

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NOTICE OF FINAL DETERMINATION TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No. WI-0056308-06-0

Permittee: Daybreak Foods Creekwood Cage Free, N5344 Crossman Road, Lake Mills, WI, 53551

Facility Where Discharge Occurs: Daybreak Foods Creekwood Cage Free, N5344 and N5505 Crossman Road, and N5432 County Highway A, Lake Mills, WI.

Receiving Water And Location: Unnamed tributaries to the Lower Koshkonong Creek and the Lower Crawfish River watersheds and groundwaters of the state

Brief Facility Description: Daybreak Foods Creekwood Cage Free is a Concentrated Animal Feeding Operation owned and operated by Daybreak Foods Inc. Daybreak Foods Creekwood Cage Free recently changed its name from Daybreak Foods Inc. – Creekwood Farm.

The facility is a recently renovated cage free egg laying operation with 2,075,340 laying chickens in five barns and 624,000 pullets in three barns for a total of 25,527 animal units. The previous facility was almost completely replaced during the renovation (2017 – 2020). The farm submitted a timely application allowing it to maintain permit coverage until the permit is reissued. There are no current plans to expand the facility during the proposed permit term.

Approximately 22,000 gallons of egg wash wastewater are produced daily at the egg processing facility. The wastewater is processed prior to being stored and land applied to cropland following an approved Nutrient Management Plan (NMP). The facility produces approximately 50,000 tons of solid chicken manure annually. Manure is conveyed out of the barns and into the Manure Drying and Processing building where it is dried and processed into a fertilizer. Dried manure (fertilizer) is transferred to a third party for distribution in accordance with the approved NMP. Daybreak Foods Creekwood Cage Free has a total of 477 acres available for land application of manure and process wastewater. Of this acreage, all the acres are rented.

A previous adjacent third-party operation (Unlimited Renewables) that processed manure for this facility is no longer in existence and the permit is being discontinued in conjunction with this action.

Permit Drafter's Name, Address and Phone: Mark Cain, DNR, 3911 Fish Hatchery Rd, Fitchburg, WI, 53711, (608) 516-5434

Date Permit Signed/Issued: **November 21, 2020**

Date of Effectiveness: **December 1, 2020**

Date of Expiration: **September 30, 2025**

Public Informational Hearing Held On: **September 21, 2020**

Following the public informational hearing, the Department has made a final determination to reissue the WPDES permit for the above-named permittee for this existing and new discharge. The permit application information from the WPDES permit file, comments received on the proposed permit and applicable Wis. Adm. Codes were used as a basis for this final determination.

The Department has the authority to issue, modify, suspend, revoke and reissue or terminate WPDES permits and to establish effluent limitations and permit conditions under ch. 283, Stats.

The following is a summary of significant comments and any significant changes which have been made in the terms and conditions set forth in the draft permit:

Comments Received from the Applicant, Individuals or Groups and Any Permit Changes as Applicable

Nutrient Management Plan (NMP) related questions/comments:

1. **Comment:** NMP review is not up-to-date. As of today (Sept. 27, 2020) the 2020 Nutrient Management Plan Update is still listed as "Pending" approval status on the DNR website. The Daybreak Foods Corporation submitted information months ago as required. DNR staff has

already reviewed and approved at least one NMP 2021 Update for another facility in Jefferson County. It is unclear why the NMP 2020 Update has not been reviewed yet.

Response: The NMP updates are typically reviewed for completeness. The 2020 NMP update has now been granted within the department's ePermitting portal. The 5 year nutrient management plan is reviewed more robustly for compliance with NR 243 and has been approved.

