIGN INFORMATION FOR
2. DATE 05-Apr-16

M & M Cattle & Poultry WASTE MANAGEMENT PLAN BROILERS
Benton COUNTY
6.00 SINGLE STAGE BROILER HOUSE(S)

file: BROILER.WK1
Version 1.5 April 6, 1995
Dan Philbrick, NRCS

I. GENERAL INFORMATION:

| | | | | |
|---|---------|-----------------|---------|-----------------------------|
| 3. Total Capacity | 156,000 | birds | 6 | No. Houses |
| 4. Market Weight | 6.85 | | 26,000 | Birds per House |
| 5. Death Loss Rate | 0.05 | Dec. % | 148,200 | No. to market |
| 6. flocks/year | 5.0 | number | | |
| 7. Days/flock | 54 | Days/flock | 7.71 | Weeks/flock |
| 8. Spreader capacity | 400 | cu.ft. | 6.8 | tons |
| 9. Litter Volume per 1000 weight | 0.63 | cu.ft. | 35 | lbs./cu. ft. Unit Weight |
| 10. Soil-plant Filter acres per 1000 weight | 0.50 | acres/1000 lbs. | | |
| 11. Crop Nitrogen Uptake MPAN Method | 100 | lb/ac/yr | | |
| 12. Average bird weight: | 4.50 | lbs. | | |

II. CALCULATIONS:

| | | | | | | |
|---|-----------|------------|------|---------------------------------------|-------|-----------------------|
| 13. 1000 weights | 521 | 1000 wts | | | | |
| 14. Human Population Equivalents | 26036 | HPE | 50 | Human Equivalent conversion factor | | |
| 15. Manure Production per Year Litter-Manure | 119410 | cu.ft./yr. | | | | |
| 15a. Manure Production per Year Mortality Compost | 6184 | cu.ft./yr. | | | | |
| 16. Manure Production per Year Litter-Manure | 2030 | tons/yr. | | | | |
| 17. Number of Litter Loads | 298.5 | loads/yr. | 0.62 | hrs/load | 59.7 | loads/flock |
| 18. Days Spreading per Year | 18.5 | days/yr. | 10.0 | hrs/day | 3.7 | days/flock |
| 19. Litter Spread per Acre per Year | | Consv. | 115 | cu.ft./yr. | 2.0 | tons/yr. |
| 20. | | SPAN | 1701 | cu.ft./yr. | 29.8 | tons/yr. |
| | <u>1/</u> | Compost | 88 | cu.ft./yr. | 2.0 | tons/yr. |
| | | | | | 22.9 | cu.ft./flock (consv.) |
| | | | | | 0.4 | ton/flock (consv.) |
| | | | | | 340.2 | cu.ft./flock (SPAN) |
| | | | | | 6.0 | ton/flock (SPAN) |

SPREADING AND SPF REQUIREMENTS
FOR ONE FLOCK

SOIL-PLANT FILTER:

Conservative Management Approach:

| | | | | |
|-------------------------------------|--------|-------|-------|-------------|
| 21. Acres Needed for Litter-Manure | 1041.4 | acres | 208.3 | acres/flock |
| 22. Acres Needed for N from Compost | 70.2 | acres | 14.0 | acres/flock |
| 23. Total Acres Needed | 1111.6 | acres | 222.3 | acres/flock |

