

**TOWN OF ROUND LAKE
SAWYER COUNTY, WISCONSIN**

**ORDINANCE NO. _____
CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO) ORDINANCE**

WHEREAS, the Town of Round Lake Comprehensive Plan explicitly directs through its goals and objectives: 1.) “To monitor the development and environmental impact of Large-Scale Animal Feeding Operations as they occur in other parts of the state/country and facilitate adoption of local/county ordinances that will protect against the degradation of the health, safety, and welfare of the citizens of the Town and its environment as well as preserve, with integrity, the Northwoods Character,” 2.) “To foster respect for the viability and necessity of agriculture and its practices that are appropriately scaled for this environment and the natural resources, so that farming practices of integrity can occur without creating conflicts between agricultural and non-agricultural users,” 3.) “To encourage uniform farm practices that are environmentally sound emphasizing organic, biodynamic and regenerative practices,” 4.) “To promote proper agricultural manure and nutrient management to mitigate risk of non-point water pollution and/or airborne pathogens,” 5.) “To encourage conscientious agricultural practices that are environmentally sound and do not deplete, pollute, or impair the natural resources (air, soil quality, erosion, surface/ground water, etc.) including prohibiting high-capacity wells,” 6.) “To promote plans, ordinances and design standards that enhance and sustain the Northwoods Character,” 7.) “To preserve the quality of our area’s lakes and surface waters such as streams, rivers, and springs,” 8.) “To protect and improve the quality and quantity of the Town’s ground water,” which specifically mentions “limit excessive irrigation practices and prohibit use of proposed or existing irrigation or injection systems for the distribution of liquid manure,” 9.) “To avoid practices that would result in land use conflicts for adjacent properties and environmental factors,” and 10.) “To promote coherent, consistent land use planning that maintains the Town’s distinctive rural and Northwood’s Character,” which again specifically mentions “promote positive environmental practices that protect natural resources, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources;”

WHEREAS, the Plan Commission devoted a substantial amount of time and expertise in reviewing the potential impacts of large-scale livestock farming with respect to the particular natural resources inherent to the Town of Round Lake and these goals and objectives;

WHEREAS, the Plan Commission has reviewed documents from surrounding towns, counties, states, and the scientific literature, and it has formulated recommendations to the Town of Round Lake’s Board for ordinance provisions to address the concerns raised by CAFOs;

NOW, THEREFORE, the Plan Commission of the Town of Round Lake makes the following Findings of Fact and declarations in support of this Ordinance and referral to the Town Board for support and approval:

Local Findings

1. Consistent with the Primary objectives of the Comprehensive Plans for both the State of Wisconsin and Sawyer County, the Town of Round Lake's vision for proper stewardship of Agricultural Resources is: To preserve and enhance farming as both an environmentally responsible occupation and sustainable agricultural business while maintaining productive farmland and preserving natural resources. ([Town of Round Lake Comprehensive Plan](#))
2. The Town is located in Sawyer County, which lacks a CAFO ordinance and has declined pursuing any safeguards at this time.
3. The Plan Commission conducted a comprehensive literature review which provides thorough documentation of the risks associated with CAFOs included as Appendix A. Maps of data specific to Round Lake are included in Appendix B.
4. The Town recognizes the importance of protecting water and air quality, and that proper management, including proper management of nutrients from livestock operations is essential to the protection of groundwater, surface water and air quality, public health, domestic and wild animal health, property values, safety, and welfare.
5. Data for the Town of Round Lake on approximate land cover:

Land Cover (NOT land use)	Percent
Agriculture	2.78%
Bare Land	0%
Forest	62.59%
Grassland	1.96%
Open Water	8.28%
Urban/Developed	0.16%
Wetland	24.23%

Source: NOAA Coastal Change Analysis Program. See Appendix B (Map 1).

6. Groundwater is the only source of drinking water for the 1,103 residents of the Town of Round Lake (2018). It is a critical resource, not only because it is used by residents as their source of water, but also because rivers, streams and other surface water depends on it for recharge. Two goals the Town has identified regarding this resource include: 1. Preserve the quality of our area's lakes and surface waters such as streams, rivers, and springs; and 2. Protect and improve the quality and quantity of the Town's ground water. ([Town of Round Lake Comp Plan](#))
7. The Town is embarking on an ongoing baseline well water monitoring program targeting at least one sample for every square mile each year. The goal is to build a database of information from which point and non-point sources of pollution can be detected and identified.
8. The Town has a vulnerable landscape with shallow soils, high water table and gravel formations that make large areas susceptible to groundwater pollution. Five factors contribute to groundwater susceptibility, including: bedrock depth, bedrock type, soil characteristics, superficial deposits, and water table depth. Data from the Wisconsin Department of Natural Resources (WDNR) Groundwater

Susceptibility Model were divided into five evenly spread categories ranging from high to low. Nearly all the Town's total acres are labeled as high risk for being susceptible to groundwater contamination. And groundwater depth generally ranges from 20 to 50 feet. See Appendix B. (Map 2 and 3).

9. The Town has 140 miles of shoreline, covering approximately 5,780 acres, and 70 miles of rivers and streams covered by the Sawyer County Zoning Shoreland-Wetland Protection Ordinance. Wisconsin DNR classifies water bodies as outstanding resource water (ORW) or exceptional resource waters (ERW). ORWs typically do not have any point sources discharging pollutants directly into the water, and no increases of pollutant levels are allowed. Bodies of water that have existing point sources are more likely to be designated as ERW, and dischargers are required to maintain background water-quality levels. The Town of Round Lake has 4 OWRs and 1 ERW. Additionally, there are 4 creeks classified as WDNR trout streams. See Appendix B (Map 4, 5, and 6).
10. The Town of Round Lake is located just south of the continental divide separating the Mississippi River drainage basin and the St. Lawrence River drainage basin. The area covered by these two drainage basins covers much of central North America. There are 5 major watersheds that drain water from the Town into the Mississippi River. Importantly, Sawyer County is at the headwaters of these watersheds potentially impacting all areas to the south. See Appendix B (Map 7 and 8).
11. Over 24% of the land cover in the Town is classified as wetlands, which are home to unique and diverse plant and animal species. Wetlands are recognized as important regulator of global climate because they sequester large quantities of carbon dioxide, nitrogen, and phosphorous. Sawyer County has recognized the importance of these fragile ecosystems and has enacted specific ordinances regulating certain activities and construction. See Appendix B (Map 4).
12. Of the Town of Round Lake's total acres, the Natural Resources Conservation Service (NRCS) Web Soil Survey indicates the vulnerability of soils to degradation, erosion, and recovery through the Fragile Soil Index:
 - 0% Extremely - Highly Fragile
 - 0% Fragile
 - 12.7% Moderately Fragile
 - 77.5% Slightly Fragile
 - 1.0% Not Fragile
 - 8.6% Not Rated(See Appendix B. Map 9.)
13. Of the Town of Round Lake's total acres, the NRCS Web Soil Survey shows the soil's limitations accommodating the spreading of Manure and Food-Processing Waste as follows:
 - 85.6% Very Limited – Limitations cannot generally be overcome. Poor performance and high maintenance can be expected.
 - 6.2% Somewhat Limited – Limitations can be overcome or minimized by special planning, design, or installation.
 - 0% Not Limited
 - 1.9% Not Rated(See Appendix B. Map 10.)

14. Of the Town of Round Lake's total acres, the NRCS Soil Survey shows the extent to which soils are limited for Disposal of Wastewater by Irrigation as follows:

- 91.0% Very Limited
- 0.9% Somewhat Limited
- 0% Not Limited
- 7.9% Not Rated

(See Appendix B. Map 11.)

15. Of the Town of Round Lake's total acres, the NRCS Soil Survey shows the limitations for utilizing Sewage Lagoons for managing agricultural wastes:

- 90.2% Very Limited
- 1.7% Somewhat Limited
- 0% Not Limited
- 7.9% Not Rated

(See Appendix B. Map 12.)

16. The 2020 Wisconsin Ground Water Coordinating Council report finds that nutrient application from fertilizers and manure on agricultural fields accounts for 90 percent of nitrate in groundwater. The report and many studies summarize health risks from nitrate pollution, including:

- a. Infants below the age of 6 months are especially at risk and could become seriously ill with a condition called methemoglobinemia or "blue-baby syndrome"
- b. Growing evidence of a correlation between nitrate and diabetes in children
- c. Birth defects have been linked to nitrate exposure
- d. Thyroid disease
- e. Increased risk of non-Hodgkin's lymphoma, gastric cancer, colon cancer, bladder cancer, and ovarian cancer

17. Excess nitrates and other contaminants potentially found in well water present significant health risk to the residents of the Town of Round Lake, all of whom rely on private groundwater wells for their water supply. Therefore, the protection of this resource is of utmost importance to all who live and work here.

18. The Town of Round Lake's total 2021 tax assessed property value is approximately \$364,565,500. Of that approximately \$177,695,700 (48.7%) is the value of land and approximately \$186,869,800 (51.3%) is the valuation of homes and buildings. Tax parcel counts are classified as follows:

57.76%	Residential
3.10%	Commercial
0.00%	Manufacturing
2.64%	Agricultural
13.97%	Undeveloped
1.67%	Agricultural Forest
20.59%	Productive Forest Land
0.27%	Other

(Parcels may have more than one classification.) Source: Sawyer County Municipal Tax Summary 2021

19. Property values could be affected by CAFOs depending on where they are located. Research shows that the value of property within a 3-mile radius of a CAFO could be reduced by up to 26%, with bordering properties decreasing by up to 88%. Map 9.0 demonstrates three areas in the Town, which are currently zoned Ag-1, and the 3-mile radius projected negative impact areas for property values. (See Appendix B. Map 13.)