- Comment:** Required soil samples are outdated. CAFOs are required to submit soil samples every four years, for fields which will receive their waste. The 2020 NMP Update includes 39 soil test results; 16 (33%) of which are more than four years old. Thirteen of the soil test entries are designated as "BOGUS" under Soil Test Lab and "BOGUS" under Lab Number on the document. Mr. Cain said he "checked with the farm's consultant, and the BOGUS label is put on fields that do not have a current soil sample yet. For planning purposes, they set the soil test P level at 101 ppm which creates the most restrictive requirements. However, that number is not a real number so it gets labeled BOGUS. They do not spread on fields until they get an actual soil test result." (Email correspondence from Mark Cain, 9/10/20)

Response: The Department is aware of this process and believes it is consistent with the requirements in NR 243. The fields are not spread on until actual soil tests are completed and show compliance with NR 243.

- Question:** How high might the phosphorus levels actually be in the untested fields? There is no way of telling.

Response: There is no way of knowing until soil test are actually taken. The department allows the farm to use a default soil test P of 101ppm for planning only, since there is a required 50% drawdown of P over the rotation when soil test P is above 100ppm. By setting the soil test P to 101, the farm must follow the most restrictive P application requirements under NR 243. The untested field is prohibited from phosphorus applications from manure and or process wastewater until real soil samples are taken and entered into the NMP.

- Question:** Soil test results of 300-766 ppm Phosphorus have been documented recently at another large CAFO egg laying facility, not owned or operated by Daybreak Foods. If Daybreak's overdue field test results end up being 300 or 400 or 700, would other measures be needed to remediate (other than just not spreading anything with phosphorous on the field)? (Note: High soil phosphorus increases risks of runoff, nitrate issues and water pollution. Experts say it could take many decades for soil to go back to a desirable level, once phosphorus levels reach 300 or more.)

Response: Prohibiting the field from phosphorus applications from manure and/or process wastewater is a very effective way of reducing the soil test P levels within a field. If the field stays in the farm's NMP, it is still required to meet other rotational requirements which are designed to prevent soil loss from the field and in turn reduce the phosphorus leaving the field. These rotational requirements are the annual and rotational Phosphorus Index requirements which aim to prevent phosphorus from leaving the field AND the rotational soil loss requirements which aims to restrict the amount of soil leaving the field over a rotation. Both of these calculations take into consideration the soil test P of the field.

- Question:** Additionally, the 16 outdated soil tests encompass fields with a total of 200 acres of potentially spreadable acres. If outstanding soil test results come back showing high phosphorus, and say, a total of 100 or 200 acres could not subsequently receive waste, where would all the waste go? Would the facility have enough authorized spreadable acres for all the waste it will be generating? If not, the risk of over-applying on the remaining approved fields exists, and/or applying waste on unapproved fields. To approve this NMP, the DNR must confirm the facility has enough land which meets all permissible parameters to safely receive waste in the applicable amounts. It does not look like this has happened.

Response: This farm's NMP is approved to distribute all of the manure generated on an annual basis. The only land application activities that will occur within the approved NMP are process wastewater applications. Due to the very low nutrient content of the process wastewater, the farm is able to use less acreage than if they were applying manure. The department has concluded that the farm has adequate acres to land apply the process wastewater throughout the permit term.

6. **Question:** Is the other waste authorized to be land-applied on fields accounted for in the NMP? After reviewing available NMP documents with soil specialist Dr. Steve Oberle, I emailed a few questions to Mr. Cain and Mr. Aaron O'Rourke on May 16, 2019, including, "Is there a dairy manure analysis for the waste being land-applied from Wiedenfeld's operations?" Mr. Cain responded, "The Wiedenfeld's liquid dairy manure is not manure produced by Creekwood. Therefore, the testing requirements are different. It is allowable to use book values or other manure testing methods for these non-CAFO sources. How the nutrient analysis is determined for this source is a question for the farm." To date, has the DNR confirmed the nutrient analysis for the non-CAFO manure was determined using allowable parameters?

Response: There are no authorities through NR 243 to address the testing procedures that a Non-CAFO uses on their farm. It is the responsibility of the CAFO to gather the land applications information from the Non-CAFO and track it within their NMP as accurately as possible.

