IN THE IOWA DISTRICT COURT FOR CLAYTON COUNTY

SIERRA CLUB IOWA CHAPTER,)
Petitioner,) No. ****
vs. IOWA DEPARTMENT OF NATURAL)) PETITION FOR JUDICIAL REVIEW
RESOURCES,)
Respondent.))
And)
SUPREME BEEF LLC,)
Indispensable Party.)

Comes now the Petitioner and in support of this Petition for Judicial Review, states as follows:

INTRODUCTION

1. The Iowa Chapter of the Sierra Club has approximately 7,000 members across Iowa and is part of a national organization with over 700,000 members. Our mission is to preserve and protect Iowa's environment. We have been especially concerned about the quality of Iowa's water resources. As a part of this focus, Sierra Club has advocated for effective regulation of animal feeding operations (AFOs) and the pollution of Iowa's water resources caused by animal feeding operations. With respect to the facts and issues in this case, there are Sierra Club members who use and enjoy Bloody Run Creek and other streans, which is imperiled by the improper application of manure allowed by the nutrient management plan (NMP) approved by the Iowa Department of Natural Resources (IDNR), as discussed subsequently in this Petition. 2. IDNR is the agency authorized to regulate animal feeding operations (AFOs) in Iowa. Pursuant to that authority, IDNR, on April 2, 2021, approved an NMP submitted by Supreme Beef LLC. This Petition challenges the approval of the Supreme Beef NMP by IDNR.

3. Supreme Beef LLC is the entity that proposes to own and operate the animal feeding operation at issue in this case and as such, it may be an indispensable party affected by the outcome of this case.

<u>VENUE</u>

4. Venue is proper in this Court, pursuant to Iowa Code § 17A.19(2), because Sierra Club members Larry Stone, Faith Blaskovich, and Laurel Klosterboer reside in Clayton County.

STANDING

5. Sierra Club has standing to bring this action though its members who use and enjoy the environment that would be impacted by the operation of Supreme Beef, as shown by the declarations of Steve Veysey, Larry Stone, Laurel Klosterboer, and Faith Blaskovich, attached hereto.

The United States Supreme Court has held that plaintiffs in cases involving environmental concerns establish standing if 'they aver that they use the affected area and are persons `for whom the aesthetic and recreational values of the area will be lessened' by the challenged activity.' Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., 528 U.S. 167, 183. 120 S.Ct. 693. 705, 145 L.Ed.2d 610. 628 (2000)." Bushby v. Washington Co. Conservation Bd., 654 N.W.2d 494, 496-97 (Iowa 2002). See also, Puntenney v. IUB, 928 N.W.2d 829, 837 (Iowa 2019)(adopting the Bushby test for standing). And an organization like Sierra Club has standing to assert the interests of its members. *Id.*

GROUNDS FOR RELIEF

6. With an entire chapter of the Iowa Code and page after page of regulations purporting to regulate animal feeding operations, it is clear that the environmental hazards from animal feeding operations are well known. Therefore, it is incumbent on the IDNR to properly enforce those regulations. Unfortunately, IDNR often shirks its duty. This case is a tragic example.

7. Supreme Beef, LLC (Supreme Beef) proposes to operate what IDNR classifies as an open feedlot, containing 11,600 cattle, in Clayton County, Iowa.

8. The Supreme Beef proposal would make it one of the largest animal feeding operations in the state, with 11,600 animal units. It would be in the top one-third of one percent of animal feeding operations in Iowa based on IDNR's animal feeding operation database. In 1990 there were approximately five AFOs in Clayton County. Today, IDNR's animal feeding operation database identifies 116 such operations in Clayton County with a total of over 100,000 animal units. In response to an open records request by the Iowa Environmental Council, IDNR identified 19 other animal feeding operations with manure management plans or nutrient management plans within eight miles of Supreme Beef. These operations also use nearby cropland for applying manure. The growing number of AFOs and density of animals increases the risk of manure overapplication or runoff into surface water and groundwater.

9. Supreme Beef is located in the watershed of Bloody Run Creek, designated as an Outstanding Iowa Water. Supreme Beef also proposes to apply manure on fields in the watersheds of other streams: Silver Creek, Sny Magill, Mossy Glen, Dry Mill, Howard Creek, Roberts Creek, and Hickory Creek. Sny Magill, Mossy Glen and Hickory Creek are cold water trout streams. The other streams are generally spring fed and support diverse aquatic life. Manure will also be applied near two State Preserves: Roberts Creek and Mossy Glen.

