

**HENRY COUNTY HEALTH CENTER
REGULATION NO. 97-1
CONFINED ANIMAL FEEDING OPERATIONS**

PURPOSE:

To enhance the public health and prevent the entrance of infectious, contagious, communicable or dangerous diseases, which could originate or be caused by Confined Animal Feeding Operations, all as provided by RSMo. 192.300.

AUTHORITY:

This regulation is enacted pursuant to Section 192.300, RSMo, which provides, in part, as follows:

The county commissions and the county health center boards of the several counties may make and promulgate orders, ordinances, rules or regulations, respectively as will tend to enhance the public health and prevent the entrance of infectious, contagious, communicable or dangerous diseases into such county, but any orders, ordinances, rules or regulations shall not be in conflict with any rules or regulations authorized and made by the department of health and senior services. . . [t]he county commission or county health board of any such county has full power and authority to initiate the prosecution of any action under this section.

Section 1. DEFINITIONS

1.1 Animal Carcasses - The dead body or fetus or any part thereof of any Animal of any nature.

1.2 Animal Unit - A unit of measurement to compare various Animal types at a CAFO. An equivalent Animal type and weight that has a similar amount of manure produced as one of the listed Animal categories. One Animal Unit equals the following: 1.0 beef feeder or slaughter Animal; 0.5 horse; 0.7 dairy cow; 10 swine weighing over 10 but less than 56 pounds; 2.5 swine weighing over 55 pounds; 10 sheep; 30 laying hens; 55 turkeys; or 100 broiler chickens.

1.3 Animal Waste - Any Animal excrement, Animal Carcasses, feed waste, Animal Wastewater, or any and all other waste associated with Animals.

1.4 Animal Waste Management System - Any system (liquid or dry) used for the collection, storage, distribution or disposal of Animal Waste generated by a CAFO.

1.5 Animal Wastewater - Any Animal excreta, any liquid that comes into contact with any manure, litter, bedding, or any other raw material or intermediate or final material or product used in or resulting from the production of Animals or products directly or indirectly used in the operation of a CAFO, i.e., spillage or overflow from Animal watering systems; any liquid used in washing, cleaning, or flushing pens, barns or manure pits; any liquid used in the washing or spraying to clean or cool Animals; and any liquid used in dust control for a CAFO.

1.6 Best Management Practices (hereinafter referred to as BMP) - Those schedules of activities, prohibitions of practices, maintenance procedures, and all other management practices to prevent or reduce the pollution of air, Surface or Groundwater, as required by this regulation. BMP includes, but is not limited to, the following: treatment requirements; operating procedures; practices to control site runoff spillage or leaks; sludge or waste disposal; odor, chemical, or noise pollution; and all items associated with or contributing to any pollution.

1.7 Board - The Henry County Health Board of Trustees

1.8 Confined Animal Feeding Operation (hereinafter referred to as a CAFO) - Any operation consisting of a lot, building, or combination of lots and buildings specially designed for the confined feeding, breeding, raising, or holding of 1,000 or more Animal Units of the same Animal type.

1,000 Animal Units = BEEF FEEDER OR SLAUGHTER ANIMAL	1,000 head
1,000 Animal Units = HORSE	500 head
1,000 Animal Units = DAIRY COW	700 head
1,000 Animal Units = SWINE (weighing over 10 lbs. but less than 56 lbs.)	10,000 head
1,000 Animal Units = SWINE (weighing 55 lbs. or more)	2,500 head
1,000 Animal Units = SHEEP	10,000 head
1,000 Animal Units = LAYING HENS	30,000 head
1,000 Animal Units = TURKEYS	55,000 head
1,000 Animal Units = BROILER CHICKENS	100,000 head

for at least 45 continuous days per 12 month period, during which time waste may accumulate. This definition shall include confined enclosure areas where concentration of Animals is such that vegetative cover is not sustained over at least fifty percent (50%) of the confinement area.

1.9 County Health Officer (hereinafter referred to as CHO) - Administrator of the Henry County Health Center or representative designated by the administrator.

1.10 Discharge - Any release of Animal Waste by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, leaching or any other means of release of Animal Waste.

1.11 Land Application Sites - Any land where processed Animal Wastewater is injected, knifed, or placed into soil in any manner.

1.12 Health Hazards - Any condition which may or can cause disease or harm to a Person, community, Animal, or the environment, whether now or in the future.

1.13 Permit - A written authorization issued by the CHO and approved by the Board, which authorizes the permittee to construct, modify or operate a CAFO.

1.14 Person - Any individual, partnership, corporation, limited liability company, association, firm, company, joint venture or any combination of these.

1.15 Processed Animal Wastewater - Animal wastewater placed in a lagoon.

1.16 State Registered Engineer - A Registered Professional Engineer, authorized and empowered to operate in that capacity in the State of Missouri, who is registered as such with the Missouri Board of Architects, Professional Engineers, and Land Surveyors. CHO State Registered Engineer (CHO SRE) shall be the State Registered Engineer hired by the Board. The CHO SRE shall certify that no conflict of interest exists, in that neither the CHO SRE nor any organization by which the CHO SRE is employed is currently under contract with, or who has any business relationship with, any CAFO applicant. "SRE" or "CAFO SRE" shall mean the State Registered Engineer hired by the CAFO.

1.17 State Registered Geologist - A Registered Geologist, authorized and empowered to operate in that capacity in the State of Missouri, who is registered as such with the Missouri Board of Geology Registration. CHO State Registered Geologist (SRG) shall be the State Registered Geologist hired by the Board. The CHO SRG shall certify that no conflict of interest exists in that neither the CHO SRG nor any organization by which the CHO SRG is employed is currently under contract with, or who has any business relationship with, any CAFO applicant. State Registered Geologist shall be the State Registered Geologist hired by the CAFO.

