

Richfield Dairy LLC Proposed Reissuance – Department of Natural Resources’ Response to Public Comments

Public hearing summary: 39 participants (that filled out hearing slip), 10 provided oral comments

Written comments summary: 36 written comments received

Comments received have been grouped and summarized below. See Notice of Final Determination document for changes made to the permit.

Public Input

Comments: We received a number of comments that were not germane to the reissuance of the WPDES permit. These issues are listed below to acknowledge these broader issues of concern to the public.

- **Water quantity** – require flow meter and real time data monitoring to show how much water is being used; require animal unit cap based on estimated water quantity necessary per animal unit; high capacity wells are drying up area surface waters which is eliminating waterfowl habitat; over pumping of groundwater impacts surface waters and is negatively affecting tourism in which the local economy relies upon; the current high capacity well permit allow up to 52.5 million gallons of water which is not enough to support the proposed herd size.
- **Animal welfare** – Guidelines on cattle stall size and overcrowding should be set for buildings.
- **Economy/community** – Milksource have been good neighbors in the Town of New Chester and provide economic growth needed to help the people in the area; Milksource participates in local events and meetings and provide updates to what activities are going on at the dairy; Milksource is working on piping the manure to their fields to protect our infrastructure and eliminate some of the odor that comes from over the road transporting;

Response: No specific suggestions to the proposed draft WPDES permit were made in the comments summarized above; therefore no changes were made to the permit. See animal unit cap section regarding those comments seeking animal unit cap to correlate with groundwater quantity.

Groundwater Quality

Comments regarding Alternative Concentration Limit:

- Prohibit the use of an Alternative Concentration Limit (ACL) for nitrates. Add language to specifically ban that option or at least require public notice before the default groundwater standards are increased for this facility.
- The DNR has the authority to grant an exemption and to set an ACL to account for background groundwater conditions at a site or facility where groundwater quality is monitored. There is a specific process under NR 140 for establishing ACLs.
- Section 2.1 should be modified to eliminate the referenced footnote regarding development of an ACL which “will not result in further public noticing of this permit.”
- Richfield Dairy does not meet the NR 140.28 criteria for an ACL. Elevated nitrate levels are already a threat to public health and welfare.

Response: The department will make the determination as to whether an ACL is appropriate for the site once the minimum required amount of groundwater samples have been taken and reported to the department. If an ACL is deemed appropriate, the parameters within NR 140 will be followed to calculate the limits. Inclusion of ACLs will be subject to public review and comment.

Comments regarding groundwater quality concerns:

- Private wells in the area already have high nitrate concentration that we cannot cook with or drink it. Testing at another CAFO shows nitrate levels as high as 77 mg/L in monitoring wells and local residents’ drinking water wells are in the range of 51 mg/L.
- The permit should be denied due to likely violations of groundwater quality standards.
- Require Richfield Dairy to submit groundwater modeling analysis that shows that no groundwater contamination will occur as a result of its spreading activities.
- Monitoring wells must be required in the manure spreading areas and at the production site.
- Wisconsin law does not include any regulatory that could require monitoring wells in land-spreading areas. In addition, such wells are of very limited usefulness because of the difficulty in interpreting the information yielded from such wells.
- Richfield Dairy’s permit application does not demonstrate that its discharges will comply with groundwater quality standards, either from the production site or from manure-spreading operations.

Response: The Department does not claim that the requirements of a WPDES permit, including the requirement to develop and implement an NMP, will guarantee that water quality will not be impacted. However, the permit contains a number of requirements designed to protect groundwater quality. The permit also requires compliance with groundwater standards, including for land application areas. Practices to protect water quality include:

- Manure or process wastewater may not be applied within 100 feet of a direct conduit to groundwater.
- Nutrient shall not be spread within 200 feet upslope of direct conduits to groundwater unless the nutrient is effectively incorporated within 48 hours
- No manure application within 100 feet of direct conduits to groundwater (sinkholes, private wells)
- No causing fecal contamination of water in a well.
- No application on fields with soils that are 60 inches thick or less over fractured bedrock when ground is frozen or where snow is present.
- No application when snow is actively melting.
- No application on areas of fields that have less than 24 inches of soil to bedrock.
- Field verification procedures include ground depth evaluations on fields with mapped shallow soils. A detailed protocol for determining bedrock depth on fields with such soils is outlined in the NMP. All fields must be evaluated before applying manure.