Simplified PAN Approach

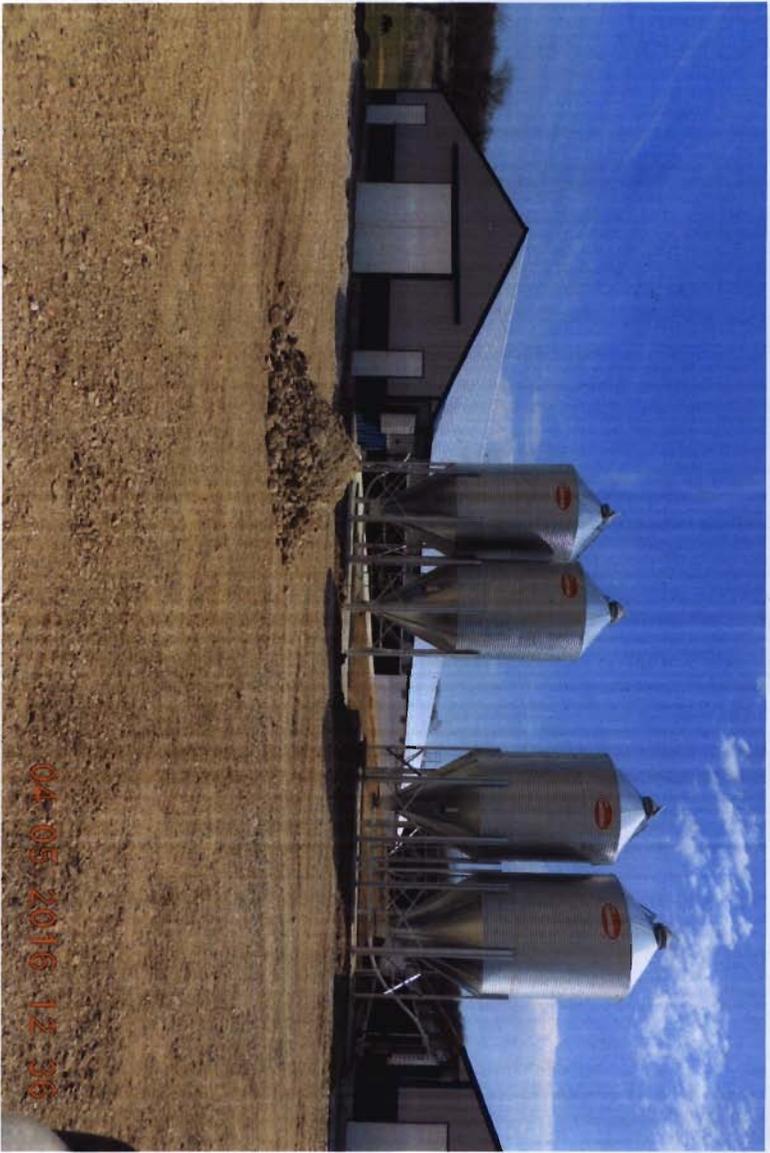
| | | | | |
|-----------------------------------|-------------------|-------------|--|---|
| Crop | Cool Season Grass | Unit/Acre | | Nitrogen based on 1.0 pounds N produced per day per 1000 pounds average animal weight. |
| Residue Removed | | ton/ac | | Tilled cropland reduce N by residual Organic N |
| Crop & Soils Nitrogen Requirement | 100 | Pounds/acre | | Percent left after storage and application losses |
| Modified Vol. & Min. Factor MVR | | MVR | | Includes composter acreage requirements |
| 24. Total Acres Needed | 70.2 | acres | | |

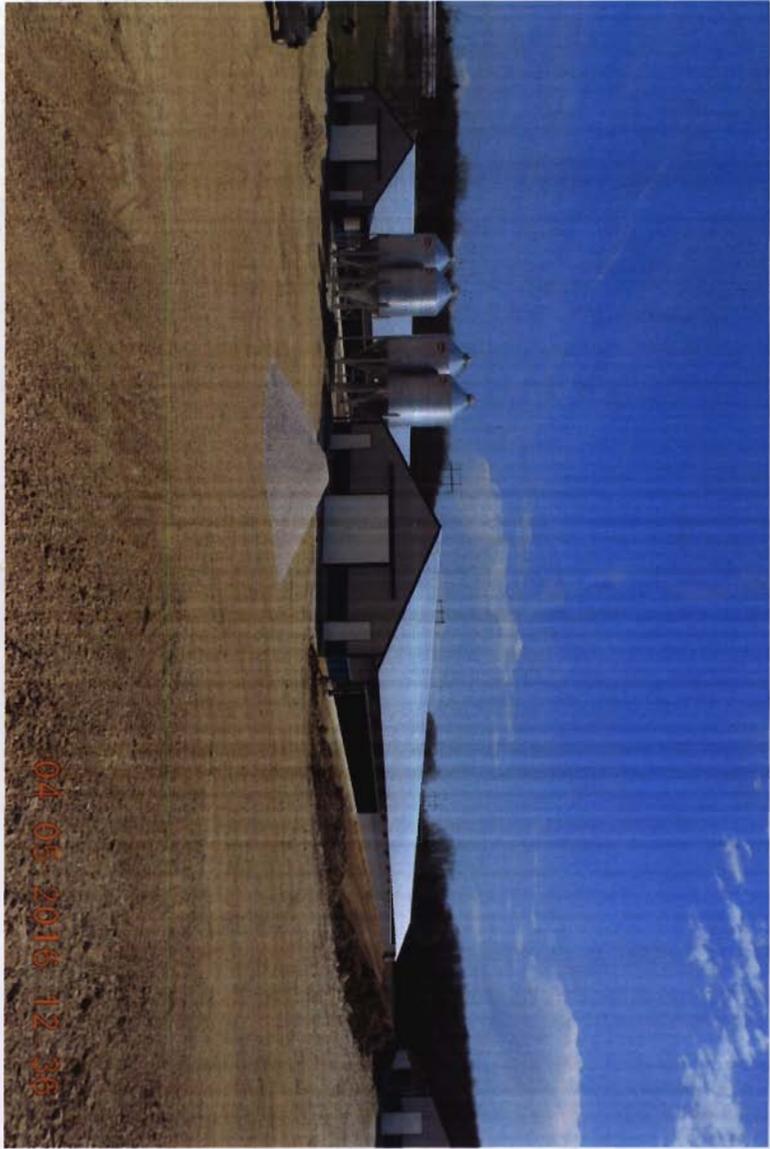
COMPOSTER DESIGN:

| | | | |
|-----------------------------|--------|-------------|---|
| Primary Bin Requirements | | | From design formula in SCS-313a |
| 25. Primary Storage | 2473.6 | cu.ft. | |
| 26. Bin Size: | Width | 8.0 | Standard bin size, 8ft. wide, 6 ft. long, 5 ft. deep. |
| 27. | Length | 6.0 | |
| 28. | Depth | 5.0 | |
| 29. Primary Bins Needed | 10.3 | use ----> | 11 Number Primary Bins Needed |
| Secondary Bin Requirements | | | |
| 30. Secondary Volume Needed | 2473.6 | min. cu.ft. | 11 Number Secondary Bins Needed |
| 31. Carcasses per year | 87.8 | tons/yr | |

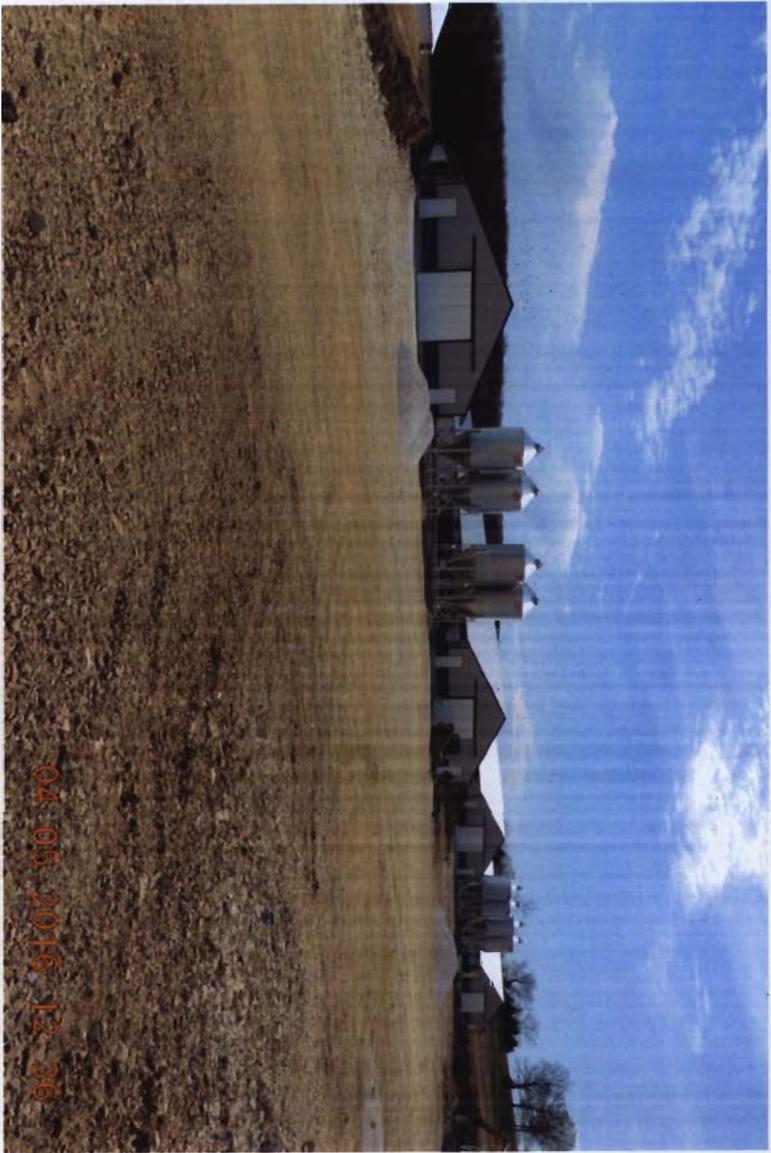
| |
|------------------|
| Checked |
| BY _____ |
| TITLE EE I _____ |