7. **Question:** If ash is generated through incineration of mortality, where and how will the ash waste be stored? Where and how will it be transferred, transported, and land applied? It's my understanding, the ash would need to be accounted for in the NMP, prior to land application.

Response: Currently the facility is not operating incinerators for animal mortalities. Should the facility propose to use incineration, the department would review the proposed process, including the management of the ash.

8. **Question:** Would DNR staff agree that soil erosion and P runoff from excessively-high soil P levels in soils are primary factors in determining actual P loading to our waterbodies and watersheds?

Response: Yes.

9. **Question:** Are DNR staff aware that P and sediment are two of the main reasons why Wisconsin streams, lakes, impoundments, and other waterbodies are put on the Impaired Waters List?

Response: Yes. Please view this factsheet on the phosphorus rule for additional information: https://dnr.wisconsin.gov/sites/default/files/topic/Wastewater/TP_factsheet4162013.pdf

10. **Question:** Would DNR staff agree that, where we are building excessively high P levels (> 200 ppm P) in our agricultural fields (of all slopes), these fields represent significant short- and longer-term threats to surface water and groundwater quality in the impacted watersheds?

Response: Increasing phosphorus levels greater than 200 ppm on agricultural fields can be a factor that impacts surface water quality in watersheds.

11. **Question:** Would DNR staff agree that perhaps one reason why P levels are rising so fast in agricultural fields and watersheds is that we may be permitting some operations with too few spreadable acres for the number of animal units proposed, or currently in operation?

Response: The department disagrees. CAFOs are required to develop a 5-year NMP. These NMPs are reviewed by department staff for compliance with NR 243 and NRCS 590. Part of this review ensures that a CAFO operation has adequate acreage to spread manure and process wastewater proposed to be generated by the operation. Fields that have soil test P levels over 100 have additional restrictions on applications of manure and process wastewater. This should result in soil test P levels being drawn down over the crop rotation.

12. **Question:** Within the Daybreak Foods Creekwood Cage Free permit application and supporting documentation, does DNR know what ratio of animal units to spreadable acres is being proposed?

Response: The department does not calculate this.

13. **Question:** Have DNR staff given any thought to what might be a more appropriate and sustainable ratio of animal units to acres, prior to permitting this facility or any additional CAFOs in WI?

Response: The department does not calculate this. Application rates are determined by nutrient content of waste, soil test levels, current crop rotations, and other field-specific factors contained in NR 243 and NRCS 590.

14. **Question:** Are DNR staff aware of the number of fields/acres within the proposed Nutrient Management Plan over 200 ppm? Over 100 ppm?

Response: Yes. This information can be found in the NMP update on the document titled Soil Test Report under the following link:

<https://permits.dnr.wi.gov/water/SitePages/DocSetViewDet.aspx?DocSet=AG-NMP-SC-2020-28-X04-21T11-34-07>

15. **Question:** Are DNR staff aware of that 35 ppm P is considered an excessively high level of P in agricultural fields for most agronomic crops under WI soil-climate conditions?

Response: Yes.

16. **Question:** Are DNR staff aware that once soil test levels reach “excessively high” levels, the University of Wisconsin Extension recommends no additional P be added to fields?

Response: Manure applications are allowed on fields that are considered ‘excessively high’. This allowance comes from the UW-Publication A2809 as well as NRCS 590 which CAFOs are required to follow.

17. **Question:** Why haven’t spreading logs from the farm been reviewed since June 2018?

Response: The permittee must provide spreading logs when requested. The department reviews spreading logs when deemed necessary.

Substantial compliance comments:

1. **Comment:** No compliance inspection has been conducted by the DNR since October 2016.

Response: The department has been on site several times since the formal inspection in October 2016 to monitor the progress of the farm’s renovations and facility closures. These site visits were not full inspections. Additional full inspections were not warranted or required during this timeframe.