Existing environmental issues in the area are not a basis for denial of the WPDES permit.

There are requirements in Wis. Admin. Code NR 243 that require assessment of groundwater monitoring for field sites when manure irrigation is proposed; Richfield Dairy has not proposed use of irrigation to apply manure and process wastewater.

Richfield Dairy has submitted plans and specifications regarding the production area that demonstrate applicable standards for reviewable facilities will be met during construction. Plans will need to be resubmitted to the department for review prior to construction to ensure compliance.

Comments regarding production site groundwater monitoring:

- The DNR should modify Permit Section 2.1 to require a more extensive groundwater monitoring network at the production site.
- The following parameters should be added for groundwater monitoring at the production site: *E. coli*, Total Organic Carbon and Potassium as they can help identify if manure is the source of contamination.

Response: Richfield Dairy's proposed permit has groundwater monitoring requirements for the production area. Evaluation of monitoring data and whether to provide an alternative concentration limit at the site will be done according to NR 140 Wis. Adm. Code. A proposed monitoring plan shall be submitted according to permit. The plan will be reviewed and approved by the department. The suggested additional monitoring parameters will be added to permit.

Land Application

Comments regarding porous soils:

- Require a plan that limits phosphate and nitrate application on sandy soils.
- Additional nutrient management measures are necessary to reduce incidence of nitrate N and Phosphorus leaching (i.e. limit timing of applications to spring or summer, additional testing to determine plant nitrogen needs, etc.).
- There is no published evidence that nutrient management plans and best management practices protect groundwater in sandy, porous soil like central sands.
- At the present time there is no research that supports the claim that a nutrient management plan will protect groundwater from nitrates, phosphates, or *E. coli*. Direct observations demonstrate the opposite.
- Is there a requirement for phosphorus and nitrate assessments to ensure the safety of groundwater when such intensive spreading is done on fragile soils?

Response: The WPDES permit is a water quality protection based permit intended to protect surface water, groundwater and wetlands. The proposed and finalized WPDES permit contains permit conditions that limits nutrient applications to reduce the risk to groundwater and surface water and are consistent with ch. NR 243, Wis. Adm. Code, the code that

establishes permit requirements for CAFOs throughout the state. Ch. NR 243 and permits issued under this authority already have requirements designed to address issues such as surface runoff as well as a number of other potential surface and groundwater related concerns. In general, under ch. NR 243, the DNR has limited authority to require case-by-case best management practices.

Comments regarding oversight:

- Require oversight of manure spreading on all lands where spreading occurs.
- Are manure logs kept?
- Who is going to monitor Richfield Dairy to ensure it follows all the guidelines and rules of the WPDES permit? Sadly, the DNR has not done a great job of following through with monitoring.

Response: The permittee is required to oversee land application activities. The nutrient management plan and permit conditions call for monitoring of cropland sites before, during and after land spreading occurs. Manure logs and other required inspection logs are kept by the permittee and available to the department upon request or within the annual reports submitted to the department each year. Department staff review records and perform site inspections of both land application sites and production site to evaluate compliance.

Comments regarding field overlap with other CAFOs:

- Review all applicable WPDES Permits to ensure that there is no overlap in manure spreading areas and no risk to areas streams, wetlands, and lakes.
- Existing laws does not allow overlap of field in other CAFO's nutrient management plan (NMP). Each CAFO develops an individualized NMP that accounts for all sources of nutrients on each field in its NMP. No field can be in more than one CAFO NMP.
- Has it been ascertained that no fields are double spread or overlapped in areas?

Response: The department has reviewed Richfield Dairy's NMP and required that there is no land base overlap with other CAFO NMPs.

Comment: The permit should be modified to include the requirement that all potential spreading sites be confirmed by written agreement prior to WPDES permit issuance.

Response: Richfield Dairy has demonstrated they have adequate land base available to support to proposed waste generation from the production site. There have been no comments or other evidence to question the availability of land in the approved NMP to receive manure and process wastewater from Richfield Dairy; therefore, written agreements were not requested by the department.