10. In order to operate the proposed open feedlot, Supreme Beef was required to submit and have approved by the DNR an NMP, pursuant to Iowa Code § 459A.208 and 567 I.A.C. § 65.112.6. Supreme Beef submitted its initial NMP on July 27, 2020, but because of deficiencies it was not fully approved. It was approved for only 13 of the originally designated 47 manure application fields. So Supreme Beef, with the apparent complicity of IDNR, submitted a "revised" NMP on October 7, 2020, listing only the 13 approved fields and reducing the size of the initial operation to 2,700 head of cattle. This is confirmed by an October 2, 2020, e-mail from Becky Sexton, who prepared the NMP, to IDNR staff, stating as follows:

After your phone call earlier today to advise we had two options, either withdrawal our application or be denied by the DNR, Jared Walz and I have had many lengthy discussions. He ultimately spoke with his state senator, Dan Zumbach, who made a call to Kayla Lyons [sic] about this site. She said he could apply for 2750 head at this time and apply for the remaining number in the future. How long must we wait to apply for the remaining 8,900 head.

It should be noted that Dan Zumbach is not Jared Walz' senator, but rather, Jared Walz' father-in-law. IDNR approved the revised NMP through a letter dated October 5, 2020.

11. IDNR only has statutory authority to approve or deny the NMP, not to allow it to be amended. Iowa law required that the new NMP for 2,700 head be published and public comments allowed. That did not occur. After the October 5 approval, Steve Veysey reviewed the new NMP and found a glaring mistake with the calculation of the sediment delivery ratio (SDR) values which should have disqualified 7 of the remaining 13 fields. While IDNR admitted by internal e-mail that Mr. Veysey's analysis was correct, the agency discussed the situation, but then made a conscious decision to do nothing about it.

12. On February 1, 2021, Supreme Beef submitted the NMP at issue in this Petition for Review. The NMP stated that the operation would involve 11,600 head of cattle and designated 45 fields where manure would be applied. Sierra Club and others submitted oral and written comments objecting to various aspects of the NMP. Those comments are incorporated into this Petition as appendices and they provide the factual basis for assertions about the NMP in this Petition. Despite those objections, IDNR approved the NMP.

13. Because Supreme Beef claims to be an open feedlot, it was required to submit a nutrient management plan, rather than a manure management plan. Iowa Code § 459A.208. The purpose of an NMP is to prevent overapplication of manure on crop fields to avoid discharge of pollutants into Iowa waters. Iowa Code §§ 459A.401, 459A.410. This requires correctly calculating the amount of manure that can be applied to designated crop fields. For several reasons the Supreme Beef NMP does not make the correct calculations.

14. In order to calculate the appropriate agronomic rate for manure application the correct calculation of nitrogen (N) and phosphorus (P) must be made. The problem with correctly calculating the amount of N and P for Supreme Beef, first of all, arises from the fact that the regulations for open feedlots assume that the operation will have a "formed settled open feedlot effluent basin" as defined in 567 I.A.C. § 65.100. However, Supreme Beef will have an earthen lagoon with a polyethylene liner handling the manure in a

manner similar to a confined animal feeding operation. The basin has capacity to hold one year of manure plus calculated barn-runoff from precipitation. IDNR presumes that the basin contents will be removed annually during fall and/or spring. IDNR presumes that the contents –to a depth of 30 feet –will be agitated into a slurry. Agitation into a slurry may prove to be difficult or impossible because the basin will have a depth of 30 feet, far deeper than a typical settled open feedlot effluent basin. In that case, N and P will not be partitioned between clear effluent to be siphoned off, and the sludge and solids left behind. The N and P will all be in the slurry, therefore in the manure "as applied.". However, this is all speculation. The question on the NMP form at Page 7 to describe the operation and maintenance of the manure storage structure was left completely blank.

15. The proper measure for the Supreme Beef operation is the total amount of N and P in the basin. 567 I.A.C. § 65-17(5) states that the amount of N and P must be determined by using the amount of nitrogen and phosphorus in the manure from an average cow per year multiplied by the number of cattle in the Supreme Beef feedlot. IDNR has informed us the manure will be removed as an agitated manure slurry. In this situation, the N & P content will be most similar to values in 567 I.A.C. Chapter 65 Appendix Tables associated with "liquid, deep pit or basin." Using these values as the minimum "as-excreted" content the annual N and P from the 11,600 head of finisher cattle will be at least 1,102,000 pounds of N and 684,400 pounds of P. The values used by Supreme Beef to calculate manure N and P content will only account for 290,347 pounds of N and 115,588 pounds of P. More than 1.3 million pounds of N and P per year remain unaccounted for in this NMP. The basin was not designed or constructed as a facultative or anaerobic lagoon, nor does the applicant or IDNR suggest that it will be operated in

that fashion. All manure will be agitated and removed from the basin for liquid injection. Therefore, all of the P and most of the N "as-excreted" will still be present in the "asapplied" manure. The applicant has vastly underestimated the number of acres that will be required to receive the manure.