1.18 Stop Order - A written order issued by the Board to stop construction, modification or operation of a CAFO or land site applicant.

1.19 Surface or Groundwater - Liquid that is contained in or flows through all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of liquid, whether or not it is contained on the surface or underground, naturally or artificially, whether or not on public or private lands, that are contained within, or flow through the State of Missouri.

1.20 Occupied Dwelling - Any residence, church, school, business, etc., which has been occupied at anytime during the calendar year immediately prior to the date of application or for which occupancy is anticipated within a year after issuance of an operating Permit.

1.21 Soil Scientist - An individual who has a minimum of fifteen (15) semester credit hours of soils course work including a minimum of three (3) hours in the area of soil morphology and interpretations, and has a minimum of two (2) years of field experience.

1.22 Aerobic Lagoon - A lagoon which utilizes the principle of oxidation in the decomposition of sewage by the introduction of air into the sewage.

1.23 Noxious Gases - Hydrogen Sulfide gas in a quantity above established ambient standards. See Section 4.14 A.

1.24 Animal Unit Equivalent - an equivalent Animal type and weight that produces a similar amount of manure as one of the listed Animal Unit categories. This also applies to other Animal types which are not specifically listed.

1.25 Animal - domestic animals, fowl or other types of livestock, except for aquatic animals.

Section 2. PERMIT PROCESS

2.1 The Permit process shall be a three step approval process consisting of

1. a pre-application Permit (engineer's report)
2. construction Permit and
3. an operating Permit

The CAFO must obtain approval of each step prior to the submittal of the next application step. Each step in the process shall be reviewed and approved upon the basis of actions taken and recommendations made in the previous application steps. The first step shall be referred to as the pre-application Permit. This step consists primarily of submittal of a comprehensive engineering report. The report must include:

- A. Project description, engineering analysis, outline of treatment processes and design criteria in accordance with 10 CSR 20-8.110. This submittal shall include:
 - (i) The types of Animals to be confined, including the average and maximum numbers of each type and the total number of Animals;
 - (ii) The waste handling plan and general layout of the operation presented in plain and nontechnical terms;
 - (iii) A plan for the disposal of Animal Wastes, Animal Carcasses, wastewater (including Animal Wastewater), and any other wastes generated by the facility;
 - (iv) The density of Animals per acre at such operation;
 - (v) The expected duration of operations at the site described;
 - (vi) The name and address of the CAFO, directions to the property of the CAFO, the legal description of the property utilized by the CAFO, and the legal relationship between the CAFO and the land utilized by the CAFO. If the CAFO is not a proprietorship, then also its individual representative;

- (vii) A complete plant layout drawing, drawn to scale, showing the locations of all operating components, buildings, incinerators, lagoons, property boundaries, and the locations of the nearest inhabited dwellings. Such document shall be prepared by a registered professional engineer;
- (viii) A Henry County soil survey, and if land reclamation or changes have occurred since the most recently published Henry County soil survey, on-site soil testing performed by a Soil Scientist;
- (ix) The location of waters of the state, including the proximity of such waters to drainage from Land Application Sites and waste storage facilities owned by, leased from, or utilized by applicant.

CAFO Facilities:

- (a) Provide the CAFO SRE's plan of all buildings, lagoons and Land Application Site locations in relationship to all streams, lakes, ponds, etc. on owned or leased property; the distance in feet to all natural surface water drainage systems, all wells on the property, all wells on adjacent property within 8,000 feet of the CAFO.
 - (b) Provide a list of owners of all leased Land Application Sites including name, address, and telephone number with a copy of the lease contract;
 - (x) Name, address and telephone number of the Person or his authorized agent who is seeking the Permit to enable the CHO to obtain further information; and
 - (xi) Evidence that the owner or operator has applied for all other applicable permits which are required by local, state, or federal governmental authorities for the construction and operation of the affected facility, or which may apply to any component of the affected facility, including, but not limited to the air quality permits, water quality or National Pollutant Discharge Elimination System ("NPDES") permits for the lagoon and storm water runoff; and a solid waste disposal permit, if applicable. The CAFO must submit with the application for a construction Permit evidence that all of the above applicable permits have been obtained from the appropriate agencies.
- B. Description of Best Management Practices as described within this regulation.
- C. Environmental Impact Assessment, as described in Section 26.10.

- D. Land application plan. It is suggested that the contents of this report should comply generally with Missouri regulation 10 CSR 20-8.110.
- E. Geologic Report.
- F. The CAFO shall have dispersion modeling performed to predict the location off the property where maximum ground-level impact of odors is likely to occur.
- G. The Permit, or the application for the Permit, shall be signed by:
 - (i) the chief executive officer of a corporation, or an individual having responsibility for the overall operation of the facility or activity, such as a plant manager;
 - (ii) a general or managing partner or the proprietor, respectively, of a partnership, limited liability company, limited partnership, or sole proprietorship; or
 - (iii) a principal executive officer of a municipal, state or other public facility, or an individual having overall responsibility for environmental matters at the facility.

Section 3. PERMIT REQUIREMENTS FOR CAFO'S

3.1 No Person shall construct, modify or operate a CAFO unless the Person has first obtained a Permit issued by the Board, except as provided under Section 25.02 of this regulation. Such Person shall obtain the separate Permit referenced under Section 25.05 and Permitting process under Section 24.01.

New operations classified as a CAFO of 1,000 or more Animal Units shall be required to obtain a pre-application, construction, and operating Permits from the Board. The 1,000 Animal Units are the following number and types of Animals:

I.	BEEF FEEDER OR SLAUGHTER ANIMAL	1,000 HEAD
II.	HORSE	500 HEAD
III.	DAIRY COW	700 HEAD
IV.	SWINE (weighing over 10 lbs. but less than 56 lbs.)	10,000 HEAD
V.	SWINE (weighing 55 lbs. or more)	2,500 HEAD
VI.	SHEEP	10,000 HEAD
VII.	LAYING HENS	30,000 HEAD
VIII.	TURKEYS	55,000 HEAD
IX.	BROILER CHICKENS	100,000 HEAD

3.2 Permit Requirements - Exceptions:

- A. Operations having less than 1,000 Animal Units will not be required to obtain a pre-application, construction or operating Permit.

