

**WORTH COUNTY RURAL HEALTH AND FAMILY FARM
PROTECTION ORDINANCE**

AN ORDINANCE ESTABLISHING HEALTH REGULATORY STANDARDS TO ENHANCE AND PROTECT THE OPPORTUNITY FOR WORTH COUNTY RESIDENTS TO LIVE AND WORK IN A HEALTHY ENVIRONMENT BY PROVIDING LIVESTOCK EMISSION STANDARDS; PROVIDING DEFINITIONS AND PROVIDING FOR SEVERABILITY

WHEREAS, IOWA CODE §137 DICTATES THE DUTIES AND RESPONSIBILITIES OF THE COUNTY BOARDS OF HEALTH AND

WHEREAS, HEALTH STANDARDS HAVE BEEN PROPOSED BASED ON STATE LAW, FEDERAL REGULATIONS, AND THE NECESSITY TO PROTECT PUBLIC HEALTH IN RURAL COMMUNITIES, AND

WHEREAS SCHOLARLY, PEER-REVIEWED PROFESSIONAL STUDIES HAVE BEEN PRESENTED TO, AND CONSIDERED BY, THE WORTH COUNTY BOARD OF HEALTH AND

WHEREAS, THE WORTH COUNTY BOARD OF HEALTH HAS IDENTIFIED A NEED FOR HEALTH STANDARDS IN RURAL COMMUNITIES, BASED UPON DUTY VESTED IN THE COUNTY BOARD OF HEALTH AND LACK OF REGULATION BY STATE OR FEDERAL AUTHORITIES

WHEREAS, THE ADOPTION AND ENFORCEMENT OF SAID STANDARDS IS HEREBY FOUND NECESSARY TO RETAIN A HEALTHY ENVIRONMENT AND PROTECT THE PUBLIC HEALTH OF WORTH COUNTY; NOW,

THEREFORE BE IT ORDAINED BY THE BOARD OF HEALTH OF WORTH COUNTY, IOWA AS FOLLOWS:

1 DEFINITIONS:

The following are definitions of words, terms, and phrases used in this ordinance.

1.1 ANIMAL/LIVESTOCK: A domesticated animal belonging to the bovine, porcine, caprine, equine, or avian species.

1.2 ANIMAL WASTE: Any animal excrement, animal carcass, feed waste, animal water waste, or any other waste associated with animals.

1.3 ANIMAL WASTE WATER: Any animal excreta, any liquid which comes into contact with any manure, litter, bedding, or other raw material or intermediate or final material or product used in or resulting from livestock production or products directly or

indirectly used in the operation of a livestock confinement operation or any spillage or overflow from livestock watering systems, any liquid used in washing, cleaning, or flushing pens, barns or manure pits, or any liquid used in washing or spraying to clean animals or any liquid used for dust control on the premises of a confinement feeding operation.

1.4 APPLICATION: The disposal of animal waste or animal wastewater by injection into the land or on top of the land.

1.5 ANIMAL FEEDING OPERATION: A lot, yard, corral, building, or other area in which animals are confined and fed and maintained for 45 days or more in a 12 month period, and all structures used for the storage of manure from animals in the operation. An animal feeding operation does not include a livestock market. Open feedlots and confinement feeding operations are considered to be separate animal feeding operations

1.6 COMPLAINANT: A resident of Worth County that presents a written and signed form to the Worth County Board of Health objecting to odors or other possible health risks connected with a specific livestock confinement operation within two (2) miles of their residence.

1.7 CONFINEMENT BUILDING: A building used in conjunction with a confinement feeding operation to house animals.

1.8 CONFINEMENT FEEDING OPERATION: An animal feeding operation in which animals are confined to areas, which are totally roofed.

1.9 CONFINEMENT FEEDING OPERATION STRUCTURE: A formed manure storage structure, egg washwater storage structure, earthen manure storage basin, or confinement building.

1.10 CONFINEMENT SITE: A site where there is located a manure storage structure which is part of a confinement feeding operation.

1.11 DRAINAGE WELL: A well used to drain storm runoff into a subsurface formation

1.12 DRY HANDLING WASTE: Manure (urine or feces), litter, bedding, or feed waste from animal feeding operations.

1.13 EPA: Environmental Protection Agency, Region 7 which includes Iowa, Kansas, Missouri, and Nebraska is located at 901 N. 5th Street, Kansas City, Kansas 66101.

1.14 EMPLOYEE: one employed by another for wages or salary.

1.15 SUBSURFACE WATER: Ground water and water in the vadose zone that may become ground water or surface water in the reasonably foreseeable future or may be utilized by vegetation.