Condition 1 Findings - Operations, Public Health

1. On November 2, 2019, the American Public Health Association enacted a policy statement advising federal, state and local governments and public health agencies to impose a moratorium on all new and expanding CAFOs recommending a complete halt until additional scientific data has been collected and public health concerns associated with CAFOs are addressed. ([APHA 2019](#))
2. CAFOs confine large numbers of animals of the same species—such as beef and dairy cattle, swine, broilers (poultry raised for meat consumption) and laying hens—on a small area of land. The scale, density, and practices associated with these operations present a range of public health and ecological hazards, including large volumes of untreated animal waste, the release of environmental contaminants to air, water, and soil, and the generation and spread of antibiotic-resistant pathogens. ([Johns Hopkins 2008](#)) ([USEPA 2004](#))
3. Studies in Pennsylvania demonstrate the association between antibiotic-resistant micro-organisms and high-density livestock production. Eighty (80%) percent of all antibiotics in the US are used in livestock feeds. The manure from animal fed those treated feeds contains antibiotic-resistant bacteria, resistance genes, and 75% of those antibiotics and is applied to crop fields. It was discovered that proximity to these fields and to the CAFOs each resulted in increased risk of methicillin-resistant *Staphylococcus aureus* infections (MRSA). ([Casey 2013](#))
4. There is a significant body of evidence which shows CAFOs are directly associated with occupational and community health risks, as well as the social and economic decline of rural communities. Current regulatory structures make it difficult to adequately address these concerns. ([Donham 2007](#)) ([Fry 2014](#)) ([Foltz 2002](#)) ([Graham 2008](#))
5. Researchers at the Johns Hopkins Center for a Livable Future found that the primary human health concerns related to industrial food animal production, or CAFOs, include: infections resulting from transmission of harmful microorganisms from animal operations to nearby residents; respiratory effects from increased exposure to air pollution from animal operations; and multiple negative health impacts due to increased exposure to ground and/or surface waters that can be contaminated by manure from animal operations. ([Johns Hopkins 2008](#))
6. A 2009 American Academy of Pediatrics policy statement recommends that pediatricians ask families if they obtain their water from private wells and encourage parents to test and maintain their wells at least annually for coliform bacteria and nitrates. Tests of rural Wisconsin wells found that 47% of wells had an exceedance of one or more health-based water quality standards. Surveys from other states report similar findings. ([AAP 2009](#)) ([Knobeloch 2013](#)) ([MacDonald 2017](#))
7. The National Association of Local Boards of Health published a 2010 report identifying the following Environmental Health Effects of CAFOs:

Groundwater
Surface Water
Air Quality
Climate Change
Odors

Insect Vectors
Pathogens
Antibiotics
Property Values

Pollutants commonly found in air surrounding CAFOs include the following:

CAFO Emissions	Source	Traits	Health Risks
Ammonia	Formed when microbes decompose undigested organic nitrogen compounds in manure	Colorless, sharp pungent odor	Respiratory irritant, chemical burns to the respiratory tract, skin, and eyes, severe cough, chronic lung disease
Hydrogen Sulfide	Anaerobic bacterial decomposition of protein and other sulfur containing organic matter	Odor of rotten eggs	Inflammation of the moist membranes of eye and respiratory tract, olfactory neuron loss, death
Methane	Microbial degradation of organic matter under anaerobic conditions	Colorless, odorless, highly flammable	No health risks. Is a greenhouse gas and contributes to climate change.
Particulate Matter	Feed, bedding materials, dry manure, unpaved soil surfaces, animal dander, poultry feathers	Comprised of fecal matter, feed materials, pollen, bacteria, fungi, skin cells, silicates	Chronic bronchitis, chronic respiratory symptoms, declines in lung function, organic dust toxic syndrome

Pathogens found in animal manure that have been determined to cause illness in humans include the following:

Pathogen	Disease	Symptoms
<i>Bacillus anthracis</i>	Anthrax	Skin sores, headache, fever, chills, nausea, vomiting
<i>Escherichia coli</i>	Colibacillosis, Coliform mastitis-metris	Diarrhea, abdominal gas
<i>Leptospira pomona</i>	Leptospirosis	Abdominal pain, muscle pain, vomiting, fever
<i>Listeria monocytogenes</i>	Listeriosis	Fever, fatigue, nausea, vomiting, diarrhea
<i>Salmonella species</i>	Salmonellosis	Abdominal pain, diarrhea, nausea, chills, fever, headache
<i>Clostridium tetani</i>	Tetanus	Violent muscle spasms, lockjaw, difficulty breathing
<i>Histoplasma capsulatum</i>	Histoplasmosis	Fever, chills, muscle ache, cough rash, joint pain and stiffness
<i>Microsporum and Trichophyton</i>	Ringworm	Itching, rash
<i>Giardia lamblia</i>	Giardiasis	Diarrhea, abdominal pain, abdominal gas, nausea, vomiting, fever
<i>Cryptosporidium species</i>	Cryptosporidiosis	Diarrhea, dehydration, weakness, abdominal cramping

([Hribar 2010](#))

8. The impact of CAFOs on human pandemics such as Covid-19 would represent a risk for Round Lake residents. Most CAFO operators contract with processing plants to deliver milk, beef, pork, or chicken. Processors across the nation and Wisconsin saw Covid-19 infection rates among workers as high as 54% with estimates of 59,000 total infections and 269 deaths. These high rates forced more than 100 plants to close, according to the Centers for Disease Control. This caused problems for swine CAFOs which cannot ship animals over 280 pounds to slaughter. The closure of so many processors meant that CAFOs had nowhere to ship their animals. National Pork Producers Council president, Howard Roth said on April 29, 2020, that "millions of pigs can't enter the food chain" and will have to be killed and disposed of. The JBS plant in Worthington, MN reopened to euthanize, not process, up to 13,000 hogs a day saying that the "carcasses will be rendered, sent to landfills, composted or buried." Smithfield's Sioux Falls, SD plant shut down for four weeks. Another shutdown caused by human pandemics would leave Round Lake vulnerable when CAFOs would be forced to kill and dispose of tens of thousands of animals. ([Ag Week 2020](#)) ([Dyal 2020](#)) ([Milligan 2021](#)) ([National Pork 2020](#)) ([USEPA](#)) ([US House 2021](#))
9. Highly infectious animal viruses such as African Swine Fever (ASF) would be a high risk for Round Lake. Millions of hogs have died or been killed globally due to ASF, commonly called hog Ebola. The disease is 100% fatal and the pathogen is especially hardy. Asian countries such as China, Vietnam and Korea have been hit hard. Germany is building a wall along its Polish front to stop a potential ASF invasion. On July 28, 2021, the US Department of Agriculture announced the first documentation of ASF in the Western Hemisphere's Dominican Republic. Veterinary health experts are concerned that ASF will invade the United States, spread rapidly among large,

concentrated swine facilities, and have a devastating negative effect on the swine industry. ([USDA Sep 2021](#)) ([UMN Sep 2021](#))

10. While researchers believe ASF cannot be transmitted from pigs to humans, many public health issues have been raised, such as how to:
 - Euthanize tens of thousands of animals.
 - Ensure capacity to dispose of tens of thousands of carcasses through composting, incineration, or landfilling.
 - Dispose of leachate from carcasses.
 - Disinfect infected trucks and facility materials such as metal cages, tractors, and feed.
 - Treat and dispose of water used for disinfection. ([USDA August 2019](#)) ([USDA ASF](#))
11. Zoonotic transmission of pathogenic organisms from animals to humans is the most common mechanism through which emergent infectious diseases and pandemics afflict humans. Animal husbandry practices that confine and concentrate large numbers of animals are ripe for the transmission of pathogenic viruses and bacteria and their alterations and mutations that can dramatically increase the probability of cross-species transmission. We are now entering a new age of global pandemics due to how we treat and interact with animals and how rapidly emergent pathogens are capable of being transmitted around the world. ([Hughes and Wilson 2010](#))

Condition 2 Findings - Waste

1. The increase in concentration of livestock and poultry and transition to large, high density CAFOs over the last several decades has resulted in the concentration of animal waste and process water over small geographic areas. While it can be a valuable fertilizer, untreated animal waste spread at the magnitude produced by CAFO operations represents a public health and ecological hazard impacting groundwater, surface water, air, property values and a community's quality of life. ([USEPA 2013](#))
2. Untreated wastes from these operations can contaminate ground and surface waters with nitrates, drug residues, parasites, viruses, bacteria, and other hazards. Studies demonstrate negative impacts on ecosystems and that humans can be exposed to waterborne contaminants from livestock and poultry operations through the recreational use of contaminated surface water and the ingestion of contaminated drinking water. Exposure to elevated levels of nitrates in drinking water is associated with adverse health effects, including cancer, birth defects and other reproductive problems, thyroid problems and methemoglobinemia. ([Brender 2013](#)) ([Burkholder 2007](#)) ([Chiu 2007](#)) ([Graham 2010](#)) ([Gulis 2009](#)) ([Manassaram 2006](#)) ([Price 2007](#)) ([Showers 2008](#)) ([Spencer 2004](#)) ([USEPA 2012](#)) ([Ward 2009](#))
3. Animal wastes are also rich in organics and high in biochemical oxygen demanding materials (BOD). For example, treated human sewage contains 20–60 mg BOD/L, raw human sewage contains 300–400 mg BOD/L, and swine waste slurry contains 20,000–30,000 mg BOD/L. ([Burkholder 2007](#))
4. Nutrient runoff is implicated in the growth of harmful algal blooms, which may pose health risks for people who swim or fish in recreational waters, or who consume contaminated fish and shellfish. Exposure to algal toxins has been linked to neurological impairments, liver damage,

gastrointestinal illness, severe dermatitis, and other adverse health effects. ([Carmichael 2001](#)) ([Heisler 2008](#)) ([Paerl 2001](#)) ([USEPA 2013](#))

5. Wisconsin CAFOs are required to have a Nutrient Management Plan to get a permit under the Clean Water Act from the WDNR. The rules governing how these permits are issued and implemented are contained in NR 243. Wisconsin's agricultural standards and prohibitions for runoff management are contained in NR 151. WDNR released draft revisions to NR 151 in March 2021 but stopped the process in November 2021. ([WI NR 151](#)) ([WI NR 243](#))
6. Runoff from land application of waste and leaks from storage facilities at permitted facilities can cause groundwater contamination. That is of particular concern for residents who rely on private ground wells for drinking water and household use because private wells are not monitored by government agencies to ensure safe levels of pathogens. In Wisconsin, the risk of finding pathogens in wells is seasonably variable but typically highest following spring snowmelt or large rainstorms that generate runoff, since these events can create large pulses of water that move quickly through the ground. ([Fox 2016](#)) ([Uejio 2014](#)) ([Ward 2009](#))
7. Baseline and ongoing water quality data collection engages the community and protects residents dependent on private wells from potential exposure to contamination. ([AAP 2009](#)) ([Schmalzried 2010](#))
8. CAFO operators have a limited number of days when they can do land application based on varying weather, soil types, harvest status, equipment availability and condition of waste. Maps from the Runoff Risk Advisory Forecast and SNAP Plus provide information that, combined with knowledge of field-specific conditions, allow for better decisions on the timing of nutrient applications. ([UWI-SNAP](#)) ([WI DATCP Runoff](#))
9. Historically, livestock farmers disposed of manure by applying it to fields as fertilizer. But a CAFO often has more manure than it can use at any one time. Excess is typically stored in lagoons which can contaminate water via seepage, breaches, or overflow. During the cold spring of 2013, a Minnesota CAFO discharged an estimated 1 million gallons of animal waste when a lagoon wall ruptured. This type of impact can be decreased with better practices, such as liners, leak detection systems, engineered berms designed for 100-year events and requirements for engineered enclosed waste storage tanks and treatment facilities. ([USEPA 2012](#))
10. DATCP's 2019 Livestock Facility Siting Technical Expert Committee proposed upgrading Wisconsin's rules for waste storage, compost, process water, leachate, nutrient management structures. No action has been taken. ([WDATCP 2019](#))
11. For decades CAFOs thought the federal Resource Conservation and Recovery Act (RCRA), applied to garbage landfills. That changed in 2015, when a federal judge in Washington State ruled that RCRA did apply to CAFO waste as part of a lawsuit against the 7,000 head Cow Palace. Settlement required mitigation measures including manure storage liners, monitoring wells, compliance monitoring and a reduction in the use of manure as fertilizer. ([Ziemba 2015](#))
12. CAFOs house animals in highly specialized facilities engineered to capture and store manure. Many operations own less land than needed to safely use the manure to fertilize crops. However, Wisconsin and Sawyer County do not require operators to have Manure Easements or Land