- B. Any CAFO that has been in full and complete operation OR that has applied for AND received all permits as required and approved by the Missouri Department of Natural Resources as of September 23, 1997 shall not be required to obtain a pre-application, construction or operating Permit, and may continue and maintain their operation without complying with any terms of this regulation, except with respect to their maximum size. All CAFOs exempt under this section shall be allowed to enlarge their operations to the following number and types of Animals without being subject to this regulation:
- (i) 6,999 beef feeder or slaughter cattle
 - (ii) 4,899 mature dairy cows (milking and dry cows)
 - (iii) 17,499 swine each weighing over 55 lbs.
 - (iv) 34,995 swine weighing over 10 lbs. but less than 56 lbs.
 - (v) 3,499 horses
 - (vi) 69,999 sheep
 - (vii) 384,999 turkeys
 - (viii) 524,925 broiler chickens
 - (ix) 209,999 laying hens
 - (x) 6,999 Animal Unit equivalents
- C. The mere sale or transfer of ownership of any CAFO exempted under provisions of this Section 25.02 is not prohibited and will not affect the exempted status as provided herein.
- D. Sale barns and/or livestock markets are exempt from this regulation.

3.3 A Person who applies for a Permit under this regulation must provide a complete Permit application and file the application with the CHO on such form or forms as the CHO may require.

- A. Any Person applying for a Permit for a CAFO under this section shall make the following certification:

“I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that

there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

3.4 The Permit application to construct, modify or operate a CAFO must be accompanied by a CAFO State Registered Engineer design with data, specifications, and other pertinent information pertaining to the BMP to be used in the construction, modification, or operation of the CAFO and any additional information requested by the Board. The CAFO must analyze alternate design processes and justify the basis upon which the final process was selected.

3.5 The Person requesting the use of land application techniques shall submit with their pre-application report the following items:

- A. The site management plan;
- B. The nutrient application rates;
- C. The timing of waste application with respect to the nutrient uptake cycle of the vegetation found on the Land Application Sites as specified by the Missouri Department of Natural Resources or the University of Missouri; and
- D. The waste storage and distribution methods prepared in accordance with the requirements of Section 26 of this regulation, i.e., Animal Wastewater lagoons and above ground storage of Animal Wastewater, and land application methods and processes;

The Persons applying for a pre-application Permit shall notify the CHO of all ownership arrangements and all contractual agreements for the use of the land proposed as Land Application Sites by submitting proof of the ownership of the Land Application Sites as required by the CHO.

3.6 No new CAFO or modification to an existing CAFO which would require a Permit under this regulation shall be placed into operation after the effective date of this regulation unless the Owner or Operator demonstrates full compliance with this regulation.

3.7 Health Board Response

- A. Health Board Actions. The Henry County Health Board will review the Permit application for completeness, and respond to the Owner or Operator of the Affected Facility.
- B. The Owner or Operator of the affected facility must provide documentation prior to receiving an operator’s Permit that it has built the facility in strict accordance with the plans approved by Missouri Department of Natural Resources, or other governmental authorities.

Otherwise, the facility will not be allowed to operate, and no operating Permit will be approved until the Owner or Operator of the affected facility demonstrates that any and all noncompliant aspects of CAFO operations have been corrected.

- C. If the Henry County Health Board finds that the operating Permit application is complete, and if documentation has been provided showing that the construction has been in accordance with approved plans, an operating Permit will be issued. Final approval of the Permit will be given after the CAFO passes the performance test requirements. The scheduling of the tests will be at the discretion of the Board.

3.8 Modification - Permit Required:

- A. The Person who owns and/or the Person who operates the CAFO (except as exempted under Section 25.02), must submit an application for a Permit to modify the CAFO. Such application shall be submitted to the CHO on such form or forms as the CHO may require prior to modification. Modifications shall include, (but shall not be limited to) the following:
 - (i) Change in ownership, management or control of a CAFO;
 - (ii) An increase in the number of Animal Units by twenty percent (20%) at anytime;
 - (iii) Change in Land Application Sites; or
 - (iv) Change in the handling, treatment or disposal of Animal Waste and Animal Wastewater of any CAFO.
- B. All Permit modifications must comply with this regulation.

A Permit fee of \$250.00 will be required for each modification, and will be paid into the Henry County Health Center general fund.

3.9 The CHO shall attempt to approve or disapprove Permit applications within sixty (60) days from the date the completed application is submitted for approval to the Board.

Section 4. BEST MANAGEMENT PRACTICES (BMP) - PLAN

4.1 The CAFO's SRE shall develop a BMP Plan. The BMP Plan must be approved by the Board. The BMP Plan shall, at a minimum, specifically include (but not be limited to) the following components:

- A. Land Application Sites and procedures
- B. Specifications and location of buildings;

- C. Proposed location and specifications of Animal Wastewater lagoon; collection methods, proposed above ground storage, and the distribution systems to be utilized;
- D. Land Application Site procedures and practices;
- E. Open Lot and Pen utilization; and
- F. Animal Carcass disposal;
- G. Comparison of various treatment options evaluated and the basis for selecting the recommended process to be used. The CAFO must consider at least two alternate treatment methods.