2. **Comment:** The DNR needs to inspect this farm every six months for compliance and keep a record of all site inspections.

Response: The department is required to conduct compliance inspections at permitted farms before permit reissuance to determine substantial compliance. Additional compliance inspections may be scheduled as needed. The DNR is continually working to find ways to increase the amount of time staff can spend out in the field on compliance activities.

3. **Comment:** Daybreak has the freedom that allows them to monitor themselves and this is not wise.

Response: Self-reporting is key component of the federal NPDES permit program that serves as a basis for Wisconsin's WPDES permit program. The permit requires the operation complete ongoing self-monitoring and reporting of its production area and nutrient management activities. The permittee is required to report certain types of non-compliance within 24 hours to the DNR. In addition to self-monitoring/reporting by the permittee, the DNR (1) reviews annual reports summarizing self-monitoring activities and Nutrient Management Plan updates, (2) responds to citizen complaints, (3) may conduct a manure hauling audit on an operation's land application practices, (4) conducts a compliance inspection at least once every five-year permit term, typically during the last year of the permit term, (5) conducts more frequent inspections where warranted based on compliance issues or construction activities and (6) responds to spills should they occur. Documented noncompliance is subject to DNR compliance and/or enforcement measures. The DNR is continually working to find ways to increase the amount of time staff can spend out in the field on compliance and enforcement activities.

Air related questions/comments:

1. **Comment:** The facility submitted corrected air emission data, which the Wisconsin DNR made publicly available September 16, 2020, and which are currently (9-26-20) posted online, https://dnr.wi.gov/cias/am/amexternal/AM_PermitTracking2.aspx?id=16881. Mr. Loren C. Trick, LT Environmental LLC, reviewed the corrected data, and noted that while the raw data is not provided, he believes, based on the available information, the air summary report is still incomplete and incorrect.

Response: Facilities required to file emission inventory reports shall keep accurate and reliable records sufficient to enable verification of the reports by the department. The department continues to review the data that the facility certified on September 18, 2020, and will follow up where questions or concerns arise.

2. **Question:** What was the bird population at the time the 2019 emission data was initially submitted?

Response: The facility is permitted to have up to 3 million birds. It is not known how many birds were at the facility at the time the 2019 emissions data was submitted.

3. **Comment:** The construction air pollution permit includes and would allow 3 incinerators/crematories. The facility reported to DNR no cremators or incinerators were in use at the time the 2019 emissions data was submitted.

Response: That information correctly reflects the Air Program's understanding.

4. **Comment:** The facility needs to correct their corrected 2019 Air Emission data; the DNR needs to certify it and make the corrected correction available to the public.

Response: Facilities required to file emission inventory reports shall keep accurate and reliable records sufficient to enable verification of the reports by the department. Submitted Air Emissions data is required to be certified by the facility, not the DNR. The department continues to review the data that has been certified by the facility and will follow up where necessary.

Feathers and avian flu comments and questions:

1. **Questions:** "Feathers emanating beyond the property line of this CAFO can carry bacteria, feces, particulates, and viruses. These materials could potentially spread animal disease (domestic, livestock, and wildlife) as well as human disease. What, if anything, is being done to address feather litter and/or feather airborne dispersal issue? The increase in number of feathers on Crossman Rd., County A, and County S (in the right-of-way, on roadways, and on private property) seems to correlate with the increase in the number of high speed, high powered blue industrial fans in use at the facility. Have screens or filters been installed to help reduce the dispersion of feathers beyond the

property line? If not, is there any reason they cannot be installed? This situation should not be ignored, as the potential for problems goes beyond being an annoyance to neighbors. In addition to facing potential health risks over which they have no control, taxpayers end up absorbing financial costs when avian flu strikes. It seems like the feathers are slipping between the regulatory cracks. Where in the regulatory scheme of things do feathers fall?"