Application Agreements with owners of land where they plan to spread. Some fields can be listed in multiple NMPs or owned by people who have not granted access. ([Drake Law](#)) ([Polk County](#)) ([U of Missouri](#))

Condition 3 Findings - Animal Population and Depopulation

1. Experts recommend approaching CAFO animal depopulation as a three-step, or 3D, process - Depopulation, Disposal and Disinfectant. All or parts of this process apply under three circumstances:
 - a. **Standard mortality** - The tonnage of dead animals produced annually by normal operations is substantial. For example, mortality rates in a typical 5,000 sow farrow-to-finish farming system run up to 10% and will produce over 200,000 pounds of carcasses annually. In many systems losses can be higher. Horizontal integration of livestock agriculture systems can concentrate mortality losses into smaller and smaller geographic areas.
 - b. **Non-diseased animal catastrophe** - The need for the 3D process can be triggered by catastrophic events such as the hurricanes, tornadoes, or fire. In addition, CAFOs can be impacted by human pandemics. For example, chicken and hog CAFOs were forced to depopulate in 2020 when high worker Covid-19 infection rates shutdown processing plants.
 - c. **Diseased animal catastrophe** - CAFO operators face disease outbreaks such as Foot-and-Mouth, Avian Influenza and Porcine Reproductive and Respiratory Syndrome (PRRS). Minnesota and Iowa have an especially virulent PRRS mutant affecting both sow and hog finishing barns. USDA earmarked \$500 million in September 2021 in an effort to keep the global African Swine Fever outbreak from entering and spreading in the United States. ([APHIS web](#)) ([Costa 2019](#)) ([Morrow 2001](#)) ([Narishkin 2020](#)) ([NPPC 2020](#)) ([NPPC Sep 2021](#)) ([Swinecast 1168](#)) ([UMN 2014](#)) ([USDA Aug 2019](#)) ([USDA ASF week](#)) ([USEPA covid](#))
2. USDA and veterinarian associations recommend that CAFO operators have a Depopulation, Disposal and Disinfectant plan. However, under normal operation, plans are not required. Plans are required if there is a catastrophe covered by a government indemnification program. ([USDA ASF week](#)) ([USDA Nov 2020](#))
3. USDA and veterinarian associations recommend euthanasia protocols ranging from electrocution to blunt force, injections, gas, or heat. Workers can find the work distressing. ([AASV 2016](#)) ([USDA avian](#)) ([USDA swine](#))
4. Once the animals are euthanized, workers in protective equipment remove them from the CAFO buildings. Accessing the animals may require opening walls. Temporary storage of the carcasses outside the buildings during the removal is challenging because high levels of body fluids quickly begin to leach out and spill across surfaces. According to the USDA, the average 6,800 hog CAFO will produce more than 27,000 gallons of leachate within days. That is enough to fill a 20' x 40' pool, 4.5 feet deep. ([USDA Aug 2019](#)) ([USEPA 2018](#))
5. There are a wide range of disposal methods, including: Composting on-site; Composting off-site; Burial; Burial above ground; Rendering; Incineration; Incineration (energy from waste); Burning

(open/air curtain); Burning (mobile gasifier or similar). Each disposal method has costs and benefits depending on the particular CAFO's location, needs and available resources. ([Arora 2017](#)) ([Costa 2019](#)) ([Hseu 2017](#)) ([USDA Aug 2019](#)) ([USEPA 2018](#)) ([USEPA covid](#)) ([UMN 2014](#))

6. Chemical disinfection of all contaminated structures, equipment, vehicles, and surfaces on the premises follows animal euthanasia and disposal. Insecticides and rodenticides are also applied. Facilities may be left fallow with adequate fencing and security against unauthorized entry or wildlife incursions. ([UMN Pitkin](#)) ([USDA Aug 2019](#))
7. Closely related, but safer surrogate viruses are used to test disinfectant efficacy to prevent accidental infections. However, this is challenging because surrogate viruses do not always act like the actual virus depending on the chemical. Eliminating residual microbial DNA or RNA, as well as pathogenic microbes which are often the reason for reoccurring disease, can be especially difficult. ([Steinmann](#)) ([USDA Aug 2019](#))
8. In some operations, it may be economically feasible to depopulate and disinfect the facilities and, after a few weeks, repopulate with stock free of target diseases. Producers should thoroughly analyze risk factors for herd re-infection as well as the level of biosecurity that can be maintained throughout the depopulation, disinfection, and repopulation processes. Hog CAFOs located in swine-dense areas are at high risk for re-infection of several important swine pathogens. ([USDA Aug 2019](#)) ([SwineCast 1168](#))
9. Disposal and disinfection present concerns for local communities, including:
 - a. Potential on-site groundwater contamination by diseased decomposing animals and chemicals used to disinfect buildings, equipment, and vehicles.
 - b. Liability for landfill operators from potential groundwater contamination.
 - c. Air pollution from incineration.
 - d. Potential for pathogen contamination spread if livestock leave the CAFO.
 - e. Difficulty finding new buyers for land with large burial sites. ([UMN 2014](#)) ([USDA Aug 2019](#))

Condition 4 Findings - Biosecurity, Animal Health

1. In the context of animal agriculture, biosecurity is a series of management steps and practices implemented to prevent the introduction of infectious agents, especially Foreign Animal Diseases (FAD), into a herd or flock, the spread of these agents through the herd, and out of the herd to other animals or humans, herds, or flocks. A strong biosecurity program is critical and must be properly implemented not just developed as a plan on paper. ([Alarcón 2020](#)) ([FAO 2020](#)) ([Graham 2008](#)) ([Paploski](#)) ([UMN Pitkin](#))
2. Biosecurity plans are not required by existing federal, state, or local laws and regulations that apply to Round Lake.
3. The spread of disease throughout a CAFO facility is enhanced by the closeness of the animals and interior housing. Labor shortages make it challenging to implement and maintain strong biosecurity because crews move among multiple buildings on a CAFO and among different CAFOs. Once introduced, hardy, highly transmissible pathogens can reinfect animals returned to

a depopulated and disinfected building. Disinfection is difficult to do such that the target pathogen is completely eliminated. ([ISU 2021](#)) ([UMN Pitkin](#))

4. Neighboring farms are at risk from airborne animal diseases contracted by contained animals living in a controlled and ventilated environment. Exhaust fans running 24/7 can introduce pathogens into the surrounding community. ([UMN Aug 2021](#)) ([Schulz 2012](#)) ([UMN Pitkin](#))
5. Disease can also be transmitted from animals to humans as zoonosis, otherwise known as spillover events. Three sequentially linked populations can facilitate the transmission: the CAFO species, the CAFO workers (bridging population), and the rest of the local human population. Salmonella from dairy cows, Avian Influenza from poultry and H1N1 Influenza from swine are examples of zoonotic diseases. Findings challenge the assumption that modern production is more biosecure than small holder operations. ([Deschuyffeleer 2012](#)) ([Graham 2008](#)) ([Jahne 2015](#)) ([Ma 2009](#)) ([Saenz 2006](#)) ([Shaw 2018](#))
6. Disease outbreaks can have far-reaching effects on the industry. Even a short-term market closure can lead to long-term consequences to market structure. One prominent example is Porcine Epidemic Diarrhea virus (PEDv), which was first detected in the U.S. in Iowa 2013. Just one year later, premises in 32 states had reported losses. Fourteen percent of beef and 27% of pork produced in the US is exported. Outbreaks can trigger trade barriers with a rapid economic impact. In late 2003, one case of Bovine Spongiform Encephalopathy (BSE) was identified in a Washington State cow. Within days, 53 countries banned U.S. Cattle and beef products. U.S. beef exports of \$3.95 billion in 2003 accounted for 9.6 percent of U.S. commercial beef production. Exports for 2004 declined 82 percent below the 2003 level. While sales volumes recovered, loss of export competitiveness still lingered more than a decade later. In 2020, the value of U.S. poultry & poultry product exports to the world had still failed to return to the pre-2015 highly pathogenic avian influenza (HPAI) outbreak levels. ([Chen 2020](#)) ([Coffey 2000](#)) ([Song 2015](#)) ([USDA-FAS 2020](#)) ([USMEF-FAQ](#))
7. Well-conceived and executed scientific studies on virus variants are sobering. For example, a 2019 study at the University of Minnesota assessed genome sequences from more than 4,000 PRRS virus isolates from the Morrison Swine Health Monitoring Project over nine years (2009-2017). They documented the circulation, emergence, and sequential turnover of different PRRS virus lineages. Results point to immune response as a major driver of virus diversification. Rapid turnover of the dominant virus lineage leads to complex multi-strain virus dynamics in which different virus variants interact and increase and decrease by swine immune-mediated competition and selection. Immune-mediated virus selection is a major challenge for vaccine development, design of veterinary surveillance programs and implementation of effective disease prevention strategies. ([Paploski](#)) ([UMN Sep 2021](#))
8. Implementing protocols and technology necessary to characterize rapidly evolving, highly pathogenic and efficiently transmitted viruses is extremely difficult. Understanding the ancestral relationships and evolution of viruses as they spread quickly among CAFOs requires state-of-the-art genome sequencing and virologic epidemiology. ([Kikuti](#))
9. Field reports from veterinarians managing multiple herds at multiple locations belonging to large systems indicate that new PRRS virus variants are able to elude filtration systems. Filtration systems are not preventing virus spread. There are often multiple virus strains in infected animals

that can spread rapidly to adjacent facilities throughout the neighborhood. ([Sanhueza 2020](#)) ([SwineCast 1168](#)) ([UMN Aug 2021](#))