4.2 Additional requirements for the BMP shall include:

- A. All the cleaning methods and practices of the CAFO;
- B. Laboratory analysis of all soil, surface or groundwater, Animal Wastewater, and air, on a daily, weekly, monthly or quarterly basis as determined by the Board;
- C. Full records of all test results;
- D. A provision whereby the CHO must approve all laboratory results and approve the utilization of Animal Waste disposal; and
- E. A provision whereby the CAFO certifies that a state certified wastewater Class D operator shall be employed to operate and maintain the facility.

4.3 It shall be the duty of the Persons operating the CAFO and the owners of the CAFO to comply with the approved BMP Plan and to prevent pollution within Henry County.

4.4 Confinements Buildings, Storage Buildings and all other Buildings of the CAFO (hereinafter referred to as "Building"): The BMP Plan shall include, as a minimum, these standards for the CAFO:

- A. No confinement building shall be constructed within 3,000 feet of all existing Occupied Dwellings, unless a lesser distance is negotiated and reduced to writing between the CAFO and all dwelling owners and submitted to the CHO;
- B. The BMP shall require specifications of all building sizes, number of Animals housed in each building, and all structure and component specifications of all buildings;
- C. No building shall be modified to such an extent that it deviates from the plan submitted by the CAFO SRE and approved by the CHO SRE;

- D. Prohibition of noxious gas Emissions from Livestock Confinement Operations. The BMP shall provide procedures whereby noxious odors shall not be Discharged into the outside air;
- E. Sufficient water under pressure shall be available to employees for lavatory and shower purposes. All confinement buildings shall provide for cold water under pressure for cleaning and maintenance of the confinement buildings;
- F. The BMP Plan shall provide plans and procedures of cleaning. This plan shall have as its goal the elimination of disease potential for humans or Animals;
- G. The BMP Plan shall set forth a prevention and clean-up plan related to toxic pollutants. The prevention plan is to avoid spills of toxic pollutants in all buildings and grounds affiliated with the CAFO. The clean up shall comply with all requirement of the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), National Institute of Occupational Safety and Health (NIOSH) Standards, Missouri Department of Natural Resources and the Missouri Department of Health and Senior Services rules and regulations; and
- H. A professional geologist's report shall be included in the BMP Plan of the preliminary engineering report. The geologist's report shall provide for the utilization of monitoring wells and clearly identify all potential geological hazards and the methods to be used to mitigate such hazards. The number and location of such wells shall be set forth in the CAFO SRE's Plan. Monitoring wells shall be constructed, so as to detect, as early as possible, migration of pollution. All wells shall be utilized to provide background information and shall be sampled prior to any generation, storage, or land application of any Animal Wastewater. All monitoring wells may be inspected by the CHO monthly. All laboratory analysis required by the CHO and all associated costs shall be borne by the CAFO. The geologist's report shall also clearly state recommendations for pond liners and address geologic collapse potential.

4.5 Animal Wastewater lagoon collection, above ground storage, and distribution systems. The BMP Plan treatment processes shall include these minimum standards for the CAFO:

- A. No lagoons shall be constructed within 3,000 feet of the nearest existing Occupied Dwelling.
- B. No lagoons shall be constructed or located on an elevation less then 742 feet in Henry County. Lagoons constructed on the 742 feet elevation line shall have reinforced berms to protect the lagoon from flooding.

- C. All CAFO lagoons must be constructed to handle waste by aerobic method.
- D. The CAFO registered engineer shall certify upon completion of construction that he or she has inspected the construction of all facilities included in the application and that they have been constructed according to the Permit conditions and specifications and are in full compliance with this regulation. This certification shall include evidence of inspection of all underground buried pipelines, thrust blades for piping, compaction and other engineered embankment and fill field tests and all tests required by this regulation.
- E. Lagoon site subsurface evaluation investigation shall be completed by a professional State Registered Geologist and included in the pre-application engineering report.
- F. The CAFO shall ensure that lagoons constructed by the CAFO have a minimum field percolation "K" factor in accordance with 10 CSR 20-8.200 and Manual 121 Section IV-B, and such other requirements as directed by the CHO State Registered Engineer.
- G. The lagoons shall be designed, constructed, and operated to contain all Animal Wastewater and precipitation of a 25 year, 24 hour storm event at the location of the point source. Additionally, the lagoon structure shall have sufficient capacity to contain 21 days of Animal Wastewater. Additionally, the lagoon size shall be sufficient to allow for surface retention, contaminated rainfall from open lots and associated areas, processed Animal Wastewater, and all other wastes which may enter or may be stored in the lagoon structure. Additionally, the lagoon shall be designed to have 12 inches of freeboard.
- H. A lagoon shall have a security fence installed at least 50 feet from the outside of the lagoon reasonably adequate to prohibit any Animal or non-authorized individual from access to the lagoon. A gate shall be installed sufficient in size to allow the entry of equipment to drain off liquid from the lagoon for land application.
- I. All equipment and facilities of the CAFO utilized to handle waste and processed Animal Wastewater shall be kept clean and odor free by providing an equipment wash station which drains into an Animal Wastewater lagoon except when handling and disposing of the same in a manner approved by the CHO.
- J. There shall be no Discharge of any Animal Waste or Processed Animal Wastewater to Surface Groundwaters at levels that reach the Maximum Contaminant Levels (MCL), according to U.S. Environmental Protection Agency (EPA), Missouri Department of Health and the Missouri

Department of Natural Resources regulations. If for any reason there is a Discharge, the permittee is required to make immediate notification to the Department of Natural Resources and the CHO. No voluntary Discharge by the permittee is allowed without prior approval of the Board.

