ENVIRONMENTAL ANALYSIS QUESTIONNAIRE for Concentrated Animal Feeding Operations

The Environmental Analysis Questionnaire (EAQ) for Concentrated Animal Feeding Operations (CAFOs) is part of the Department of Natural Resources' (DNR) programmatic procedures for meeting the requirements of the Wisconsin Environmental Policy Act (WEPA), <u>s. 1.11</u>, Stats and <u>Ch. NR 150</u>, Wis. Adm. Code.

WEPA requires state agencies to analyze, consider and publicly disclose the anticipated environmental and socioeconomic effects of certain agency actions. Under NR 150, this includes the issuance, reissuance, or modification of individual Wisconsin Pollutant Discharge Elimination System (WPDES) permits for new source CAFOs.

A completed EAQ is not a decision document. It is an information tool that is part of the DNR's analysis and disclosure of the environmental and socioeconomic effects of proposed CAFOs and CAFO expansions.

Fill in the information below.

Operation Name:
Contact Name/Title:
Phone:
Email:
EAQ Preparer Name (if different than above):
Title/Company:
Phone:
Email:
Date Prepared/Completed:

Proceed to the "Screening Questions" on the next page.

Screening Questions

Answer the screening questions below for the animal feeding operation for which you are applying for a Wisconsin Pollution Discharge Elimination (WPDES) permit. Your responses will determine whether you need to complete the Environmental Analysis Questionnaire. Use a computer to answer these screening questions. (This section is a fillable form and cannot be completed by hand.) As you answer each question, it will autopopulate the form and direct you to the next step.

Part I. Determine whether the proposed operation is a "New Source CAFO" as defined under section NR 243.03 (41), Wis. Adm. Code.

1. Will the operation be entirely new (i.e., constructed on a site where no other animal feeding operation is currently located)?	
2. Is the operation a large CAFO (housing 1,000 or more Animal Units) that was constructed <u>on or after</u> April 14, 2003, on a site where no other animal feeding operation was located?	
3. Is the operation an animal feeding operation housing less than 1,000 Animal Units that was constructed <u>on or after</u> April 14, 2003, on a site where no other animal feeding operation wa located – and is now proposing to become a large CAFO?	S
4. Is the operation a large CAFO that was in existence prior to April 14, 2003, but that <i>complete replaced</i> (or is proposing to replace) all of its production or processing equipment on or afte April 14, 2003?	ely -
5. Is the operation (as it exists or as it's proposed) <i>an addition</i> to an existing large CAFO that wa added <u>on or after</u> April 14, 2003? And if so , is it <i>essentially a new production area</i> , complet independent of the production area that was in existence on the site before April 14, 2003?	as ely

Part II. Characterize the scale of the proposed operation.

- 6. Do either of the following statements apply?
 - a.) The current operation houses less than 5,000 Animal Units (AU's) <u>and</u> will be expanded by an additional 1,000 AU's or more.
 - b.) The current operation houses 5,000 or more AU's and will be expanded by 20% or more.

ENVIRONMENTAL ANALYSIS QUESTIONNAIRE

Directions: Answer each of the following questions. If a question does not apply, explain why. For questions that require narrative responses (e.g., 'explain', 'describe', 'detail', 'discuss'...), your answer should be thorough and clear. Please note that this portion of the EAQ is not a fillable form.

If the proposed operation has, or will have, more than one production area (i.e., multiple locations), provide specific information on each of them, not just the main production area.

Some questions require attachments. These are specially noted. If you need additional space for a written response, include it as an attachment. Be sure to include all attachments with your completed EAQ, along with references to them in the EAQ itself (for example, "See Attachment 3: Soil Disturbance Map").

The symbol **()** is used to indicate online sources of information requested in the EAQ, as well as additional information that may be of interest to members of the public reviewing your completed EAQ.

DESCRIPTION OF THE PROPOSED OPERATION OR EXPANSION

● For the public: Additional information on the proposed project can be found in the WPDES permit application file. This includes the Permit Application (Form 3400-25) Animal Unit Calculation Worksheet (Form 3400-25A), Plans and Specifications, and Nutrient Management Plan. Search for the permit application file on the DNR Water Permits website: https://permits.dnr.wi.gov/water/SitePages/Permits.aspx. You will need a free WAMS ID to access. For more information, and to apply for a WAMS ID visit: https://dnr.wisconsin.gov/permits/water.