10. A September 2021 forum with veterinarians from academia and corporations described the 2021 PRRS outbreak as a "complete off-the-rails disaster..." with "so much virus in the neighborhood that it overwhelmed the filters." There is little ability to track neighboring management practices such as vaccination protocol and movement of animals and personnel to and between CAFOs or the existence and implementation of biosecurity plans. Experts recommend that corporations consider abandoning the "central hog belt" and starting over in new geographical areas. ([SwineCast 1168](#))
11. The movement of people and equipment among livestock facilities is a primary route of transmission for disease. Mitigation strategies to tackle outbreaks go beyond ordinary preventative measures. Strategies such as animal traceability, disease syndrome reporting and analysis, and risk-based herd health management are all ways to enhance the resilience of livestock production. Inspection of cleanliness and disinfection of incoming transport vehicles may be necessary. CAFO managers and owners must be willing to invest, and workers must be willing to comply with mitigation strategies. ([FAO 2020](#)) ([Graham 2008](#)) ([SwineCast 1168](#))
12. Contaminated feed and ingredients may represent a risk for transport of pathogens at the domestic and global levels. ([AASV 2020](#)) ([Dee 2018](#)) ([Niederwerder 2019](#))
13. Infectious disease testing, transmission prevention and control are measures to detect disease and control it when found. Testing for infectious disease within a facility should be performed on a schedule and at a frequency based on the common diseases of concern, the age of the animal group at risk, observations of the health of individual animals and groups of animals. If a disease is detected, response actions should be implemented immediately. ([UMN Sep 2021](#)) ([UMN 2015](#)) ([UMN Pitkin](#))
14. With the growth of CAFOs, some states have enacted ballot proposals and laws focused on improving conditions for the animals. California's Proposition 12 is one of the most far reaching and is scheduled to take full effect in 2022. ([CDFA Prop 12](#))

Condition 5 Findings - Animal Transportation

1. Disease outbreaks require restriction of pathogen transmission at all production levels, including transportation. Because of the increasing movement of animals in multisite production, as well as the centralization of the U.S. packing industry, the chances of organism transmission has increased. All trucks, trailers, and other vehicles used for transporting animals, animal products, feed, offal, and contaminated equipment are a potential risk in the spread of disease. Under favorable conditions, viruses can survive anywhere from a few days for influenza to 18 months for African Swine Fever. ([Thompson 2001](#)) ([Rule 2008](#))
2. Efficient, experienced, and quiet handling of livestock, using recommended techniques and facilities, as well as taking measures to eliminate pain and accidental injury, will reduce stress in the animals and prevent quality deficiencies in meat and by-products. Vehicle design affects airflow, vibration, heating, and cooling. Loading density, length of travel and rest duration are also important. Key factors affecting the welfare of large animals during transport include: attitudes to

animals and the need for training of staff; methods of payment of staff; laws and retailers' codes; genetics, especially selection for high productivity; rearing conditions and experience; the mixing of animals from different social groups; handling procedures: driving methods; stocking density; increased susceptibility to disease and increased spread of disease. ([Broom 2003](#)) ([Chambers 2001](#)) ([Rioja-Lang 2019](#))

3. Swine are commonly transported to slaughter in vehicles that have not been cleaned and disinfected between loads. In many cases, the risks and associated costs of disease introduced late in the growing period are thought to be less than the cost of cleaning and disinfecting vehicles. Transport vehicles are often shared by different owners, enabling the spread of disease across large regions. ([Lowe 2014](#))
4. Much of the recent research on disinfecting transport vehicles comes from the swine industry as it faces the PRRS and PED viruses. Implementation of “all in–all out” sites, in which all animals in a group are removed before arrival of the next group, limits the spread of disease introduced by transport vehicles. Critical factors in sanitation programs include selecting an efficacious disinfectant, using it at the proper dilution rate and means of application, and allowing for sufficient contact time. High-pressure washing of transport trailers, followed by 90 to 120 minutes exposure to disinfectants is likely to eliminate residual infectious. A final heating step can be effective at inactivating virus to the point of preventing future infection. Studies suggest that it may be possible to inactivate PED virus in the presence of feces by heating trailers to 71°C for 10 minutes or by maintaining them at room temperature (20°C) for at least 7 days. ([Dee 2006](#)) ([Thomas 2015](#))
5. Federal interstate regulations provide for quarantine, restriction of movement, maintenance of sanitation, and identification of animals to prevent the spread of animal disease. Accredited veterinarians certify livestock, birds, and poultry. [USDA APHIS | Interstate Regulations](#)
6. USDA's “28-hour rule” for livestock transportation dictates that livestock — poultry is exempt — can only be on a truck for 28 hours, at which point they must be offloaded and provided with food, water and at least 5 hours of rest. ([49 USC Ch. 805](#))
7. Wisconsin requires official identification for out of state dairy and swine herds and poultry flock. Generally speaking, animal truckers must be licensed in Wisconsin. In addition, vehicles used to haul animals must be licensed by the Wisconsin Department of Agriculture, Trade and Consumer Protection; this is separate from vehicle registrations issued by the Department of Transportation. ([DATCP Home Animal Movement](#)), ([Wi Legislature: Chapter ATCP 10](#))
8. Vehicle traffic at a facility can be broken down into those that are involved with livestock shipments, non-livestock shipments, and employee/personal vehicle traffic. Facilities should consider the following:
 - a. Separate parking and entrances for livestock, non-livestock, and personal vehicle traffic.
 - b. Segregated traffic flows for vehicles entering the livestock areas from non-livestock areas when leaving facility.
 - c. Washing/cleaning and disinfecting station for vehicles entering the livestock areas when leaving the facility.
 - d. Ability to contact drivers and owners of previous livestock shipments ([UMN 2015](#))

Condition 6 Findings - Private and Public Drinking and Agricultural Wells

1. Private and public drinking water wells are regulated very differently:
 - a. **Public drinking water systems** - Passed in 1974, the federal Safe Drinking Water Act, sets standards for water treatment as well as systematic collection and analysis of water quality for these systems.
 - b. **Private wells** - Safe Drinking Water Act standards *do not* apply to private wells. No state or federal laws requires existing private wells to be tested for contaminants. All of the Town of Round Lake's drinking water comes from private wells.
([AAP 2009](#)) ([MacDonald 2017](#)) ([Safe Water Drinking Act](#)) ([Ward 2009](#))
2. Wells pumping less than 36 million gallons a year are not regulated. Wells with a pumping capacity that exceed 100,000 gallons a day (70 gallons per minute or 36 million gallons a year) are regulated by the WDNR as high-capacity wells. This includes agricultural wells. Wells are further classified by a water loss above or below 2 million gallons a day in a 30-day period from the basin from which it is withdrawn because of inter-basin diversion or consumptive use or both. ([Wi DNR High Capacity Wells](#)) ([Wi Legislature: 281.35](#))
3. Wisconsin's constitutional public trust doctrine requires the state to protect its "navigable waters" for the public's benefit. A July 2021 ruling by the Wisconsin Supreme Court affirmed that wells above *and* below the 30-day period threshold require the WDNR to determine that no public water rights in navigable waters will be adversely affected and that the proposed withdrawal will not have a significant detrimental effect on the quantity and quality of the waters of the state. Permits may include conditions as to location, depth, pumping capacity, rate of flow, and ultimate use, which ensure that the high capacity well does not cause significant environmental impact. ([Wi Legislature: 281.34](#)) ([Wi Supreme Court Case: 2018AP59](#))
4. A wide range of organizations argued to the Wisconsin Supreme Court that the state does not have authority to protect public waters from some types of well pumping. These include Wisconsin Manufacturers & Commerce, Dairy Business Association, Midwest Food Processors Association, Wisconsin Potato & Vegetable Growers Association, Wisconsin Cheese Makers Association, Wisconsin Farm Bureau Federation, Wisconsin Paper Council, Wisconsin Corn Growers Association and the Wisconsin Legislature. ([Wi Supreme Court Case: 2018AP59](#))
5. Knowledge of surface and groundwater located up and down gradients from CAFOs makes it possible to analyze samples for fecal indicators, viruses, and bacteria. Pumping tests are needed to assess whether groundwater levels and volumes are sufficient to supply a CAFO's needs. ([Sapkota](#)) ([Schmalzried 2010](#))
6. CAFOs use well water for watering animals, cleaning facilities, animal cooling and in some instances for moving manure from the barn to the storage structure. Dairies use water to clean milking systems, parlors and bulk tanks, prepping cows for milking, and milk pre-cooling. When animal groups leave a swine facility it is thoroughly cleaned by pre-soaking and/or pressure washing. During periods of extreme heat, pigs may be cooled by periodically dripping water on the animals back or by small misters. ([Brumm 2006](#)) ([Cullens 2011](#)) ([Guthrie 2011](#)) ([Harmon 2008](#)) ([May MSU](#)) ([Thomas MSU](#))

7. Water use varies widely depending on animal species, number and size of animals, conservation practices and environmental conditions. Dairy CAFOs are most likely to require high-capacity wells. Each cow requires between 30 and 50 gallons of water per day. Wash water can occupy 25% to 50% of lagoon capacity. For example, a 6,125-animal unit (4,287 cows) CAFO using 40 gallons/cow/day would require an estimated 62.5 million gallons a year. ([Cullens 2011](#)) (Eastridge)
8. Daily water consumption for pigs ranges from less than 0.5 gallons/ pig/day for newly weaned pigs to greater than 1.5 gallons/pig/day for grow-finish pigs and 3 to 4 gallons/day for the gestating female to 5 to 6 gallons/day for the lactating female. Pen space utilization rates typically run 85- 90% or occupied pen spaces of 310 to 330 days per year. The mix of pigs can vary widely. As an example, the following table calculates yearly consumption based on data in the Form 3400-025A from the 2021 application for an Agricultural Livestock Operation Permit by Cumberland LLC's Swine CAFO in Burnett County, Wisconsin. Cumberland estimates water consumption at 10.9 million gallons a year. However, based on University of Nebraska research, estimated water consumption from this 6,163-animal unit (26,250 pigs) CAFO is 15.6 million gallons a year.