- K. Removal of processed Animal Wastewater from the lagoon shall take place on a routine schedule. A record log shall be maintained indicating daily inspections of the Animal Wastewater level in the lagoon. The CHO may review all daily inspections. The BMP Plan shall cover the Animal Waste management system equipment for removing processed Animal Wastewater from the lagoon. Equipment for removing processed Animal Wastewater from the lagoon shall be available whenever needed to restore the freeboard level required in subparagraph G of this section hereinabove.
- L. A permanent measuring device shall be maintained in each Animal Wastewater lagoon to show the volume required in subparagraph of this section hereinabove. The marker shall be visible from the top of the berm. A rain gauge shall be kept by the facility operator.
- M. All Processed Animal Wastewater shall be tested at least one time per calendar year, and thirty days prior to any scheduled reduction in lagoon liquid level, or at such other times as the Board requires. The testing dates shall be specified by the Board. Said tests shall be utilized to ascertain the amounts of the following: pH, antibiotics, copper sulfate, total nitrogen, ammonium, potassium, phosphorous, nitrates, heavy metals and pesticides and all other pollutants or potential Health Hazards to Animals or humans. The CAFO shall ensure that employees or contractors who perform such testing are not exposed to toxic and hazardous substances in excess of the Exposure Limits, Immediately Dangerous to Life or Health levels and the Permissible Exposure Limits (PEL) as found in 29 CFR 1910, Subpart Z, General Industry Standards for Toxic and Hazardous Substances. Costs of laboratory analysis and all associated costs shall be borne by the CAFO.
- N. The BMP Plan, which has been approved by the CHO SRE, shall provide for the utilization of monitoring wells. All monitoring wells shall be inspected by the CHO monthly. All laboratory analysis from the inspection and all associated costs shall be borne by the CAFO.

4.6 Land Application Sites and practices: The BMP Plan shall include these minimum standards for CAFOs:

- A. All CAFOs shall have BMP Plan for each Land Application Site, prepared by a State Registered Engineer, and approved by the Board and the Missouri Department of Natural Resources. The CHO shall require proof

of land ownership or of contractual agreements for use of land as a Land Application Site.

- B. A notice shall be given to all CAFO land owners of leased or contracted lands for Land Application Sites, by the CHO informing the CAFO and owners of their responsibilities concerning obtaining Land Application Site Permits prior to applying any processed Animal Wastewater to the Land Application Sites. These notices shall be obtained at the Henry County Health Office. Each party receiving a notice should acknowledge receipt in writing on an affidavit provided by the CHO.
- C. The soil shall be tested by the CAFO under the supervision of the CHO prior to application of processed Animal Wastewater for pH, antibiotics, copper sulfate, total nitrogen, ammonium, potassium, phosphorous, nitrates, heavy metals and pesticides, and for such other potential pollutants as specified by the CHO for all Land Application Sites owned or leased by the CAFO. All costs of laboratory sample collection, analysis and all other associated costs shall be borne by the CAFO.
- D. The CHO may require testing to insure that the application rate of the processed Animal Wastewater does not exceed the nutrient needs of the crop with said needs established by the University of Missouri Extension Service and as described in Manual 121 of the Missouri Department of Natural Resources.
- E. The application rate of all processed Animal Wastewater shall either be knifed in or injected into the soil with a device and method approved by the CHO SRE, to prevent surface seepage and minimized disturbance of crop residue.
- F. Processed Animal Wastewater application shall be applied only on land approved by the CHO SRE and the crop and soil specialists.
- G. Records shall be kept for applied processed Animal Wastewater. These records shall be kept in sufficient detail to determine the application rates. Records shall be kept of all Land Application Sites including the dates, locations of application, weight and volume of processed Animal Wastewater and acreage over which the load was spread. All records shall be kept and maintained at the CAFO. The CAFO shall provide the CHO with a copy upon request. Further, the CHO shall have access to the original at anytime.
- H. No application of Animal Waste or processed Animal Wastewater shall occur prior to the Land Application Site being approved by the Board.
- I. Processed Animal Wastewater applications shall not be applied unless it is applied:

- (i) 300 feet from any property that is not an approved Land Application Site;
- (ii) 300 feet from any Occupied Dwelling existing at the time of the issuance of Permit;
- (iii) 300 feet from all streams (including intermittent streams) ponds, strip pits, lakes, springs, sinkholes, rock outcrops, wells and water supplies;
- (iv) on land located at an elevation of more than 742 feet (mean sea level).

All other Animal Waste applications shall not be applied within.

- (i) 1,000 feet from any property that is not an approved Land Application Site;
 - (ii) 1,000 feet from any Occupied Dwelling existing at the time of the issuance of the Permit;
 - (iii) 1,000 feet from all streams (including intermittent streams), ponds, strip its, lakes, springs, sink holes, rock outcrops, wells and water supplies.
- J. Discharge of Animal Wastes or processed Animal Wastewater not in conformity of this regulation shall be deemed a violation of this regulation;
- K. The BMP Plan shall provide for all equipment utilized to apply Animal Waste and processed Animal Wastewater to land sites shall be kept clean and odor free.

4.7 Open lot and pen utilization: The BMP Plan shall include these minimum standards for a CAFO:

- A. Open lots and pens utilized for holding Animals shall not be located in the flood easement areas within Henry County.
- B. Open lots, pens, and associated Animal Wastes shall be isolated from surface drainage by ditches, dikes, terraces or other such structures designed to carry peak flows back to the Animal Wastewater lagoon, and/or settling basin.

4.8 Animal Carcass Disposal: The BMP Plan shall include these minimum standards for CAFO:

- A. The BMP Plan shall provide for proper handling practices for all Animal Carcasses. Animal Carcasses shall not be managed in a manner that would create a fly problem or cause a Health Hazard. It is prohibited to allow any CAFO Animal (whether alive or dead) to be placed in any lagoon.
- B. Animal Carcasses shall be properly disposed of as soon as reasonably possible. The CAFO may dispose of Animal Carcasses by having a rendering company dispose of the same outside of Henry County. Until the Animal Carcasses have been picked up by the rendering company, they shall be kept in a chilled condition below 46 degrees Fahrenheit. Additionally, the CAFO may dispose of Animal Carcasses by composting in a manner as set forth in the CAFO SRE's BMP Plan, said plan to be approved by the CHO SRE.