Comment: The DNR has removed three provisions from the 2011 permit regarding nutrient management that should be included in proposed permit: 1) For areas of field with high permeability soils (as defined by NRCS 590) that receive manure or process wastewater and are without an established crop and outside a NR 243 SWQMA, records of manure or process wastewater incorporation timing, by field, shall be submitted with annual reports to the department. 2) For areas of fields with high permeability soils that receive liquid manure or process wastewater, records of all crop planting dates, by field, shall be submitted with annual reports to the department. 3) All liquid manure and process wastewater applied on areas of fields with high permeability soils shall, to the maximum extent practicable, have a dry matter content at least 1.00-2.00 %.

Response: These requirements are conditions that will be included in the nutrient management plan (NMP); conditions of the NMP are permit requirements.

Comment: Missing from draft permit that was in previous permit is a section on solid manure stacking (section 1.4) and the notation that failure to comply with the facility nutrient management plan is considered a violation of this permit (section 1.6). These should be included in proposed permit.

Response: Richfield Dairy has not proposed to utilize solid manure stacking on cropland therefore the permit language has not been included. Richfield Dairy cannot headland stack solid manure but rather will store any solid manure generated in a designed storage facility at the production site. The department no longer includes clarifying language

stating that failure to comply with an NMP is a permit violation. The current permit language provides the necessary authority to take compliance/enforcement actions against operations that do not comply with an NMP.

Animal Unit (AU) Cap

Comments in favor of cap:

- Provide an animal unit cap of 4,279 animals with a requirement that it cannot be exceeded in the future.
- Judge Boldt ruled that water use by Richfield Dairy was not to exceed 52.5 million gallons annually. That limits the number of animal units that can be supported.
- We strongly ask that Richfield Dairy be capped at 3500 animal units.
- Available data suggests that 6,270 animal units would require 70 to 100 million gallons of groundwater per year.
- Animal units have been routine in WPDES permits for CAFOs and plainly are within DNR's authority under Chapter 283 of the statutes.
- The lack of an animal unit cap makes it impossible to determine the adequacy of the nutrient management plan.
- The recent circuit court decision, *Clean Wisconsin v. Wis. DNR*, regarding Kinnard Farms addresses animal units and makes clear that the DNR has the authority to impose animal unit caps on CAFOs.
- Without an animal cap there is no way to determine just how much land is needed to spread the urine and feces generated at the production site.
- Two separate judicial opinions, both published after enactment of Act 21 in 2011, found that the DNR has the power to impose an animal unit cap as a permit condition. The DNR's potential disagreement with the Order is not a reason to ignore its mandates.
- The DNR failed to justify the lack on an animal unit cap in the proposed permit. Wisconsin Administrative Code NR Ch. 203 states that the multiple purposes of the WPDES permit public notice requirements include the intent to inform members of the public of their right to obtain additional information, submit comments, or request a public hearing. The propose permit's lack of reasoning for omitting the cap denies the public adequate information to comprehend or contest this aspect of the proposed permit.
- Using AU limits as a regulatory tool is consistent with DNR's prior practice. The livestock industry receives benefits of AU caps via general WPDES permit for CAFOs, which is available to CAFOs that do not exceed 5,720 AU, a number not in any statute or rule. If DNR cannot include an AU limit in individual permits, the general permit would also be unlawful.
- An AU limit is necessary to set the maximum level of discharge at a facility, as required by Wis. Stat. 283.31(5).
- Limits on AUs effectuation the requirement to notify the public of proposed increases in the maximum level of discharge (Wis. Stat. 283.53(2)(2d), Wis. Admin. Code NR 203.015)
- An AU limit is necessary to give meaning to Section 4.1.12 of the draft permit which requires the dairy to report to the DNR any time there is a facility changed which will result in new, different, or increased discharges of pollutants to waters of the state; lack of baseline makes this permit difficult to enforce or interpret.
- An AU limit is necessary to give meaning to a CAFO's obligation to demonstrate it has 180 days of manure storage and to inform DNR when it intends to expand by 20% or more.
- An AU limit is necessary to give meaning to Section 1.5 of the Draft Permit which states that the nutrient management plan may be amended at any time for a variety of reasons including changes in number of livestock.
- The DNR always has authority to impose additional practices and limits under NR 243.14(10) and NR 243.15(1)(d) based on site-specific conditions like those present in Central Sands (sandy soils, high infiltration rates and other risks to groundwater).