Number & Type of Animal	Pen Utilization	Water Consumption	Yearly Water Consumption Gallons
7,500 - Sows (3,000 Animal Units)	330 days	6 gal/space/day	14,850,000
14,625 - Pigs up to 55 pounds (1,463 Animal Units)	330 days	.5 gal/space/day	2,413,125
4,125 - Pigs 55 pounds to market (1,650 Animal Units)	330 days	1.5 gal/space/day	2,041,875
Total animals - 26,250 (Total Animal Units 6,163)			19,305,000

Condition 7 Findings - Air Pollution

1. Another prominent concern about large livestock operations is the impact on public health and property values of toxic air pollution from manure spreading as well as dust and manure blown from powerful building fans. While science-based regulations for manure spreading attempt to protect water, there is very limited regulation of air pollution. Federal regulators have not developed standards. A 2010 WDNR study identified 30 beneficial management practices for mitigating hazardous air emissions from animal waste. No action was taken. ([APHA 2019](#)) ([FWW 2021](#)) ([Spencer 2004](#)) ([USEPA 2013](#)) ([USEPA 2017](#)) ([UMN 2021](#)) ([WDNR 2010](#))
2. Community members living near CAFO operations face increased exposure to air pollution which can cause or exacerbate respiratory conditions including asthma, eye irritation, difficulty breathing, wheezing, sore throat, chest tightness, nausea, bronchitis, and allergic reactions. Air emissions include particulates, volatile organic compounds, and gases such as nitrous oxide, hydrogen sulfide, and ammonia. Odors associated with air pollutants from large-scale hog operations have been shown to interfere with daily activities, quality of life, social gatherings, and community cohesion and contribute to stress and acute increased blood pressure. ([Cambra 2010](#)) ([Donham 2007](#)) ([Heederick 2007](#)) ([Horton 2009](#)) ([Hribar 2010](#)) ([Mirabelli 2006](#)) ([Schinasi 2011](#)) ([Wing 2000](#)) ([Wing 2013](#))
3. Statistical analyses confirm that source terms such as distance to a hog CAFO and live weight per operation, as well as temperature, wind speed and wind direction are important predictors of

atmospheric ammonia (NH₃) at community locations. The results indicate potential zones of exposure for human populations who live or go to school near hog CAFOs. ([Wilson 2007](#))

4. Wisconsin rural residents living in close proximity to CAFOs report increases in allergies, asthma, uncontrolled asthma, medication use, and impaired lung function. North Carolina citizens show high rates of infant mortality, asthma, low birth weights, kidney disease, and tuberculosis in communities near hog factories. ([Kravchenko 2018](#)) ([Schultz 2019](#))
5. North Carolina now recognizes the impact of air pollution on communities in the 2020 Odor Control Check List as part of "Title VI: Increasing equity, transparency and environmental protection...." ([NCDEQ 2020](#))
6. Under Wisconsin Statute 93.90 and Wis. Admin. Code Ch. ATPC 51 setbacks for livestock structures with an infinite number of animals cannot exceed 200 feet. Maximum setbacks allowed for manure storage cannot exceed 350 feet. ([Wi Admin Code Ch. 51](#)) ([Wi Legislature: Chapter ATPC 93.90](#))
7. The 2019 Technical Expert Committee (TEC) of the Wisconsin Department of Agriculture Trade and Consumer Protection recommends that setbacks be established using the University of Minnesota Extension's "Odor from Feedlots Estimation Tool" (OFFSET). ([UMN OFFSET](#)) ([WDATCP TEC 2019](#))
8. In 2019, Wisconsin Department of Agriculture Trade and Consumer Protection developed a draft and final draft rule for Wis. Admin. Code Ch. ATPC 51. In the draft rule setbacks for high odor structures run from 600 to 2,560 feet. In the final draft, setbacks run from 350 to 1,450 feet. However, the Wisconsin Legislature refused to hear the rule and none of the proposed changes were adopted. ([WDATCP TEC 2019](#)) ([ATPC 51 2019 Draft Rule](#))
9. Neighboring farms are at risk from airborne animal diseases contracted by contained animals living in a controlled ventilated environment where exhaust fans move airborne particles to the outdoors. Pathogens transmitted in the air flow into the environment threaten herds in the surrounding community. Microorganisms could be spread by air flow up to 3000 meters from chicken production buildings. ([Baykov 1999](#)) ([Spencer 2004](#))

Condition 8 - Private and Public Property Rights and Values

1. Economic concentration of agricultural operations tends to remove a higher percentage of money from rural communities than when the industry is dominated by smaller farm operations, which tend to circulate money within the community. Communities dominated by smaller owner-operated farms have a richer civic and social fabric. More retail purchases are made locally resulting in income being more equitably distributed. ([Foltz](#))
2. Concentration of agriculture is associated with local economic and community decline as evident through decreased tax receipts and local purchases as operations expand. The social and economic well-being of local rural communities benefit from increasing the number of farmers, not simply increasing the volume of commodity produced. ([Foltz](#))

3. Financial health of government and citizens is based in large part on property values. Large livestock facilities can bring new investment while also negatively impacting property values. CAFOs can have large adverse impacts on home values within 3 miles and directly downwind. Empirical evidence indicates that residences near large scale animal operations are significantly affected, and data seems to suggest a valuation impact of up to 26 percent for nearby properties, depending on distance, wind direction, and other factors. There has been some suggestion that properties immediately abutting a CAFO can be diminished as much as 88 percent. Nearby small farms can be impacted by such factors as water degradation and insects. ([Isakson](#)) ([Kilpatrick 2001](#)) ([Kilpatrick 2015](#)) ([Kim](#)) ([Lawley](#)) ([Wi DOR](#))

Condition 9 Findings - Compliance and Enforcement

1. WDNR struggles to keep up with CAFOs required to have WPDES permits as the number grew from 135 in 2005 to 323 in 2021. Eighty (80) or 25% of Wisconsin CAFOs are operating under expired WPDES permits. ([WLAB 2016](#)) ([WDNR CAFO page](#))
2. Enforcement of WPDES permits relies, for the most part, on self-reporting and whistleblowers. One WDNR regional staff person covers compliance for eight counties running 245 miles from Douglas County on Lake Superior to Buffalo County on the Mississippi River. ([WDNR employee](#))
3. Issues with Emerald Sky Dairy illustrate the enforcement challenges communities face. Located in St. Croix County, Emerald Sky is owned by a Nebraska company. They have had five known manure violations in three years. The worst was a 2016 spill of 275,000 gallons that was reported by a whistleblower in 2017. The dairy received an \$80,000 fine in May 2019. In November 2019, an anonymous call reported manure flowing down a ditch that dumps into Hutton Creek. DNR staff documented manure flowing into the creek and dead fish. St. Croix County Development Corporation had to send a letter to the DNR in February 2020 demanding "full and quick enforcement of manure application rules and statutes for CAFO's located in St. Croix County. ([Kremer 2017](#)) ([St. Croix CDC 2020](#)) ([Wi Circuit Court-000002](#)) ([WDNR Emerald 2019](#))
4. Enforcement by Wisconsin Department of Justice (DOJ) under the state Attorney General on CAFOs with WPDES permits can be very uneven. Enforcement on 2017 violations in St. Croix County took years. In 2021 alone, DOJ has taken enforcement action against CAFOs owned by Rolling Hills, Kostechka, Tri-Star, Maple Leaf, Redtail Ridge, JonDe Capital and Verhasselt Farms.
5. Tracking where animal wastes are spread is very challenging. In one Iowa study, public records were used to document manure management by CAFOs housing 59,700 finishing hogs in a 3,840-acre area. Together, they generated an estimated 1.79 million pounds of nitrogen each year, more than 70% of which volatilized into the atmosphere. CAFO operators minimized the area required for applying manure by underestimating manure nitrogen content, projecting above average crop yields, and applying manure to soybeans. Some fields were claimed by more than one operator, and some field sizes were overestimated. For example, one operation spread manure on 2,446 acres; however, based on crop demand for phosphorus, 23,104 acres of cropland would have been required. ([Jackson 2000](#))

Condition 10 Findings - Monitoring

1. The Wisconsin Supreme Court ruled in July 2021 that WDNR has the authority to require offsite groundwater monitoring as part of a CAFO wastewater discharge permit. The ruling does not require permits to include monitoring. Kinnard Farms in Kewaunee County and the Wisconsin Legislature argued that Act 21 prevents the DNR from taking steps through its permitting process to protect groundwater. ([WI Supreme 2016AP1688](#))
2. Large-scale industrial food animal production can cause numerous public health and environmental problems and should thus be monitored to prevent harm to surrounding communities. Since each situation is different, monitoring program design should be tailored to particular situations. ([Hribar 2010](#)) ([USEPA 2003](#))
3. The most fundamental step in the development of a monitoring plan is to define the goals and objectives. Designing a monitoring plan also includes selecting sampling variables, a sampling strategy, station locations, data analysis techniques, the length of the monitoring program, and the overall level of effort to be invested. ([USEPA 2003](#))
4. Most groundwater contamination incidents involve substances released at or only slightly below the land surface. Contamination can occur by infiltration, recharge from surface water, direct migration, and inter-aquifer exchange. The first and second mechanisms primarily affect surface aquifers, the third and fourth may affect either surface or deep aquifers. ([USEPA 1994](#))
5. Groundwater monitoring is necessary to determine: background groundwater quality; existing groundwater conditions near retention ponds, corrals, and land application areas; and effects of the improved management practices on groundwater quality. ([CAEPA 2010](#))
6. Livestock operators must have a reporting and monitoring system to ensure odor control practices are implemented in accordance with specifications. New Wisconsin rules should require local governments to monitor permitted livestock facilities using a checklist that is comprehensive and forward looking and that covers whether an operation anticipates adding animals or building livestock structures. Local governments should have the option of monitoring by conducting site visits or requiring self-reporting by livestock operators. ([WDATCP 2019](#))
7. Data collection of particulate-matter air exposure in rural areas is needed because of the huge gap in knowledge as compared to gases emitted by CAFOs. Exposure mechanisms for particulates are expected to be different than those for gases because particulates from CAFOs are biologically active and are relatively large. Therefore, data is needed on sedimentation out of the air, resuspension, and aerosols from waste spreading. ([Heederik 2007](#))

Condition 11 Findings - Preserve Quality of Life

Roads - Damage and Traffic Disruptions

1. Rural roads account for an estimated 33 percent of the vehicle miles traveled in the U.S. and 56 percent of fatalities. Rural roads may have design elements that increase the risk of fatalities or serious injuries, such as inappropriately high-speed limits, narrow lane widths and shoulders, steep ditches, or trees close to the roadway. Transport of animals and feed on roads not designed for increased use and added weight loads can cause road deterioration and traffic disruptions. Low

population density and sparse land use of rural communities can increase detection, response, and travel times for emergency services, reducing key factors in crash survivability. ([USDOT 2012](#))