- 1. Provide a detailed overview of the proposed operation, including:
 - a. Current Site Characteristics (including land use, buildings, manure storage facilities, runoff control systems, etc.)
 - b. Proposed Changes (to above)
 - c. Current and Proposed Animal Units
 - d. Approximate timeline for construction
 - e. Estimated cost
 - f. Products (milk, eggs, feeder beef/swine, market ready beef/swine, etc.)
 - g. Purpose or Need for the proposed operation or expansion
- 2. <u>Attach</u> a map showing the location of all current and proposed land application areas. The map should include county, town and municipal boundaries, roads and surface water features. Also include the location of the production area.
- Detailed maps of individual fields, showing setbacks or restricted areas for land application of manure or process wastewater, can be found in the Nutrient Management Plan.
- 3. Will the proposed operation involve applying for additional DNR permits or approvals (not including the CAFO WPDES Permit)? Check all that apply below:

 -	-	-	

- DNR Storm Water Construction Site Permit
- DNR High Capacity Well Permit
- DNR Non-Transient Non-Community System Testing
- DNR Chapter 30 Waterway Permit

- DNR Wetland Disturbance Permit
- DNR Air Permit
- DNR Solid or Hazardous Waste License
- DNR Wastewater Discharge Permit
- Other: _____
- Unsure or Undetermined
- 4. List any non-DNR permits or approvals (local, other state agency, federal, etc.) that will be required for the proposed operation or expansion of an existing operation.

LAND DISTURBANCE

1 Any construction activities that disturb over 1 acre require coverage under the DNR Construction Site Storm Water Runoff General Permit. Information can be found at <u>https://dnr.wi.gov/topic/stormwater</u>.

- 5. Estimate the total acreage of soil excavation and disturbance that will occur during the construction of proposed structures (amount of disturbance should also include disturbance that will take place outside the footprint of the proposed structure). Provide following information:
 - a. Total Acres: _____
 - b. Start Date: _____
 - c. Disturbance Length of Time:
- 6. If an erosion control plan has been developed, attach a copy.
- 7. If a plan has not been developed provide:
 - a. A description of the erosion control measures that will be used during soil disturbance to prevent offsite discharges of sediment runoff to wetlands and waterways.
 - b. <u>Attach</u> a map showing planned areas of soil disturbance, including stockpile locations.

SOLID & HAZARDOUS WASTES

For more information on what is defined as solid or hazardous waste: <u>https://dnr.wisconsin.gov/topic/Waste</u>

- 8. Provide an estimate of monthly animal mortalities at the operation (quantity and types or percentage). Describe current or planned disposal methods.
- 9. List other types of solid waste that will be generated at the operation (e.g., plastic, garbage, etc.). Describe storage, use, disposal, and recycling methods.
- 10. List types and amounts of hazardous wastes (e.g., veterinary waste, cleaning chemicals, etc.) that will be used and generated at your operation. Describe storage, use, disposal, and recycling methods.

DRINKING WATER AND GROUNDWATER

(1) The questions in this section focus on drinking and groundwater associated with the production area. For information on groundwater and bedrock depths at land application sites (spreading fields) see the Nutrient Management Plan in the WPDES permit application file.

For more information on groundwater visit: https://dnr.wisconsin.gov/topic/Groundwater.

11. Attach a site map showing all current private wells within the production area (including any residential wells on the property, if applicable). Attach a well log record for each well shown on the map.

1 An online mapping and information tool can be used to show the approximate location of wells and to access well log information. Visit: <u>https://dnr.wi.gov/WellConstructionSearch/#!/PublicS</u>earch/Index.

- 12. How many residences and businesses have private wells located within one mile of the production area? Attach a map of the locations of the wells.
- 13. If any groundwater monitoring has been conducted, attach the latest groundwater monitoring report. Information should include results of parameters analyzed, groundwater depth measurements, general groundwater flow.
- 14. What is the average groundwater depth at the production area? Attach a site map that shows groundwater depths and groundwater flow direction (if determined). Indicate how this information was derived and attach supporting documentation (soil boring logs, temporary monitoring well measurements, general site assessment data collected, etc.)
- 15. Are you aware of any known pollutants (nitrates, bacteria, arsenic, etc.) detected in private wells located near the production area and land application sites? Please list pollutants and provide references to any reports.