1.16 FEEDLOT: Any land area, structure, yard, corral, or other area whether enclosed with a roof or unenclosed wherein livestock are confined in close quarters for the purpose of fattening, feeding, growing, raising, or birthing such livestock for final shipment to market or slaughter. A "feedlot" does not include enclosed pasture areas, which are used for the raising of crops or other vegetation upon which livestock are allowed to graze or feed.

1.17 IOWA DNR: Iowa Department of Natural Resources located at 502 E. 9th Street, Wallace State Office Building, Des Moines, IA 50319-0034

1.18 LEASE: A written contract for the exclusive use of real property which specifically grants unto the lessee the right to apply animal waste and animal waste water to the leased premises.

1.19 FORMED MANURE STORAGE STRUCTURE: A structure either covered or uncovered, used to store manure from a confinement feeding operation, which has walls and a floor constructed of concrete, concrete block, wood, steel, or similar materials. Similar materials may include, but are not limited to, plastic, rubber, fiberglass, or other synthetic materials. Materials used in formed manure storage structure shall have the structural integrity to withstand expected internal and external load pressures.

1.20 UNFORMED MANURE STORAGE STRUCTURE: A covered or uncovered animal feeding operation structure in which manure is stored, other than a formed manure storage structure or egg washwater storage structure, which is an anaerobic lagoon, earthen structure or earthen manure storage basin.

1.21 OWNER: The person who has title to the property where the animal feeding operation is located or the person who has title to the animal feeding operation structures.

1.21.1 Fee simple title

1.21.2 A leasehold interest

1.21.3 Any interest in an entity which holds fee simple title; or

1.21.4 Any interest in an entity that has a leasehold interest.

1.22 PERSON: Includes natural persons and also includes corporations, partnerships, associations, and any other business or charitable entities, a natural person who has supervisory authority over the operation of a confinement feeding operation whether or not such a person is an owner of this operation, and a natural person who applies animal waste or animal waste water originating from the operation.

1.23 PLANT FILTER AREA: Land used or reserved for the application of liquid waste from a livestock lagoon or holding pit.

1.24 WET HANDLING WASTEWATER: Water containing waste or contaminated by waste contact including process-generated and contaminated rainfall run-off.

1.25 AQUIFER: A formation, group of formations, or part of a formation containing sufficient saturated permeable material that could yield a sufficient quantity of water that may be extracted and applies to a beneficial use.

1.26 OBJECTIONABLE ODOR: Any odors present in the ambient air that by itself or in combination with other odors that are harmful or injurious to human health or welfare. Odors are harmful and injurious to human health if they tend to lessen human food and water intake, interfere with sleep, upset appetite, produce irritation of the upper respiratory tract, or cause symptoms of nausea or diarrhea, or if their chemical or physical nature is or may be detrimental or dangerous to human health.

1.27 SURFACE WATER: (1) An open body of water such as a stream, lake, or reservoir. (2) Water that remains on the earth's surface; all waters whose surface is naturally exposed to the atmosphere, for example, rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc., and all springs, wells, or other collectors directly influenced by surface water. (3) A source of drinking water that originates in rivers, lakes, and run-off from melting snow, either drawn directly from a river or captured behind dams and stored in reservoirs.

1.28 GROUND WATER or GROUNDWATER: (1) Generally, all subsurface water as distinct from surface water, specifically, the part that is in the saturated zone of a defined aquifer. (2) Water that seeps downward and saturates soil or rock, supplying springs and wells. The upper level of the saturate zone is called the water table. (3) Water stored underground in rock crevices and in the pores of geologic materials that make up the earth's crust. Ground water lies under the surface in the ground's zone of saturation, and is referred to as Phreatic Water.

1.29 AIR QUALITY EASEMENT: An agreement between a landowner and an ANIMAL FEEDING OPERATION that allows for additional space inside the landowner's property line where air quality will not be measured.

1.30 VADOSE: Unsaturated, relating to the surficial zone of the earth's crust that is above the permanent ground water level.

1.31 FLURRY WALL: A barrier built of impermeable material to block the flow of contaminated groundwater.

2 RULES APPLICABLE TO LIVESTOCK CONFINEMENT FEEDING OPERATIONS:

2.1 TOXIC AIR EMISSION:

A. No person shall cause or allow to occur the emission of objectionable odorous air contaminants or toxic air emissions from confinement structures, manure storage and treatment, waste disposal modalities, land application, and/or carcass disposal to degrade air quality. In no event shall the concentration of gases at the property or air quality easement line of the land resulting from this operation exceed the following levels:

GAS MAXIMUM ALLOWABLE CONCENTRATE

(parts of gas per million parts of atmospheric air)

EXPOSURE PERIOD(The time during which the noxious effects of the gas are felt by an adult human)

Carbon dioxide (CO ₂)	5,000	Not applicable
Hydrogen Sulfide (H ₂ S)	10	Avg. over a 10 minute period
Methane (CH ₄)	1,000	Not applicable
Carbon Monoxide	9	
Ammonia	5	Concentration not to be exceeded more than once a year.