2. The Wisconsin Towns Association (WTA) estimated in 2019 that a 700-cow CAFO would produce 7 million gallons of animal waste requiring a John Deere 8230 tractor pulling a 2-axle Husky manure tanker to make 2,071 trips annually. That would prematurely decrease the life of a road (50-year lifespan) built with 3 inches of asphalt over 5 inches of gravel on fair base soils, by 30 years. However, a road built with 5.5 inches of asphalt over 9 inches of gravel, would have no premature aging of the road. ([WTA 2019](#))
3. WTA recommended to DATCP in 2019 that new livestock siting rules must strongly consider:
 - a. Transportation infrastructure needs associated with a new or expanded facility
 - b. Current state of the transportation infrastructure proposed to be used
 - c. Gap between needs and current status
 - d. Process for identifying both short-term damage and long-term physical degradation of infrastructure resulting from the operation
 - e. Method for the operation to fund road damage and life cycle costs accruing to the operation at the owner's expense. ([WTA 2019](#))
4. Heavy vehicles which were not anticipated at the time the pavement structure was designed can cause additional damage and create the need for rehabilitation or reconstruction sooner than expected. These unexpected heavy vehicles could be generated by new industrial facilities, temporary heavy construction in a limited geographical area, and other reasons. Best practices entail the completion of a traffic study and roads needs analysis, including provision for additional signage and speed limits and signals as part of the planning. This analysis should be performed in conjunction with both state and local authorities. ([MNDOT 2014](#)) ([USDOT 2012](#))
5. Accident reports on 415 commercial livestock truck accidents were tabulated between 1994 and June 2007 in the United States and Canada. Data was collected from Google internet searches of newspaper and television news reports, unpublished industry sources, and Alberta government agencies. Fifty-nine percent of the accidents occurred during the early morning hours from midnight to 9:00 am and 80% involved a single vehicle. Driver error was blamed for 85% of the wrecks. In 83% of the accidents, the vehicle rolled over with 84% of the truckers tipping over on their right side. In North America, vehicles travel on the right-hand side of the road and if a driver falls asleep at the wheel he usually drifts off toward the right. Driver fatigue is the most likely explanation for many of these accidents. ([Woods 2008](#))

Fire

1. CAFOs can present increased fire safety costs and concerns for communities. A May 2021 fire near Waseca, MN burned two buildings, killed 12,000 hogs, and required 20 tankers from nine fire departments. In March 2019, fire resulted in a roof collapsing at a Holden Farms CAFO near Mondovi, WI killing an estimated 4,000 hogs and requiring crews from five counties. Hazardous winter condition made the Mondovi scene dangerous sending the Eleva fire truck into the ditch. ([Moran 2021](#)) ([Clemons 2019](#))
2. The need for multiple rural fire departments to respond may stretch or exceed their capacity to address other fires at the same time. CAFOs may also be served by rural fire departments that do not have a sufficient water supply. ([NFPA 1144](#))

- a. Fire Safety Needs Analyses look at the ability of multiple fire departments to respond to a fire, while still supporting the needs of the community; availability of sufficient water on site to douse a fire; and building designs and operating plans that reduce the likelihood of a fire. Standards are laid out by the National Fire Protection Association (NFPA) in NFPA 1141: Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas. ([NFPA 1141](#))
3. Water Supply Needs Analyses look at the adequacy and reliability of a water supply to control and extinguish anticipated fires in the jurisdiction every day of the year. Guidelines are included in NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting. An adequate water supply may entail the need to obtain permits and drill new supply wells. Storage may be needed for enough water to ensure the necessary pumping rate, as well as the total amount of water required to extinguish a large fire. ([NFPA 1142](#))
4. Water Supply Needs Analyses should include an evaluation of the potential impact on surrounding private, public, and agricultural wells, as well as springs.
5. CAFOs can also be affected by wild land fires. NFPA 1144: Standard for Reducing Structure Ignition Hazards and Wildland Fires provides a methodology for assessing wildland fire ignition hazards around existing structures and developments to reduce the potential of structure ignition from wildland fires. NFPA 150: Fire and Life Safety in Animal Housing Facilities Code addresses the fire and life safety needs of both animals and humans. ([NFPA 1144](#)) ([NFPA 150](#))

Given the potential impacts to health, safety and general welfare, the Town has an obligation to enact reasonable regulations on the operations of CAFOs.

In addition to the general impacts, the Town of Round Lake has also determined that this Ordinance is necessary to achieve water quality standards under Wis. Stat. 281.15 which are designed to protect the public interest including the present and prospective future use of the Town's water for public and private water systems, propagation of fish and aquatic life and wildlife, domestic and recreational purposes, and agricultural, commercial, industrial, and other legitimate uses. The waters of the Town are vitally important to its residents and require protection and regulation.

Before a CAFO may begin operation within the Town of Round Lake, it is imperative that the operational risks be analyzed, baselines be established to control medical risks, and the monitoring of each risk be established for evaluation and appropriate review.

It is for these reasons the Town of Round Lake enacts this Concentrated Animal Feeding Operations Ordinance.

TOWN OF ROUND LAKE CONCENTRATED ANIMAL FEEDING OPERATIONS ORDINANCE

The Town Board of the Town of Round Lake, Sawyer County, Wisconsin, does ordain as follows:

Section 1. Authority

This Ordinance is adopted pursuant to the powers granted under Wisconsin Constitution, and Wisconsin Statutes including but not limited to Section 92.15. This Ordinance is further adopted pursuant to the powers granted to the Town Board under the grant of village powers pursuant to Sec. 60.22 of Wis. Statutes for the protection of public health, safety, and general welfare.

Section 2. Purpose

The purpose of this Ordinance is to effectively, efficiently and comprehensively regulate the operation of Large-Scale Concentrated Animal Feeding Operations of 500 animal units or greater (“CAFO”) in the Town of Round Lake, without respect to siting, to protect public health (including human and animal health), safety, and general welfare, to prevent pollution and the creation of private nuisances and public nuisances, and to preserve the quality of life, environment, and existing small-scale livestock and other agricultural operations of the Town of Round Lake and to achieve water quality standards within the Town of Round Lake. This Ordinance sets forth the procedures for obtaining a CAFO Operations Permit for the operation of new and expanded livestock facilities in the Town of Round Lake (sometimes referred to as “the Town”).

The need for this Ordinance is based upon the Town’s obligation to protect the health, safety, and general welfare of the public and is based upon reasonable and scientifically defensible findings, as adopted by the Town Board, clearly showing that these requirements are absolutely necessary to protect public health and safety. Specifically, the Town finds that there is ample scientific research and evidence establishing that CAFOs pose a significant risk to the integrity of the Town’s groundwater, surface water, air quality, the health and well-being of its residents and local property values. These findings are based in part on the scientific articles and research studies discussed and listed in Appendices A. & B.

Section 3. Definitions

1. “Applicant” or “permittee” refer to the entity seeking a CAFO Operations Permit under the terms of this Ordinance.
2. “Large-Scale Concentrated Animal Feeding Operation” or “CAFO” means:
 - a. A lot or facility, other than a pasture or grazing area, where 500 or more animal units, as calculated from the Wisconsin DNR’s Animal Unit Calculation Worksheet, have been, are, or will be stabled or concentrated, and will be fed or maintained by the same owner(s), manager(s) or operator(s) for a total of 45 days or more in any 12-month period. Two or more smaller lots or facilities under common ownership or common management or operation are a single Large-Scale Concentrated Animal Feeding Operation or CAFO if the total number of animals stabled or concentrated at the lots or facilities equal 500 or more animal units and at least one of the following is true: (1) The operations are adjacent; (2) The operations utilize common systems

for the land spreading of manure or wastes; (3) Animals are transferred between the lots or facilities; (4) The lots or facilities share staff, vehicles, or equipment; or (5) Manure, barnyard runoff or other wastes are comingled in a common storage facility at any time.

- b. Any lot or any facility, regardless of location that meets the definition of Section 3.2.a. and uses land in the Town to manage waste.
3. “Operations” means a course of procedure or productive activity for purposes of conducting and carrying on the business of a CAFO including populating animal housing facilities, storing, and managing animal and other waste materials, and conducting any other business activities.
4. “Pollution” means degradation that results in any violation of any environmental law as determined by an administrative proceeding, civil action, criminal action or other legal or administrative action investigation or proceeding.
5. “Private Nuisance” means a non-trespassory invasion of another’s interest in the private use and enjoyment of land, and the invasion is either: (1) intentional und unreasonable, or (2) unintentional and otherwise actionable under the rules of controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities.
6. “Public Nuisance” means a thing, act, occupation, condition or use of property which shall continue for such length of time as to “(1) substantially annoy, injure or endanger the comfort, health, repose or safety of the public; (2) in any way render the public insecure in life, health or in the use of property; or (3) unreasonably and substantially interfere with, obstruct or tend to obstruct or render dangerous for passage or public use any street, alley, highway, navigable body of water or other public way or the use of public property or other public rights.

Section 4. License Required

Regardless of siting, a livestock facility with 500 or more animal units shall be allowed to conduct operations within the Town of Round Lake only as provided under this Ordinance. Applicants shall apply for a CAFO Operations Permit to operate in the Town of Round Lake under this Ordinance prior to conducting any operations.

1. General

A CAFO Operations Permit issued by the Town of Round Lake is required for new or expanded livestock facilities that will operate with 500 or more animal units.

2. Licenses for Existing Livestock Facilities

This ordinance does not apply to any livestock facility in operation in the Town on the Effective Date, provided, however, this ordinance shall apply to any such facility at such time as its owner or operator changes, or the owner or operator proposes to house a different livestock species or an expansion to exceed 500 animal units.

Section 5. Licensing Administration

The Town Board shall administer this Ordinance and related matters thereto and shall have the authority to issues licenses under this Ordinance, and to designate the local authority/ies to whom the Operator is required to submit all reports and notices and shall have the authority to enforce the license requirements, including immediate revocation of the license for flagrant violations.

Section 6. License Application and Standards

The applicant shall apply for a CAFO Operations Permit prior to conducting any operations associated with a Large-Scale Concentrated Animal Feeding Operation in the Town of Round Lake. The application shall be submitted on a form provided by the Town Clerk.

The Town Board shall decide whether to approve and issue a CAFO Operations Permit to an applicant that has submitted a complete application and paid the required application fee, after holding a public hearing on the application and considering any evidence concerning the application and the proposed operation presented by the applicant and any other interested persons or parties, including members of the public, other governmental agencies or entities, special legal counsel and expert consultants who may be hired by the Town Board to review the application and advise the Town Board.

The Town Board shall approve and issue a CAFO Operations Permit, either with or without conditions, if it is determined by a majority vote of all members, supported by clear and convincing evidence presented by the applicant, that: the applicant can and will comply with all conditions imposed by the Town; that the applicant's operations as proposed, with or without conditions, will protect public health (including human and animal health), safety, and general welfare, prevent pollution, prevent the creation of private nuisances, prevent the creation of public nuisances and preserve the quality of life, environment, existing small-scale livestock and other agricultural operations of the Town of Round Lake; and that the applicant and the application meet all other requirements of this Ordinance.

Section 7. License Application Fee

A non-refundable application fee of One Dollar (\$1.00) per proposed animal unit payable to the Town of Round Lake shall accompany an application for the purpose of offsetting the Town costs to review and process the application.