Comments against cap:

- DNR has correctly determined that it does not have explicit authority under any statute or DNR administrative rules to impose an animal unit maximum in any CAFO WPDES permit. Because it lacks explicit authority, Wis. Stat. 227.10(2m) (Act 21) precludes DNR from imposing it as a term or condition of a permit.
- The proposal to put an animal unit cap in place is a bit of overkill; there's already a water limit use in place, it doesn't seem to make sense that people who don't like the farm can dictate how they want to allocate that water and what it will support.

Response: The previously issued version of the Richfield Dairy permit was modified to include an animal unit permit modification threshold pursuant to a contested case hearing. This is a reissuance of that permit, and so the contested case decision does not apply to this reissuance. The department is not including an animal unit modification threshold in this reissuance for the following reasons:

Most individual WPDES CAFO permits do not contain a specific animal unit cap or animal unit permit modification threshold, the permits and requirements are for livestock operations over 1,000 animal units or in limited cases for medium farms that have had discharges from the production area. At time of application and on an annual basis the animal units and associated manure and process wastewater generation is reported to the department. The department reviews this information to determine if the facility has maintained enough spreadable acreage in the approved nutrient management plan and determines if the facility has a minimum of 180 days of storage.

When a facility proposes to expand during the permit term, they must confirm adequate land base and manure storage to support the addition of animal units. If the facility needs to build additional storage or land base to support the expansion those items are available for public review and comment. Addition of a sample point for manure storage requires a permit modification; addition of any new land necessary is public noticed online.

Siting/Production Area

Comments:

- Make into law that high capacity wells and factory farms cannot be within 50 miles of a public/private lake and/or recreational waterway such as trout streams. The draft permit has not taken into account the neighboring CAFOs, Burr Oaks and New Chester Dairy. The cumulative impact of the three facilities (Burr Oaks, New Chester and Richfield Dairy) on the local drinking water, lakes, and streams has not been considered or accounted for in the permit decision.
- Burr Oaks Heifers and New Chester Dairy are already spreading large amounts of manure in this area. Adding Richfield Dairy increases the risk of pollution of area streams, lakes and groundwater.

Response: The Department does not have the authority to dictate the siting of an operation. The Department's WPDES permit authority is limited to issuing a permit that is protective of water quality should a CAFO decide to locate at a given site. The Department of Natural Resources is tasked with the responsibility to ensure that WPDES permit applicants meet all required technical standards before a permit is issued. Based upon the authority granted to the Department, CAFOs must meet or exceed these requirements to be issued a permit.

The Department does not claim that CAFO WPDES permits are "zero risk" permits and the Department acknowledges that there have been impacts associated with CAFOs, some of those impacts have been significant. However, the Department believes that the WPDES permit program has been an effective means to address these impacts and avoid impacts from occurring in the future. As with any license or permit that is issued, there is always the potential for environmental impacts associated with permit noncompliance or situations not easily or explicitly addressed by prescriptive permit requirements.

Comment: The sample point listed as "Stormwater Management Pond #1" that stores feed storage area process wastewater should not be referred to as "stormwater."

Response: This sample point description will be changed to better reflect the process wastewater it stores.

Comment: Do the approved plans for Richfield Dairy include a vegetated treatment area (VTA)? If so can that design demonstrate compliance with the permit?

Response: The current approved plans do include a VTA in the design for treatment of feed storage area runoff. The permit requires that engineering plans be re-submitted to the department for review and approval prior to construction to ensure all applicable standards and permit conditions are met, including production site limitations for navigable waters.

Comment: Section 1.3.1 of permit states that the 180 day manure storage should be designed and constructed by November 30th following the permit issuance. Construction may not begin in a time that would allow for compliance with this statement; we believe it would be more practical to link the construction of the 180 day storage with the animal housing construction timeline rather than the permit timeline.

Response: This wording will be changed to remove the November 30th date relative to permit issuance date. The language will correlate the requirement applies prior to addition of animals which create waste stream to be stored.