B. COMPLAINT PROCEDURE:

1. For toxic air emission complaints to be considered, complaint forms must be completed, signed, and received by the Worth County office of the Board of Health. The person submitting the complaint must reside within (2) miles of the site against which the complaint is lodged. The complaint must state the nature and basis of the complaint, the location of the suspected source of emissions, and all record owners and/or leaseholders as shown by the records of the Worth County Recorder. The Worth County Board of Health shall not consider complaints not in compliance with this section.

2. Within 72 hours of the receipt of complaint, test sampling will be initiated by an employee of, or person approved by, the Worth County Board of Health at the property or air quality easement line. At least three (3) air quality measurements shall be made within a period of one (1) hour. These measurements shall be separated by at least fifteen (15) minutes. This sampling will be done on two (2) non-consecutive days in a consecutive fourteen- (14) day period.

3. In the event that either sample shows a non-acceptable level of any of the gases tested, an additional sample will be taken (within seven days) to determine satisfaction. If the standards are still exceeded, measurements will be made at monthly intervals until three successive months of acceptable measurements have been made. In addition, the County Sanitation Officer may take the measurements with forty-eight (48) hours notice to the owner/person. Reports will be sent to the Worth County Board of Health, IOWA DNR, and EPA. The reports will include:

1. All odor emissions monitoring procedures or test methods.
2. Date.
3. Place of measurement.
4. Time of sampling.
5. Company or entity performing analysis
6. Method used.

7. Operating conditions existing at the time of analysis. (Temperature, winds direction, relative humidity, and wind rate).

8. Measurements recorded and identity of persons taking samples

9. Estimated distance between the source of the emissions and the location of the measurement

4. These measurements shall be made at the line of the property from which the emission originates. The initial testing will be at the expense of the Worth County Board of Health. After testing results are received, notification of the results by the Worth County Board of Health will be made to both the complainant, and the person or entity against which the complaint was issued. If no violation was detected, and the complainant requests further investigation within a 12-month period, that complainant will pay for further testing at a cost to be established by the Worth County Board of Health. If the responsible person is in violation, further testing costs will be borne by that responsible person.

5. If an emission source is found to exceed the standards of this Ordinance, the entity against which the complaint has been lodged will have ten (10) business days to correct the problem. The Worth County Board of Health shall direct that samples be re-taken following the 10-business day correction period. If the emission source is found to exceed the standards of this Ordinance following the 10 business day correction period, the Worth County Board of Health shall direct the Worth County Attorney to file a complaint against the responsible person, entity, and all landowners shown by the records of the Worth County Recorder.

6. If an emission source is found to exceed the standards set by this ordinance, the responsible person may petition, for good cause, the Board of Health for an extension of time to bring the source into compliance. No petition for extension shall be considered if not delivered to the Worth County Board of Health, or to the Worth County Auditor, before the expiration of the 10-business day correction period.

7. Within 20 days, the Board of Health shall hold a hearing to consider extension of time to bring the source into compliance. The burden shall be on the moving party to show good cause. If good cause is shown, the Board of Health shall grant a one-month extension.

8. If an emission source against which a complaint has been lodged is brought into compliance before the expiration of the correction period or extension period, the Board shall dismiss the complaint.

9. An emission source that has had a prior complaint dismissed under Section 8 shall not be entitled to an extension under Sections 6 and 7.

Responsible parties failing to meet these standards shall be assessed a civil penalty of \$50.00 for each day the emission source is not in compliance unless extenuating circumstances can be clearly demonstrated to the satisfaction of the Worth County Board of Health.

WORKER SAFETY

The WORKER SAFETY section applies to all persons employing workers for two (2) hours or more in a twenty-four (24) hour period and at least sixty (60) hours per month in a confinement feeding operation. The following safety standards shall be met:

1. At the beginning of employment, all employees shall be tested for:
 - a. Pulmonary function for baseline studies. At six (6) month intervals, all employees shall be retested.
 - b. Tuberculosis. Testing, at the employer's expense, will be available at the Worth County Board of Health Office at least once a month. The results of these studies will be furnished to the employer and employee.

2. Safety devices such as appropriate personal protective equipment shall be provided.

3. The following standards for human exposure to gases inside confinement feeding operations are as follows:

GAS	EXPOSURE (TWA)
Hydrogen Sulfide	10 PPM
Ammonia	25 PPM (Averaged over an 8 hour day)
Carbon Monoxide	35 PPM
Carbon Dioxide	5,000 PPM transitional 10,000 PPM final
Dust	2.4 mg per cubic meter

4. These measurements shall be made at quarterly intervals. If the standards are exceeded measurements will be made at monthly intervals until three successive months of acceptable measurements have been made. In addition, the County Sanitation Officer may take the measurements with forty-eight (48) hours notice to the owner/person. Reports will be sent to the Worth County Board of Health, IOWA DNR, and EPA.