Section 8. Application Procedure

1. An applicant for a CAFO Operations Permit shall complete a Town of Round Lake CAFO Operations Permit Application and pay the required application fee. The applicant must be an owner or officer of the corporate entity proposing to operate the CAFO and sign the application. The application must also be signed by the property owner, who agrees to be held by the same standards as the operator, and by one or more qualified and professionally licensed third party engineers or geoscientists who attest that they have prepared or have reviewed the plans and certify that they will meet the following performance requirements:
 - a. Prevent the spread of infectious diseases from the CAFO to other animals, livestock and humans;

- b. The CAFO Waste Management Plan as implemented with engineered perimeter berms and liners, or equivalent or better containment measures, will prevent any obnoxious odors emanating from waste management activities, any discharge of contaminated runoff to surface water, and any seepage to ground water, including impacts to surface water and ground water from offsite management or disposal of animal wastes and that the CAFO has applied for and will not operate until it has received a zero-discharge permit from the State, or in absence of action by the State, from the Town, a local zero discharge waste water and storm water permit(s);
- c. The Animal Population Control and Depopulation Plans provide for the daily recording and reporting of animal counts and mortality and reporting to the Town-designated local authority within 24 hours of any unusual mortality, as defined in the plan, and that the provisions for managing the movement and transportation of livestock, containment and treatment of bodily fluids from carcasses, and safe disposal of carcasses, will prevent the spread of disease to other livestock, animals, workers and other residents and humans in the area;
- d. The Biosecurity and Animal Health Plan provides for the health and humane treatment of all animals, routine observation and routine testing for diseases of concern (as defined in the plan), and for the separation and quarantine of diseased animals and animals in contact with diseased animals, their euthanasia, and the handling and disposal of diseased animals, sufficient to prevent the spread of disease to workers, other livestock and animals and to humans and provides for quarterly reporting of animal testing results and plan-specified enforceable metrics confirmation that the livestock and conditions at the facility, based on plan-identified metrics, are healthy by a third-party inspector and that any deviations from the metrics and any detection of diseases of concern will be immediately reported to the local health department and local authority; and that the plan provides for adequate financing and immediate implementation of emergency containment measures by third-party contractors, including testing of workers and contractors who may have come into contact with diseased animals, and other emergency measures in the event of an outbreak of disease, based on the latest authoritative disease containment guidance;
- e. The Animal Transportation Plan, in combination with the biosecurity and animal health plans, will provide for the safe transportation of all livestock to and from the CAFO, the disinfection of transport trailers and treatment of water used to disinfect trailers, the prevention of disease, and provide for coordination with local traffic and road authorities to assure their safe transport and prevent traffic accidents and to provide the necessary emergency response measures in the event of an accident;
- f. The Water Use Plan is based on a thorough hydrogeologic characterization study, including identification of all onsite and nearby wells and springs, and artesian fed streams and water bodies (including ponds, wetlands, and lakes) within 5 miles, and that the planned use of water will have no impact, considering projected 50-year growth of population in the area, on the flow rate, extent, volume and storage capacity for any existing well or spring, or artesian fed water body within 2 miles of the CAFO and the quarterly reporting of water use to the local authority or their designated hydrogeologist;

- g. The Odor and Toxic Air Pollution Prevention Plan will prevent the presence of odiferous smells noticeable to human olfactories and the detection of toxic air pollutants along the property boundaries and provides for adequate offsets, waste containment, air and odor emission control devices including particulate filters to prevent air pollution and the transmission of disease particles from the CAFO or offsite waste management area;
- h. The Community Economic, Land Use and Property Value Assessment and Impact Study has been performed by a licensed appraiser and a qualified land use planner, is scientifically sound and concludes that there will be no negative impact to properties within 3 miles of the proposed CAFO, and a net positive benefit to the Town, including considering the risks of the operations on the public health;
- i. The Construction, Fire and Road Plans, including signed engineered drawings for the measures required to meet the performance requirements of this ordinance and the measures specified in the plan have been submitted with the application, and include a fire prevention/fire-fighting capacity/fire-water capacity needs analysis and the requisite fire water storage/fire prevention/fire-fighting equipment plans, as well as a traffic study and road improvement needs analysis and road traffic and roadway improvement plans, along with letters of conformance, on agency letterhead, stating that application-submitted plans are complementary with and are in conformance with the associated traffic and road plans and requirements of and from the local, regional, state and federal road and transportation authorities;
- j. The Compliance Assurance Testing, Sampling and Monitoring Plan shall provide for an identified chain-of-command, including local authority incident commanders, for the reporting and correction, including emergency measures, of any and all deviation(s) from the plan's enforceable metrics, as well as the daily monitoring of all operations for compliance with the enforceable metrics identified in the plan, including inspection and sampling of storm water discharges, quarterly ground water monitoring at locations that will allow corrective actions and containment measures to prevent offsite migration or vertical migration of contamination, identification and verification of the efficacy of testing methods and quality assurance reviews of test results, and reporting within 24 hours of any and all deviations from compliance metrics to the owner, the third-party corrective measures contractor, and the local authorities identified in the local permit;
- k. The Compliance Assurance Plan shall document that the prepared plans and procedures are based on sound science and includes an updated review of best practices and technologies and test methods, and provides for specific compliance metrics to assure the performance requirements of the plans are met and the permit approval conditions are satisfied, and for annual audits, inspections, and certification by qualified and experienced, and licensed third party(ies), of compliance with the procedures and provisions of the various operational plans, including with the identified metrics in the plans;
- l. The Closure/Cleanup/Decommissioning and Site Restoration Plan shall be sealed by a licensed engineer and based on engineering estimates of the typical cost to address the contamination of ground water within a quarter-mile radius, the replacement cost for any wells or water supplies within a quarter mile, the remediation cost for 1/2 mile of the sediment of a receiving stream, and the complete and timely removal, closure and

restoration of the subject facility to approximate its original condition, including demolition based on a site-specific closure plan and removal of all manure, chemical waste or other hazardous materials, assuming 1 foot of affected soil below all ponds, tanks and animal holding areas, including a reasonable contingency based upon the uncertainty in the estimate as identified by the engineer.

2. Upon signing and submitting a CAFO Operations Permit Application to the Town Clerk, the applicant shall include and sign a statement that the applicant agrees to fully compensate the Town for all legal services, expert consulting services, and other expenses which may be reasonably incurred by the Town in reviewing and considering the application, regardless of whether or not the application for a permit is subsequently approved, with or without conditions, or denied by the Town Board. The applicant statement shall also state that the applicant agrees to fully compensate the Town for all legal services, expert consulting services and other expenses, for verifying and enforcing compliance with the terms of the permit, with or without conditions, if approved by the Town Board. The applicant shall submit an administrative fee deposit as required by the Town Clerk.
3. After receiving the application and the application fee, the Town Clerk shall mail a notice that a CAFO Operations Permit Application has been received to all landowners within 3 miles of the proposed CAFO with the date and time of a Town Board meeting at which the application will be considered. The notice shall provide information on how interested persons and parties may inspect and obtain a copy of the application.
4. The Town Clerk shall place the application on the agenda for the next regular Town Board meeting for which required notice can be provided.
5. At a formal public hearing held by the Town Board on the application at least sixty (60) days after it has been determined to be complete, the Town Board shall consider any evidence concerning the application and the proposed CAFO presented by the applicant and any other interested persons or parties, including members of the public and other governmental agencies or entities, and special legal counsel and expert consultants who may be hired by the Town to review the application and advise the Town Board.
6. In its review and consideration of a CAFO Operations Permit Application, the Town Board shall act in a quasi-judicial capacity, and its final decision on whether to approve and issue a CAFO Operations Permit, either with or without conditions, shall be based on written findings of fact and conclusions of law consistent with the provisions of this Ordinance, which shall be filed with the Town Clerk and served on the applicant by regular U.S. Mail.
7. The Town Board shall approve and issue a CAFO Operations Permit, either with or without conditions, if it determines by a majority vote of all members of the Town Board, supported by clear and convincing evidence presented by the applicant, that the operations of the proposed CAFO, with or without conditions, will protect health (including human and animal), safety, and general welfare, prevent pollution and the creation of private nuisances and public nuisances, and preserve the quality of life, environment, and existing small-scale livestock and other agricultural operations of the Town and that the application meets all other requirements of this Ordinance.

Section 9. Financial Surety

A CAFO Operations Permit shall require the applicant and all contractors, subcontractors, agents, and representatives, to ensure that sufficient funds will be available for pollution clean-up, nuisance abatement, and proper closure of the operation if it is abandoned or otherwise ceases to operate as planned and permitted, based on the following provisions:

1. A determination shall be made regarding the financial assurance level required by the scale of the operation. As a condition of the license, the required financial assurance shall be filed with the Town of Round Lake in an amount sufficient to clean up environmental contamination if the same were to occur, to abate public nuisances caused by the operation, including but not limited to the testing and replacement of any potentially contaminated private and public wells and water supplies within the areas subject to operations, and to ensure proper closure of the operations should the applicant elect to close or should closure occur for some other reason. The amount of the financial assurance shall be based on a Closure/Cleanup/Decommissioning and Site Restoration Plan, sealed by a licensed engineer, and based on engineering estimates of the typical cost to address the contamination of ground water within a quarter-mile radius, the replacement cost for any wells or water supplies within a quarter mile, the remediation cost for 1/2 mile of the sediment of a receiving stream, and the complete removal, closure and restoration of the subject facility to approximate its original condition, including demolition based on a site-specific closure plan, assuming 1 foot of affected soil below all ponds, tanks and animal holding areas, including a reasonable contingency based upon the uncertainty in the estimate as identified by the engineer. Upon notification of the required amount of the financial assurance by the Town, but prior to commencing operations, the applicant shall file with the Town the financial assurance conditioned on faithful performance of all requirements for the license. Upon notification of receipt of adequate form of finance assurance (as noted below) or deposit approval and verification of conformance with license conditions as verified by a third-party engineer, the applicant may commence operations.
2. The applicant may deposit cash or irrevocable letters of credit established with a bank acceptable to the Town as the required financial assurance.
3. The Town may reevaluate and adjust accordingly the amount of the financial assurance required on an annual basis.
4. Financial assurance shall be resubmitted by the applicant annually on or before the date of the originally approved application.