4.9 Insect and Pest Control: The BMP Plan shall include these minimum standards for a CAFO:

- A. The CAFO shall prevent any Discharge of pesticides or herbicides not in conformity with EPA or State regulations into the surface or groundwater in Henry County.

4.10 Environmental Impact Assessment: The BMP Plan shall include an Environmental Impact Assessment that is required by the Missouri Department of Natural Resources;

- A. An Environmental Impact Assessment shall be filed by the CAFO SRE for the CAFO for all land used by the CAFO and all Land Application Sites. The BMP shall insure that the CAFO Animal Waste and processed Animal Wastewater handling, treatment and management shall not cause destruction or adverse modification of the critical habitat of endangered or threatened species, or contribute to the taking of endangered or threatened species of plant, fish or wildlife.
- B. The Environmental Impact Assessment shall be included in the engineering report submitted with the pre-application Permit request and shall include clearances from the following agencies:
 - (i) Missouri DGLS (Division of Geologist & Land Survey)
 - (ii) Missouri State Historical Preservation Office
 - (iii) U.S. Fish and Wildlife
 - (iv) U. S. Army Corps of Engineers
 - (v) Missouri Department of Conservation

4.11 The BMP Plan submitted in accordance with this regulation shall include composting as an alternative to land application of Animal Waste, processed Animal Wastewater,

or Animal Carcasses. All composting shall be at a Missouri Department of Natural Resources permitted composting facility.

4.12 The BMP Plan shall require the CAFO to file a sufficient bond, approved by the CHO, executed by the CAFO as principal and one or more sufficient sureties, or cash, certificate of deposit, or other form approved by the Board, to the effect that the CAFO is bound to pay the costs of any inspections, investigations, laboratory costs, or any other costs that should arise in relation to non-compliance with any portion of this regulation, including the Permit requirements, and any legal costs, including reasonable attorney's fees, incurred in the enforcement of this regulation by the Board or its designee. Said bond shall be in an amount equal to \$25.00 per Animal Unit under the Permit application of the CAFO, or as otherwise determined to exist. This provision shall not limit the ability of the Board to recover any costs as described herein not covered by the bond.

4.13 The CAFO shall employ a state certified wastewater operator maintaining a Class "D" certificate or higher. This operator shall be a permanent full-time employee of the CAFO and fully trained to operate and maintain the CAFO wastewater facilities. Training shall include topics such as operation and maintenance of the CAFO, land application of processed Animal Wastewater, material storage and handling practices, record keeping, spill response and cleanup requirements.

4.14 Prohibition of Noxious Gas emissions. No Person may operate an affected facility which emits hydrogen sulfide gas, or any other gas in a quantity above established ambient standards, or common accepted standards, or that is otherwise harmful to human beings. Determination and documentation of whether this will occur will be made through performance testing, as described herein.

- A. All CAFO facilities and Animal Wastewater Lagoons shall be designed in such a manner as to avoid the degradation of air quality. In no event shall the concentration of gases at the boundary of the land resulting from the operation of an Animal Wastewater Lagoon or feedlot exceed the following levels:

<u>Gas</u>	<u>Maximum Allowable Concentration¹</u>	<u>Exposure Period²</u>
Carbon Dioxide	5,000	Not applicable
Ammonia	5	Not applicable
Hydrogen Sulfide	10	2 hours
Methane	1000	Not applicable
Carbon Monoxide	50	1 hour

¹ In parts of pure gas per million parts of atmospheric air

² The time during which the effects of a noxious gas are felt by an adult human or a 150-pound livestock.

- B. **Meteorological Measurements.** The Owner or Operator of the affected facility shall install a meteorological station in the area which measures wind speed, wind direction, and temperature. These parameters shall be monitored on a 10 meter tower. The data shall be collected continuously on a data logger, and made available to the Board when requested.
- C. **Performance Testing.** After operation startup of an affected facility, the following performance tests shall be performed by the Board on its own initiative or in response to complaints by adjoining property owners or other affected Persons. The owner or operator will have the option of observing the tests, and will be given reasonable notice of when they will occur, however, failure of such notice shall not invalidate any such test.
1. **Scentometer Measurements**
 - (a) Scentometer readings will be taken beyond the property boundaries at three locations within the zone where the dispersion modeling showed that the maximum odorous impacts would occur. Readings will also be taken at the two closest occupied inhabited dwellings outside the property boundary of the affected facility. A total of five (5) locations will therefore be used in the testing program. The scentometer is an odor dilution instrument for taking field measurements of odor intensity, and is used by the Missouri Department of Natural Resources for that purpose. It was originally developed by the U.S. Public Health through project grants A-58-541, A-59-541, and A-60-541. There is currently one known manufacturer and vendor of scentometers: "Barnebev & Sutcliffe. N. Cassady Ave., Columbus, Ohio 43219, phone 614-258-9501".
 - (b) The samples shall be taken on a date selected by the CHO between 7:00 and 10:00 a.m. and between 3:00 and 6:00 p.m. This time schedule may be revised if the dispersion modeling indicates different sampling times will be more applicable for measuring high concentrations.
 - (c) The samples will only be taken when the wind is blowing from the affected facility towards the five (5) prescribed

sites. The scentometer testing will continue until a total of fifteen (15) sets of daily readings have been taken.