5. Any person without confinement space training may not enter a confined manure pit.

Responsible parties failing to meet these standards shall be assessed a civil penalty of \$50.00 for each day the emission source is not in compliance unless extenuating circumstances can be clearly demonstrated to the satisfaction of the Worth County Board of Health.

WATER POLLUTION

These regulations shall apply to all CONFINEMENT FEEDING OPERATIONS except where the structures do not contain liquid waste storage

1. Transport systems, construction, and maintenance of buildings, collection systems, conveyance systems, and permanent or temporary storage facilities shall prevent leakage of organic matter, nutrients, and pathogens into the ground, surface water, or drainage tiles.

2. Ground water monitoring wells shall be installed to obtain samples of ground water. These shall not approach the aquifer.

3. A drawing of the facility showing placement of the monitoring wells will be supplied to the Worth County Board of Health and kept on permanent file.
4. Information necessary for establishing monitoring wells includes the depth of ground water and the direction and rate of groundwater flow.
5. Three (3) monitoring wells built as specified in Iowa Administrative Code Section 567 chapter 110, spaced not more than 600 feet apart are required to determine ground water flow. At least one of these wells will be placed up gradient from the proposed formed manure structure to be used to establish base line parameters for groundwater composition. All monitoring wells must be completed and baseline tests results submitted to the Worth County Board of Health before stocking the confinement building.
6. A monitoring well must be placed within 50 feet of any confinement feeding operation structure containing liquid storage in accordance with regulations of the Iowa Administrative Code Section 567 chapter 110, to adequately monitor for contamination.
7. These contaminants will include, but may not be limited to, nitrates and fecal coliform bacteria. The allowable contaminant levels will follow the Environmental Protection Agency National Limits. If contamination above allowable levels is found, additional tests may be required for other contaminants.
8. If a plume of contamination is detected, a flurry wall must be constructed to prevent further contamination while the source is remedied.
9. Testing shall be done by the owner/person and occur during the time of recharge to the aquifers between (1) spring thaw and the start of the growing season and (2) the first killing frost in the fall and freezing of the ground.
10. Samples must be collected and labeled from both the up-gradient and down-gradient monitoring wells with protocol established by the State Hygienic Laboratory.
11. Reports shall be sent to the Worth County Sanitation Officer directly from the Hygienic Laboratory as well as to the owner of the well. In addition, the County Sanitation Officer may randomly test monitoring wells with forty-eight (48) hours' notice to the owner/person. These reports will be sent to the Worth County Board of Health, the IOWA DNR, and the EPA.
12. An operation found in violation of the contaminant parameters shall have thirty (30) days to present a plan to rectify the situation after notification by the Worth County Board of Health.

Responsible parties failing to meet these standards shall be assessed a civil penalty of \$50.00 for each day the emission source is not in compliance unless extenuating circumstances can be clearly demonstrated to the satisfaction of the Worth County Board of Health.

SEVERABILITY

The regulations of this ordinance are severable, and if any phrase, clause, sentence, paragraph, or section of these regulations shall be declared unconstitutional or otherwise invalid by the valid judgement or decree of any court of competent jurisdictions, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs, or sections of this ordinance.

REPEAL OF REGULATIONS NOT TO AFFECT LIABILITIES, ETC

Whenever any part of these regulations shall be repealed or modified, either expressly or by implication, by subsequent regulation, that part of the regulation thus repealed or modified shall continue in force until the subsequent regulation, repealing or modifying it shall go into effect, unless therein otherwise expressly provided; but no suit, prosecution, proceeding right, fine, or penalty instituted, created, given, secured, or accrued under these regulations previous to their repeal shall not be affected, released, or discharged but may be prosecuted, enjoined, and recovered as fully as if these regulations had continued in force unless it shall therein be otherwise expressly provided.

EFFECTIVE DATE

These regulations shall be in full force and effect for all confinement operations and structures, as defined in 1.19 and 1.20 under DEFINITIONS in this ordinance, commencing operation on or after the effective date set by the Worth County Board of Supervisors. Those buildings in operation prior to the effective date must be brought into compliance with the regulations by January 1, 2012.

ADVISORY COMMITTEE

An eleven (11) member advisory committee will be appointed by the Board of Supervisors and the Board of Health of Worth County which shall be convened annually or by special request of the Worth County Board of Health to monitor any alterations of this ordinance or to advise on any situation that the board deems necessary.