Section 10. Conditions of Approval

A CAFO Operations Permit may be approved with conditions to protect public health (including human and animal health), safety, and general welfare, prevent pollution and the creation of private nuisances and public nuisances, and preserve the quality of life, environment, and existing small-scale livestock and other agricultural operations of the Town. To the extent not expressly or otherwise preempted by Wis. Stat. 93.90, and Wis. Admin. Code Ch. ATPC 51 or any other provision of state or federal law, such conditions may include, but are not limited to:

1. Conditions relating to the operational characteristics of the proposed operation, to protect public health, prevent point and non-point sources of air and water pollution, and prevent private nuisances and public nuisances; including provisions for specific air emissions controls, retention ponds and berms to prevent releases to surface water, liners under operational areas to prevent infiltration to ground water, the

annual testing of nearby wells and springs, and annual inspections for permit compliance by representatives of local authorities;

2. Conditions relating to the management of animal and other waste that may be generated as part of an operation's ongoing operation, to protect public health, prevent point and non-point sources of air and water pollution, and prevent private nuisances and public nuisances, including the operator's paying for periodic inspections and air emission, surface water, and ground water testing by consultants retained by local authorities, including the following added provisions:
 - a. The Waste Management Plan in Section 8.1.b. will include scientifically significant baseline data on the water quality of local human drinking and agricultural wells.
 - b. For applications that include land spreading of manure,
 - i. the amount of land used to spread waste as part of the Waste Management Plan in Section 8.1.b. will be based on spreadable acres, not total acres, and
 - ii. the application will include all Manure Land Application Agreements, with a minimum contract period of five (5) years, and such agreements must include provisions for application of wastes in accord with the Waste Management Plan required in Section 8. 1. b.
3. Conditions relating to the population and depopulation of individual animal housing facilities, to protect public health and prevent the spread of animal-borne and vector-borne disease, to assure a safe level of sanitation, and to assure human health hazard control or health protection for the community, including provisions for health department inspections and testing of dead animals and provisions for the safe treatment and off-site disposal of sanitation wastes at a separately permitted commercial facility;
4. Conditions relating to biosecurity and the maintenance of animal health and welfare, to prevent the spread of animal-borne and vector-borne disease, to protect public health, and provide for animal safety and welfare, including provisions for frequent testing of livestock for specific diseases of concern and development of emergency containment measures in the event of the detection of a disease of particular concern;
5. Conditions relating to transportation of animals as part of the ongoing operations, to protect public health, prevent pollution, and prevent private nuisances and public nuisances, including completion of a traffic and transportation needs analysis and applicant's paying for traffic control and roadway improvements, including provisions for high-pressure washing with disinfectant of all transport trailers coming into the Town to include treatment and disposal of water used for disinfectant;
6. Conditions relating to protection of private and public drinking and agricultural wells, and other public water supplies, as part of an ongoing operation to protect public health, prevent pollution, and prevent private nuisances and public nuisances, including provisions for completing a thorough survey and mapping of private and public wells and springs and artesian fed water bodies, including wetlands, as well as a thorough hydrogeologic characterization of ground water within 5 miles of the proposed CAFO;
7. Conditions relating to air emissions and dust control as part of an ongoing operation, to protect public health, prevent pollution and prevent private nuisances and public nuisances, including provisions for property boundary offsets, air emission and air quality testing and for specific types of air emission controls on all facility exhaust fans, waste management areas, and livestock quarantine holding areas;

8. Conditions relating to protection of the private and public property rights and property values of affected property owners, as part of an ongoing operation, to protect the general welfare of the Town's residents and property owners, and to prevent private nuisances and public nuisances;
9. Conditions relating to permit compliance, enforcement and monitoring, including establishment of fees that may be assessed against the permittee to cover the costs of hiring, training, and maintaining Town personnel, or for contracting with private consultants, to conduct permit compliance, enforcement and monitoring activities for the Town, as well as provisions for annual certification of compliance by the owner/operator and by qualified and licensed third-party auditor, approved by the Town;
10. Conditions relating to the monitoring of surface water, ground water, air quality, noise, and all other environmental factors and considerations, including retention pond sampling and testing and ground water quality monitoring at compliance points sufficiently far from the facility's property line to allow implementation of prevention of offsite migration corrective action and containment measures acceptable to the Town;
11. Any other conditions deemed reasonably necessary or appropriate by the Town Board to effectively, efficiently, and comprehensively regulate the operations of a facility, to protect public health (including human and animal health), safety, and general welfare, prevent pollution and the creation of private nuisances and public nuisances, and preserve the quality of life, environment, and existing small-scale livestock and other agricultural operations of the Town, including provisions for adequate fire-fighting equipment and storage of adequate fire-fighting water based on a needs analysis approved by the Town and a Fire Safety Needs Analysis Plan that is annually reviewed and updated based on the following:
 - a. Guidelines from the National Fire Protection Association NFPA 1141: Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas;
 - b. Water Supply Needs Analysis based on guidelines included in NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting;
 - c. Wildlands Fire Analysis based on NFPA 1144: Standard for Reducing Structure Ignition Hazards and Wildland Fires;
 - d. Animal Housing Analysis based on NFPA 150: Fire and Life Safety in Animal Housing Facilities Code.

These conditions may apply not only to the CAFO facility itself, but also to any property upon which manure, carcasses, body tissue or other by products of the CAFO are spread, deposited, or disposed of. Any conditions imposed under this Ordinance may be modified by the Town Board at the time of each annual renewal. Any modifications must be documented as required by section 11, below.

Section 11. Record of Decision

The Town Board must issue its decision in writing. The decision must be based on written findings of fact supported by evidence in the record.

Section 12. Transferability of License

A CAFO Operations Permit and the privileges granted by this license run with the operator, not the land. In the event of a change in ownership of the livestock facility, the new operator/owner of the facility will need to apply for a new license including the required fees. The license is not transferrable upon change of ownership of the land.

Upon change of ownership of the livestock facility, the owner of the facility shall file information with the Town Clerk within 30 days that such event occurs and provide pertinent information, including but not limited to such information as the name and address of the new owner and date of transfer of ownership.

Section 13. Expiration of License

A CAFO Operations Permit remains in effect regardless of the amount of time that elapses before the livestock operator exercises the authority granted under this permit, and regardless of whether the livestock operator exercises the full authority granted by the approval. However, the Town may treat a CAFO Operations Permit as lapsed and withdraw the license if the license holder fails to do all of the following within 2 years after issuance of license:

1. Begin populating the CAFO.
2. Begin constructing all of the new or expanded livestock housing or waste storage structures proposed in the application for local approval.
3. Pay the renewal fee on or before January 1 of each calendar year as required by Section 14 of this Ordinance.

Section 14. Permit Terms and Modifications

A CAFO Operations Permit and the privileges granted by a CAFO Operations Permit issued under this Ordinance is conditioned on the livestock operator's compliance with the standards in this Ordinance, and with commitments made in the application for a CAFO Operations Permit. The operator may make reasonable changes that maintain compliance with the standards in this Ordinance, and the Town Board shall not withhold authorization for those changes unless the Town can demonstrate good cause to do so. A violation of the Permit or a failure to comply with the commitments made in the application may result in suspension and/or termination of the Permit.

The Town Board, or its designee, shall work to ensure on an ongoing basis that all requirements and conditions of any permit issued under this Ordinance are followed by the permittee. The Town may request any information it finds reasonably necessary to evaluate whether requirements and conditions are being met and whether substantial changes or modification to the operation have taken place, and the permittee shall provide such information. To assist in accomplishing this task, any permit issued pursuant to this Ordinance shall be subject to an annual renewal fee in the amount of One Dollar (\$1.00) per animal unit. Modifications to the conditions of a CAFO Operations Permit may be made as described in Sections 10 and 11.

The license has a term of 5 years, so long as the permittee remits the annual renewal fee and may be renewed for additional 5-year periods if there are no substantial changes or modifications proposed in the CAFO's operations, including changes to the animal species or number of animals, and there have been no permit

violations or compliance problems. If substantial changes or modifications are determined to have taken place or if there have been violations of the permit conditions or requirements under the ordinance or under any state or federal requirements, the permittee shall have to reapply for an operations permit and follow all steps required under this ordinance.

Section 15. Penalties

Any person who violates any of the provisions of this Ordinance, or who fails, neglects, or refuses to comply with the provisions of this Ordinance, or who knowingly makes any materially false statement or knowing omission in any document required to be submitted under the provisions hereof, shall be subject to the following penalties:

1. Upon conviction by a court of law, pay a forfeiture of not less than \$5000, plus the applicable surcharges, assessments, and costs for each violation.
2. Each day a violation exists or continues shall be considered a separate offense under this Ordinance.
3. In addition, the Town Board may seek injunctive relief from a court of record to enjoin further violations.
4. In addition, the Town Board may suspend or revoke the local approval of a CAFO Operations Permit under this Ordinance after due notice to the livestock facility owner and a public hearing to determine whether the license should be suspended or revoked.

The Town shall exercise sound judgment in deciding whether to suspend or revoke a CAFO Operations Permit. The Town shall consider extenuating circumstances, such as adverse weather conditions, that may affect an operator's ability to comply.

In addition to any other penalty imposed by this Ordinance, the cost of abatement of any public nuisance on the licensed premises by the Town may be collected under this Ordinance or Sec. 823.06 of Wis. Statutes against the owner of the real estate upon which the public nuisance exists. Such costs of abatement may be recovered against the real estate as a special charge under Sec. 66.0627 of Wis. Statutes unless paid earlier.

Section 16. Appeals

An applicant or any other person or party who is aggrieved by a final decision of the Town Board on whether to issue a CAFO Operations Permit, either with or without conditions, or a taxpayer, may, within thirty (30) days after the filing of the decision with the Town Clerk, commence an action seeking the remedy available by certiorari in Sawyer County Circuit Court. The court shall not stay the decision appealed from, but may, with notice to the Town Board, grant a restraining order. The Town Board shall not be required to return the original papers acted upon by it, but it shall be sufficient to return certified or sworn copies thereof. If necessary, for the proper disposition of the matter, the court may take evidence, or appoint a referee to take evidence and report findings of fact and conclusions of law as it directs, which shall constitute a part of the proceedings upon which the determination of the court shall be made. The court may reverse or affirm, wholly or partly, or may modify, the decision brought up for review.

In any certiorari proceeding brought under the preceding paragraph, attorney fees and costs shall not be allowed against the Town Board unless it shall appear to the court that it acted with gross negligence, or in bad faith, or with malice in making the decision appealed from.

A final decision of the Town Board under this ordinance is not subject to appeal under Wis. Stat. 93.90(5), Wis. Stat 93.30, or Wis. Admin Code Ch. ATP 51, which apply only to siting decisions.

Section 17. Severability

If any provision of this Ordinance or its application to any person or circumstance is held invalid, the invalidity does not affect other provisions or applications of this Ordinance that can be given effect without the invalid provision or application, and to that end, the provisions of this Ordinance are severable.

Section 18. Effective Date

This Ordinance is effective the day after publication.

Adopted this _____ day of _____, 2022 by the Town Board of Supervisors.

Town Chair

Attested:

Town Clerk

Town Supervisor

Town Supervisor

Town Supervisor

Town Supervisor