Response: In light of the concerns of an AI biosecurity risk from deposition of several airborne chicken feathers on your property, allegedly from the Daybreak Farm, we reached out to the DATCP subject matter expert, Dr. Myron Kebus, and Elizabeth Patton for their perspective on this matter. They provided the information below.

The main points to consider on this issue are:

- The greatest risk of Avian Influenza virus introduction is from wild ducks and geese.
- Therefore the current risk of Avian Influenza virus spread is most likely to land on someone's lawn in southern Wisconsin from a wild duck, goose or other wild bird. Depositing dropping, or excreting virus from the oral secretions and exhaling virus during eating grass and other food, and simply respiration are active means of depositing the virus on the landscape.
- Avian Influenza virus has not been reported in any poultry farms in southern Wisconsin since 2015.
- All commercial poultry farms test extensively for Avian Influenza virus. All have tested negative for the past five years.

In the unlikely case that there was avian influenza virus at that particular farm and feathers escaped from the farm they could harbor the virus. So could fomites such as poultry litter or any inanimate material. However, given the level of testing required of poultry farms and the fact that all have tested negative for the past five years, the chances of this occurring are considered to be very low.

Additional information on Avian Influenza virus is available to the public on our website at this address: https://datcp.wi.gov/Pages/Programs_Services/AvianInfluenza.aspx

Also, here is a link to USDA/APHIS's, the lead agency on Avian Influenza virus control, information on Avian Influenza virus: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/ai>

Water use/high capacity wells/groundwater contamination comments:

1. **Comment:** Creekwood's water use [from high capacity wells] is enormous and I suggest they learn how to have better water conservation methods in place in their day to day operations.

Response: Water usage by animal production facilities is dependent on the type of production operation, the species of animal being raised, and climate. Water conservation is typically taken seriously by producers as both the withdrawal of water, and it's ultimate disposal, are costly to the operation. Water withdrawal from this facility is addressed through their high capacity well approval. Details are provided in the permit fact sheet which is available on the department's Creekwood webpage at <https://dnr.wisconsin.gov/topic/CAFO/Daybreak>.

2. **Comment:** The impact on the environment and potential damage to natural habitats and to the watershed are reasons that Jefferson County should not absorb more wastewater from this large poultry operation.

Response: Wastewaters disposed through landspreading operations are required to be done so in compliance with approved nutrient management plans in order to provide environmental protections, and so crops may utilize the available nutrients that are spread. Process wastewater will be spread only on fields identified in the Daybreak Foods Creekwood Cage Free approved NMP.

3. **Comment:** Local farming activities also use irrigation systems on crops grown directly around our home, this is a contributing factor along with Daybreak wastewater, in that, large water consumption can disburse contaminants within groundwater aquifers creating a mass contaminate

basin. The first systematic study of well water in southwest Wisconsin [Iowa, Grant and Lafayette counties] found bacterial and chemical contamination at rates as bad as –and possibly worse than—areas targeted by new state water protection rules. Some 42 percent of 301 randomly selected wells tested in Iowa, Grant, and Lafayette counties exceed federal health standards for bacteria that can come from animal or human waste, or toxic fertilizer residue.

Response: Protection of groundwater and wells are an important part of nutrient management planning. During this planning, soils, geology, and groundwater systems are studied to ascertain areas where groundwater quality could be impacted – specifically, what the pathway from the surface to groundwater would be for wastewater applied at the surface. The type of material that water moves through is important as it determines how much water the soil can hold, how available that water is to plants, the speed at which water is likely to travel from the surface to an aquifer, and also what type of interactions that water is able to have with soil particles and microbes. These interactions can work to either redirect, bind, or consume nutrients from wastewater. An important consideration for nutrient management planning in Wisconsin is depth to carbonate bedrock, such as limestone or dolomite, which often has fractures which water can move through quickly and with very little filtering. The counties that are mentioned above have areas of shallow carbonate bedrock and karst, along with thin soils, which means that the groundwater system can be very vulnerable to surface spreading activities. The area of Jefferson County where Daybreak-Creekwood is located has greater than 50ft of clay and sands to bedrock which provides a slower pathway for waters applied at the surface to infiltrate and to interact with the soil environment. All residents with wells are encouraged to test their water annually for bacteria and nitrates so that any changes may be detected, and to also ensure that septic systems or other domestic waste systems are operating properly.