Regional groundwater quality data can be found on the Groundwater Quality Viewer: https://gissrv3.uwsp.edu/webapps/gwc/pri_wells/

- 16. Provide current water use information for the production area:
 - a. Current daily water use (in gallons):
 - b. Current annual water use (in gallons):
- 17. Specify if the above numbers are actual (metered) or estimated. If estimated, include information on how the estimates are calculated.
- 18. List any new wells proposed for the production area and their associated pumping rates (gallons per minute).
- 19. Provide water use estimates for the production area after new well installation is complete:
 - a. Proposed Daily Water Use (in gallons):
 - b. Proposed Annual Water Use (in gallons):

SURFACE WATER RESOURCES - WETLANDS & WATERWAYS

An online interactive mapping tool, Surface Water Data Viewer (SWDV), is available to assist in answering the questions and for providing maps. Learn about its features and launch it from here: <u>https://dnr.wi.gov/topic/SurfaceWater/swdv/</u>

Note: Other GIS mapping systems may be used provided they include appropriate map layers.

- 20. <u>Attach</u> an overview map of the production area that shows all nearby surface water resources (intermittent and perennial streams, mapped wetlands, and hydric soil areas). Label stream names (if an unnamed stream indicate which named stream it flows into, "unnamed tributary to..."). Show on map any areas that may be disturbed for planned construction.
- 21. <u>Attach</u> a map that identifies with arrows storm water surface drainage flow paths in the production area. If subsurface storm water features (e.g., underground tile, french drains, manholes, etc.) are present and/or proposed, clearly identify those features on the map. Label all outfalls (i.e., points at which storm water leaves production area).
- 22. Are there any proposed physical changes to land application sites that could impact water resources (i.e., stream channel changes, tile installation, wetland fill or grading, tree clearing, etc.)? If yes, describe the extent of disturbance and <u>attach</u> a map(s) showing proposed areas of disturbance.

AIR QUALITY

For more information on air quality see: <u>https://dnr.wi.gov/topic/AirQuality/Toxics.html</u>. (See the "Ag Waste BMPs" tab for extensive information on air quality and livestock operations.) These references may be helpful for estimating emissions: <u>https://www.ars.usda.gov/northeast-area/up-pa/pswmru/docs/dairy-gas-emissions-model/</u> or <u>https://water.unl.edu/documents/Ammonia%20Emissions%20Estimator%20-</u>%20Daily%20VersionV03.pdf

- 23. List any odor mitigation measures that will be implemented for each production area facility.
- 24. Will odors from gaseous emissions be controlled from manure transport and land application? List any specific mitigation measures.
- 25. Refer to s. NR 415.04, Wis. Adm. Code (fugitive dust) to help answer the following.
 - a. What will the sources of fugitive dust be during construction? What mitigation measures will be taken during construction to minimize fugitive dust?
 - b. What will the sources of fugitive dust be at the operation? What mitigation measures will be taken to minimize these impacts. [Note: Fugitive dust is dust arising from a process that does not go through a fan or exhaust port.].
- 26. Provide a calculated estimate of potential hydrogen sulfide and ammonia emissions from the production area. List specific hydrogen sulfide and ammonia mitigation measures (if any) that will be practiced at the production area.

- 27. If applicable, discuss odor and emissions from the facility types below. Add any information on facilities specific to your operation.
 - a. Anaerobic digester:
 - b. Burning or drying systems:
 - c. Sand lanes or sand washing systems:
 - d. Composting:
 - e. Mortality management:
 - f. Spray irrigation of manure or process wastewater:
 - g. Other:

ENDANGERED RESOURCES

Complete the steps below if the proposed operation or expansion will result in a change in land use (e.g., forested land converted to land application areas, wetland changes, etc.). If no land use change is proposed, no screening is necessary (Answer: "Not applicable"). Note: DNR will supplement the information you provide with specific data from its endangered resource records.