04 05 2016 12:38



04 05 2016 12 36



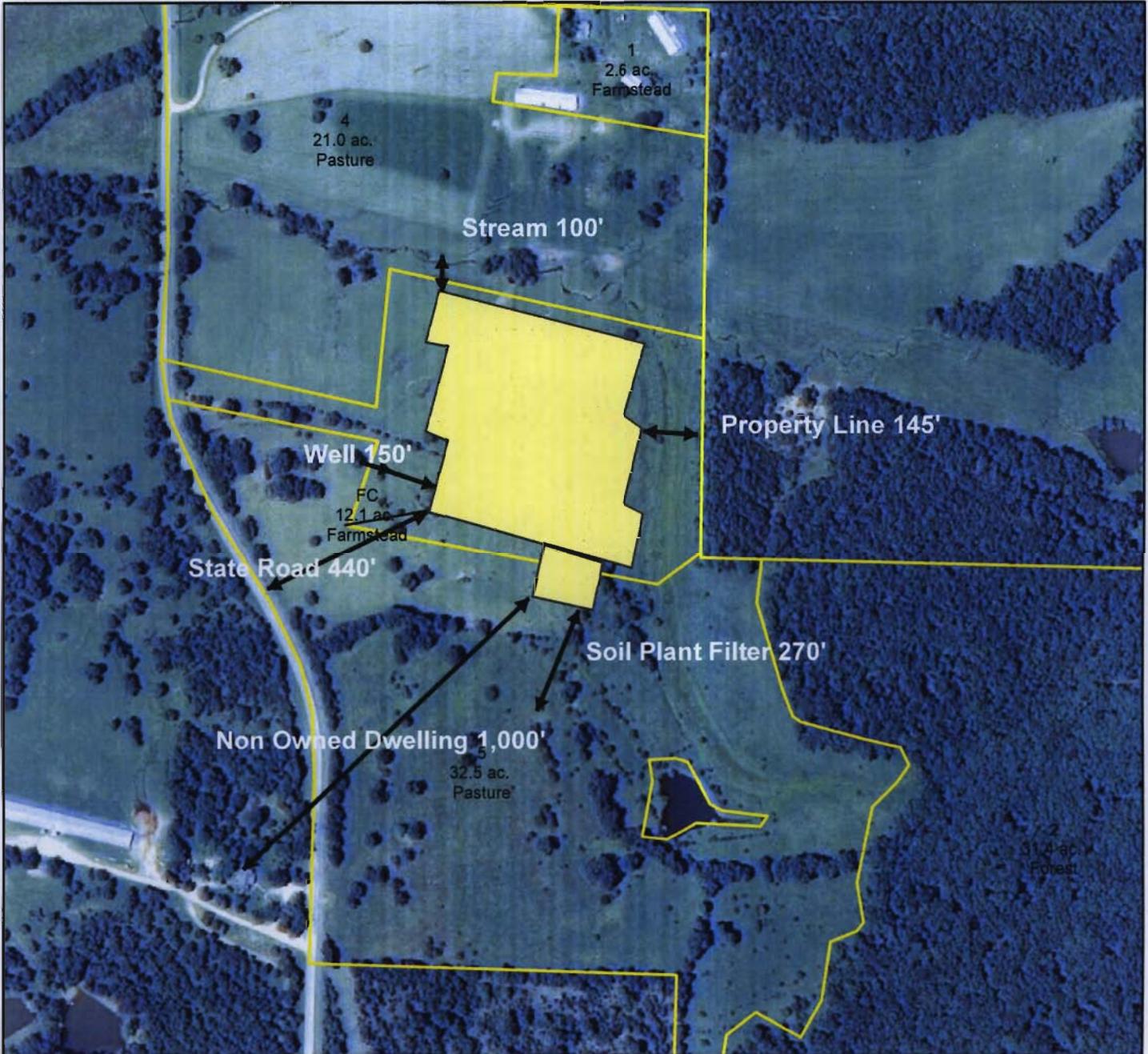
04-05-2016 12:37

Seperation Distances

Date: 4/24/2014

Customer(s): M & M CATTLE & POULTRY FARMS LLC
District: BENTON COUNTY SOIL & WATER CONSERVATION DISTRICT
Approximate Acres: 99.6
Legal Description: T41N, R20W, Section 17

Agency: NRCS



Legend

-  Consplan
-  Soils Map
-  Buildings
-  1000Buffer_Output.shp
-  Non Owned Dwelling