Need for a wastewater treatment facility comments:

1. **Comment:** Farms of this size that generate this much waste daily should be required to implement their own wastewater treatment plants on site.

Response: The facility does have a wastewater treatment set up on site for their egg wash wastewater. Manure is not conducive for wastewater treatment in the same way human waste is treated, therefore using traditional treatment methods would not be effectively applied in the same way. The farm dries all manure and transfers it to a third party in accordance with their alternative distribution plan included in their approved nutrient management plan.

Odor and noise comments:

1. **Comment:** Noxious odors and noise are emitted from the farm.

Response: The WPDES permit is a water quality protection-based permit intended to protect surface water, groundwater, and wetlands. The WPDES permit does not regulate air emissions, odor, dust, noise, traffic, lighting issues, or animal welfare. The Department cannot deny permit issuance based on non-water quality related impacts or concerns.

Other comments:

1. **Comment:** This is not a farm; this is a factory. Protocols are being followed [by the farm] and they are doing what is required by the law, but the law right now in Wisconsin is allowing these factory farms to come into our rural communities, and is not sustainable. Wisconsin's laws have allowed our natural resources to be exploited and I am hoping things can change in the future.

Response: The department acknowledges these concerns, and implements the CAFO program as allowed by state statutes and laws. If the permittee follows the permit as required, the expectation is there will be limited negative impact on the environment.

Permit Changes Made After Public Notice:

- Permit Effective Date was changed from October 1, 2020 to December 1, 2020 due to a delay in issuance resulting from time needed to process comments received during the public comment period and from the public hearing.
- Monitoring and Inspection Plan submittal date in the Schedules Section (2.1) was changed from November 1, 2020 to January 1, 2021 due to a delay in issuance resulting from time needed to process comments received during the public comment period and from the public hearing.
- Emergency Response Plan submittal date in the Schedules Section (2.2) was changed from November 1, 2020 to January 1, 2021 due to a delay in issuance resulting from time needed to process comments received during the public comment period and from the public hearing.
- Ongoing Nutrient Management Plan Annual Updates submittal date in the Schedules Section (2.3) was changed from June 30, 2025 to September 30, 2025 to coincide with the expiration date of the permit.
- Ongoing Annual Reports submittal date in the Schedules Section (2.4) was changed from June 30, 2025 to September 30, 2025 to coincide with the expiration date of the permit.

No comments or suggestions were made in regard to changing the permit, so no other changes were made.

Comments Received from EPA or Other Government Agencies and Any Permit Changes as Applicable:

None

As provided by s. 283.63, Stats., and ch. 203, Wis. Adm. Code, persons desiring further adjudicative review of this final determination may request a public adjudicatory hearing. A request shall be made by filing a verified petition for review with the Secretary of the Department of Natural Resources within 60 days of the date the permit was signed (see permit signature date above). Further information regarding the conduct and nature of public adjudicatory hearings may be found by reviewing ch. NR 203, Wis. Adm. Code, s. 283.63 Stats., and other applicable law, including s. 227.42, Stats.

Information on file for this permit action may be inspected and copied at either the above named permit drafter's address or the above named basin engineer's address, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Information on this permit action may also be obtained by calling the permit drafter at (608) 516-5434 or by writing to the Department. Reasonable costs (15 cents per page for copies and 7 cents per page for scanning) will be charged for copies of information in the file other than the public notice and fact sheet. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.