- (d) The scentometer readings shall be taken in accordance with the manufacturer's instructions.
- (e) If an odor is detected on the scentometer at a 7:1 solution of the odorous air to odor free air, a sample will be taken. A valve will be opened on a canister, which has been previously purged of odor and evacuated of all gases, and sample collection will begin. The Person from the Board will then leave the sampling location to an area which has odor free air. After a minimum of 15 minutes, but no longer than 60 minutes after the first sample, the Person shall return to the initial location and take another sample. The valve on the canister sample will be closed.
- (f) If odor is detected during this second testing effort after the 7:1 dilution, the canister valve will be opened, and a second portion of sample will be drawn into the canister for possible further testing, described below. The meteorological strip chart record shall be checked, and the wind direction verified to make sure that it was from the affected facility throughout the sampling period. Should it be found that the wind was not blowing from the facility toward the sampling location while samples were being taken, the samples shall be void and no further sampling shall be required.
- (g) Complete records of all sampling times, odors detected and wind directions during the sampling and the name of the Health Board Inspector Engineer shall be kept, regardless of the sampling results.

(2) Additional Testing

If the samples, as set forth in subparagraphs (e) and (f), above, were strong enough so that odors were detected on the scentometer during the 7:1 dilution and the wind was found to have been blowing from the affected facility toward the sampling site during the entire sampling period, additional testing shall be required. The additional testing is described in the following sub-section.

The canister will be sent to a testing laboratory, where a small sample will be extracted for analysis. The sample will be analyzed for hydrogen sulfide and other gases referenced in this Section.

- D. **Corrective Action.** Should the affected facility fail to pass the performance test, the following actions are prescribed:
1. If the Noxious Gas or other emission requirements have not been met, the facility shall modify its operations. In such event, the Facility operations will be reduced to a level of operation which does not cause emission of Noxious Gases in excess of the performance testing criteria above. This may require reducing the number of Animals below the number prescribed in the operating Permit. Within 30 days, the affected facility shall identify the problems that are causing the facility to fail the performance test, and submit a Facility Modification Plan.
 2. The Owner or Operator will implement the Facility Modification Plan and the Board will schedule a new performance test.
 3. The Facility shall be operated at full capacity during this testing period and in the event further compliance problems develop, the facility may submit a request to the Health Board to extend the Performance Testing period. If the Health Board finds that proper justification exists, and that uncomplicated, and timely changes can be made during the testing, it may grant the request. Otherwise, the operating level must be reduced as in (3) above, and the sequence repeated.

Section 5. PERMIT DURATION

5.1 The Permit duration for construction, installation, modification, or operation of the CAFO will be recorded on the Permit. The Permit for pre-application and construction period shall be valid for one year from the date of approval by the Board. Operation Permits shall be valid for five (5) years before a new pre-application is required, but shall be renewable annually. Failure to renew will require a new operating Permit application.

5.2 A CAFO shall reapply every year for renewal of their operating Permit affirming under oath, that the operation has not been modified in any manner since the original Permit was issued. Any deviations from the BMP Plan or modification of the CAFO will require a new Permit before such changes occur. An application for renewal shall be considered to be properly filed when the CHO has received the following:

- A. A completed application, on a form or forms prescribed by the CHO which shall be submitted according to Board requirements.
- B. Cash, cashiers check, or money order from the firm in the proper amount for the Permit.

Before the end of the fifth year of an operating Permit, the CAFO shall be required to complete a new pre-application for a new operating Permit. The new pre-application must comply

with all regulations in force at the time of the original Permit expiration. There shall be no additional fee required for these pre-application Permit requests.

5.3 Permits will be issued only to the "Official Applicant of Record" or his authorized representative, and such authorization must be in writing from the "Official Applicant of Record." Renewal Permits shall only be issued when the CAFO has met all requirements of this regulation.

Section 6. PERMIT SUSPENSION OR REVOCATION

6.1 The CHO, with approval of the Board, may suspend or revoke a Permit for a CAFO for the following reasons:

- A. Non-compliance with any term of the Permit;
- B. Unauthorized modifications of the CAFO;
- C. Falsification of information submitted;
- D. Non-compliance with any provision of this regulation or with any State or Federal statute or regulation;
- E. For any other reason the construction, operation, or modification constitutes, or would constitute, a violation of this regulation or a Health Hazard as determined by the CHO and approved by the Board.

Section 7. STOP ORDER

7.1 . A Stop Order may be issued by the CHO with Board approval for the following reasons:

- A. Any reason set forth in Section 28.01;
- B. Any violation of any provision of this regulation;
- C. When construction, installation, modification, or operation of the CAFO is not in compliance with the design or operation requirements set forth in the plan submitted by the CAFO SRE and approved by the CHO SRE;
- D. When a CAFO is being constructed, installed, modified or operated in violation of this regulation.

Section 8. INSPECTIONS

8.1 The CHO shall have full power at anytime to enter onto any property to cause or conduct an inspection of any CAFO under construction, installation, modification or operation of any CFO inclusive of all proposed Land Application Site areas, except if the CHO desires to enter into any confinement building, he shall not do so without a prior appointment with the CAFO. If

the CAFO does not allow the appointment to occur within a 48 hour period, then this appointment requirement is hereby waived and the CHO can enter in at anytime.

Section 9. PERMIT FEES

9.1 The original and annual renewal fee for a CAFO operating Permit shall be based on the number of Animal Units specified by the plan in the CAFO. The initial fee shall be (\$0.71) per Animal Unit, and shall be adjusted periodically by the Board. The fee for a CAFO pre-application shall be \$1,000.00 for 1,000 to 7,000 Animal Units and \$2,500 for Animal Units exceeding 7,001 units. The fee for a CAFO Construction Permit shall be \$5,000 for 1,000 to 7,000 Animal Units and \$10,000 for Animal Units exceeding 7,001 units.

Section 10. ENFORCEMENT

10.1 The CHO shall file a petition in the Circuit Court of Henry County, Missouri seeking an order to enjoin the construction, modification or operation of a CAFO without a Permit, in violation of a Stop Order, or otherwise in violation of this regulation.