Use the NHI Public Portal to generate an Endangered Resources Preliminary Assessment report for the proposed operation or expansion: <u>https://dnr.wi.gov/topic/ERReview/PublicPortal.html</u>.

- 28. Attach a copy of the Endangered Resources (ER) Preliminary Assessment.
- 29. According to the ER Preliminary Assessment, does the proposed operation or expansion have the potential to impact areas where state or federally listed endangered or threatened species may be present? Please specify.

PUBLIC LANDS

30. <u>Attach</u> a map of any public lands (natural areas, parks, public hunting lands, etc.) located within approximately five miles of the proposed production area.

Use the public lands mapping tool: <u>https://dnrmaps.wi.gov/H5/?Viewer=Public_Access_Lands</u>

31. What affects will the proposed operation or expansion have on users of these public properties?

TRAFFIC NOISE & SAFETY

- 32. Discuss changes in traffic volume and potential impacts of those changes during the following times (include specific information on the number and types of vehicles, frequency, duration, and noise and safety considerations):
 - a. During construction (short term traffic)
 - b. Post construction (long term traffic), (e.g., manure and process wastewater hauling; field preparation and harvest; livestock, feed, and milk transport; etc.)

- 33. Describe primary methods of manure and process wastewater hauling (e.g., temporary hose lines, permanent lines, tractor/tanker, semi-trucks, irrigation, etc.). How do each these methods affect traffic noise and safety?
 - More information on manure and process wastewater land application methods and spill response can be found within the Nutrient Management Plan.

ARCHAELOGICAL / HISTORICAL

Note: The DNR will supplement the information you provide here with data from its historical and archeological records.

- 34. Are you aware of any state or national historical sites on or adjacent to the proposed operation?
- 35. How will these sites be impacted? Include short-term (i.e. during construction) and long-term impacts.
- 36. Are you aware of any archaeological sites (for example, but not limited to, Native American burial sites) that are on or adjacent to the proposed operation?
- 37. How will these sites be impacted by the proposed project? Include short-term (i.e. during construction) and long-term impacts.

SOCIO-ECONOMIC

38. In the table below, provide the approximate number of homes, businesses and farmsteads within the proximities listed (from the production area).

	Within one mile	Within 5 miles
Residential homes		
Businesses (non-farm)		
Farmsteads		

- 39. Do you expect the value of nearby properties to increase, decrease, or remain the same in response to the proposed operation? What is the basis for this expectation?
- 40. Provide employee numbers for the operation in the table below. Provide current employees and an estimate of how many employees after the proposed operation or expansion is complete.

	Full-time Employees	Part-time Employees	Seasonal Employees
Current			
Proposed (after			
expansion)			

- 41. Provide information on local services/businesses your operation currently utilizes or will utilize after proposed operation completion. List types (veterinary, agronomic, equipment maintenance, etc.)
- 42. Describe any additional economic impacts (positive and negative) anticipated as a result of the proposal, and the basis for these expectations. Include specific dollar amounts (if available) entering or leaving the local economy.

PUBLIC CONTROVERSY

- 43. Describe any past or present public controversy associated with the operation. For example, contentious public meetings, petitions, signage, media coverage, etc.
- 44. What was or is the stated basis of the controversy or controversies? For example, concerns over particular waterbodies, economic impacts, odor impacts, increased traffic, etc.
- 45. Do you anticipate any additional public controversy in response to the proposed project?

ALTERNATIVES

Per the questions below, provide a summary of alternatives considered. Be as specific as possible.

- 46. Describe any alternatives that were considered, but not selected, in planning for the proposed operation or expansion. Describe how each alternative differed from the proposal in terms of the following
 - a. Location:
 - b. Production Area Size (footprint)):
 - c. Animal Numbers (larger, smaller):
 - d. Other:
- 47. Explain why each alternative was not selected for the proposed operation/expansion.
- 48. If no alternatives were considered, explain why.

ADDITIONAL INFORMATION

49. Describe any other factors or pertinent information that should be considered in evaluating the overall environmental and socioeconomic effects of the proposed operation. Include any new technologies, best-practices, conservation or other measures not described above.