Section 11. APPEALS PROCESS

11.1 In the event that the CHO shall recommend suspension or revocation of a Permit for a CAFO to the Board, the Board or the CHO shall give notice of such recommendation to the CAFO, in writing, setting out specific factual basis and the grounds for the recommendation for suspension or revocation. The Board shall serve such notice in the manner provided in Section 34. The notice shall also inform the CAFO that it has ten (10) days in which to request, in writing, a hearing on the issue of such revocation or suspension. Such request shall be made by delivering said request for hearing to the office of the Henry County Health Board, or by mailing same to Board by registered mail, return receipt.

11.2 The Board shall schedule a hearing on the appeal, within ten (10) days after receiving notice of same, or at such later date as may be requested by the appellant. At the hearing, the appellant shall be given full reasonable opportunity to present evidence and be heard on the issues. The evidence of the CHO shall also be presented at such hearing.

11.3 Appeal Hearings to the Board shall be conducted in accordance with the Board's adopted rules and procedures.

11.4 In the event that the Board shall issue a Stop Order, the CAFO may appeal to the Circuit Court of Henry County, but shall cease and desist from its activities until the case may be heard.

Section 12. NOTICES

12.1 Any notice required herein or any Stop Order shall be served by one of the following methods:

- A. By depositing said Stop Order in the United States mail, registered, postage paid;

with all regulations in force at the time of the original Permit expiration. There shall be no additional fee required for these pre-application Permit requests.

5.3 Permits will be issued only to the "Official Applicant of Record" or his authorized representative, and such authorization must be in writing from the "Official Applicant of Record." Renewal Permits shall only be issued when the CAFO has met all requirements of this regulation.

Section 6. PERMIT SUSPENSION OR REVOCATION

6.1 The CHO, with approval of the Board, may suspend or revoke a Permit for a CAFO for the following reasons:

- A. Non-compliance with any term of the Permit;
- B. Unauthorized modifications of the CAFO;
- C. Falsification of information submitted;
- D. Non-compliance with any provision of this regulation or with any State or Federal statute or regulation;
- E. For any other reason the construction, operation, or modification constitutes, or would constitute, a violation of this regulation or a Health Hazard as determined by the CHO and approved by the Board.

Section 7. STOP ORDER

7.1 . A Stop Order may be issued by the CHO with Board approval for the following reasons:

- A. Any reason set forth in Section 28.01;
- B. Any violation of any provision of this regulation;
- C. When construction, installation, modification, or operation of the CAFO is not in compliance with the design or operation requirements set forth in the plan submitted by the CAFO SRE and approved by the CHO SRE;
- D. When a CAFO is being constructed, installed, modified or operated in violation of this regulation.

Section 8. INSPECTIONS

8.1 The CHO shall have full power at anytime to enter onto any property to cause or conduct an inspection of any CAFO under construction, installation, modification or operation of any CFO inclusive of all proposed Land Application Site areas, except if the CHO desires to enter into any confinement building, he shall not do so without a prior appointment with the CAFO. If

- B. By personal delivery to the owner of the real estate where said violation is occurring and to the CAFO, with said delivery to be made by the CHO, the Henry County Sheriff's Department or their designated representative;
- C. By posting said Stop Order at the CAFO site.

Section 13. WAIVERS (Variance)

13.1 Any CAFO may apply to the Board for a waiver of any provision of this regulation. Upon such application, the Board shall give notice to the applicant of the time, date, and place of a hearing on the matter. At hearing, the applicant shall be entitled to present its basis and grounds for a variance. A variance may be granted only if the Board finds that, in the particular case at hand, the provision of this regulation is unduly burdensome and that its waiver will not violate the spirit, meaning and intent of the regulation. If such variance is granted, the basis for the variance shall be stated in such order.

Section 14. CONFLICT WITH RULES

14.1 In the event that any provision of this regulation shall be in conflict with any rules or regulations authorized and made by the Department of Health and Senior Services or by the Missouri Department of Natural Resources, as such agencies now or hereafter exist, then the more stringent provision shall apply. It is not intended that this provision shall in any way limit the scope of this regulation, but only shall apply to those provisions which directly conflict with state law.

Section 15. NON-COMPLIANCE

15.1 In the event that any action is taken by the Board relating to the non-compliance with the terms of this regulation, all reasonable legal costs shall be recovered by the Board should the CAFO be found to have violated any provision of this regulation. Included therein shall be all costs reasonably associated with the legal action taken. In the event that any CAFO shall be deemed to have violated this regulation, and has thereafter taken the requisite corrective action, a Permit shall not issue until such time as all of the costs described herein have been paid by the CAFO.

Section 16. HEALTH CARE DATA

16.1 Physicians, hospitals and other health care services in Henry County will notify the CHO of any illness associated with CAFOs. Reporting must include testing and any other factual indication of a link between the illness and CAFOs

Section 17. SEVERABILITY

17.1 If any portion of this regulation is for any reason held invalid or unconstitutional by any court of competent jurisdiction, that portion shall be deemed a separate, distinct and independent provision and that holding shall not affect the validity of the remaining portion of this regulation.

Section 18. AMENDMENTS

18.1 This regulation may only be amended with the Board's approval. At a regular or special meeting provided, at least 15 days' notice of any proposed amendment has been given to the public in a manner reasonably calculated to apprise the public of the proposed amendment with a public hearing prior to approval.

It is hereby ordered that all provisions of Regulation No. 97-1 – Confined Animal Feeding Operations, and any rules or regulations connected therewith, be printed and available for distribution to the public in the office of the County Clerk, and this order shall be published in the Daily Democrat for three successive weeks, not later than 30 days after date of this order.

Revised and Amended:

HENRY COUNTY HEALTH CENTER BOARD OF TRUSTEES

BY:

Sandra Ouston
Chair

Joseph F. Kelly
Vice-Chair

[Signature]
Member

Member

Attest: [Signature]
Secretary

[Signature]
Treasurer