16. The correct calculation of the N and P produced by the operation is important because that calculation determines how much manure will be applied to the crop fields. If too much manure is applied, the excess N and P not taken up by the crops will run off and end up in the watershed of Bloody Run Creek. Because the amount of N and P is undercounted, the number of acres of crop field for agronomically appropriate application is underestimated. That is why Iowa DNR regulations require a correct calculation of the amount of manure produced by the Supreme Beef operation.

Iowa DNR regulation 65.112(8) requires that the NMP state the amount of manure, and thus the correct amount of N and P produced. The DNR regulations contain tables that are to be used in this calculation. The calculation goes like this.

Table 3 says a cow produces 95 pounds of N per year. So, for 11,600 cows in the Supreme Beef operation, a total of 1,102,000 pounds of N per year will be produced. Table 3A says a cow produces 59 pounds of P per year. So, for 11,600 cows in the Supreme Beef operation, a total of 684,400 pounds of P per year will be produced.

What Supreme Beef did in the NMP was use 25 (instead of 95) pounds of N and 10 (instead of 59) pounds of P as the amount of nutrients produced per year. That resulted in a total of 290,000 pounds of N and 115,536 pounds of P per year.

When confronted with this discrepancy, DNR stated that the NMP used a manure sample from Upper Iowa Beef, a beef processing company, as an estimate. But Upper

Iowa Beef is a totally different operation and the sample was calculated in terms of concentration, without regard to the volume of manure, specifically the volume of manure per cow, in that particular storage scenario, therefore not the actual amount of N and P. And DNR kept referring to concentration, when the rule clearly requires calculation of the amount of N and P, which cannot be determined absent the volume information for the concentration measurement scenario. DNR has refused to clarify this discrepancy any further.

17. In attempting to predict the amount of nutrients that will be in their manure, the Supreme Beef NMP uses manure samples from a meat processing facility, Upper Iowa Beef, as allegedly representative of the Supreme Beef manure. But IDNR admits in its response to comments that the Upper Iowa Beef sample was used to determine concentration, not content with regard to the total or annualized volume from which the sample was taken. Content cannot be determined unless both concentration and volume per cow for the same specific storage and handling scenario are used in the calculation. And Upper Iowa Beef is not an animal feeding operation and there is no indication that its manure is similar to the manure that Supreme Beef will be generating. We do know that the Upper Iowa Beef manure consisted of approximately 97.5% moisture. This is very dilute. The Supreme Beef manure will be stored in more concentrated form with limited dilution. Cow manure "as-excreted" is approximately 92% moisture. It would need to be diluted by a factor of times 3.2 to measure 97.5% moisture. This suggests Upper Iowa Beef may have taken a sample from the top layer of a true "settled effluent basin," which excludes settled solids and does not reflect the full N and P content of the manure. This improper calculation will clearly lead to overapplication of manure. In response to comments criticizing the approach, IDNR said it used the manure sample from Upper Iowa Beef as an estimate of the nitrogen and phosphorus concentration. But 567 I.A.C. § 65.17(5) requires a statement of the manure content, not the concentration. For IDNR to allow use of the Upper Iowa Beef sample, IDNR should have required the amount of N and P in the Upper Iowa Beef sample to be determined per cow per year, and only allowed that estimate to stand if the storage and handling scenario of the Upper Iowa Beef manure is the same as that proposed for the Supreme Beef facility.

18. An NMP is required to show that "[t]here is adequate storage for manure, process wastewater, stockpiled manure and open feedlot effluent, including procedures to ensure proper operation and maintenance of the storage structures." 567 I.A.C. § 65.112(8)(e)(1). The Supreme Beef NMP simply describes, on page 1, the manure storage and manure type as "storage basin effluent" and "rainwater added to basin." The NMP may be using the addition of rainwater to claim the manure is diluted. But that does not establish the actual quantity of manure, only a concentration, which is relevant only to the manure applicator at time of injection. It has no bearing on total content, and therefore the number of crop acres necessary to agronomically use the manure nutrients.

19. Using the correct assumptions and correctly calculating the N and P values leads to the conclusion that there are insufficient acres in the designated application fields to accommodate all of the manure to be applied.

20. The NMP must show that the grid-based soil sampling data for the proposed application fields correctly calculates the phosphorus present in the respective fields. 567 I.A.C. § 65.17(16). The P index calculation cannot rely on P-test data that is more than four years old, or on single-point sampling except in the case of an original NMP. 567

I.A.C. § 65.17(16). But the February 1, 2021 NMP is not original. It is a supplemental NMP to the October 7, 2020 NMP. On this basis, 23 of the fields designated in the current NMP do not have a current correct soil test for phosphorus.

21. The NMP claims that a substantial amount of commercial fertilizer will be added annually to every field. Yet none of the RUSLE2 management plans include a step for the application of commercial fertilizer. This affects the calculation of erosion on the fields and the subsequent calculation of total P index. Therefore, the amount of manure that can appropriately be applied to these fields has not been correctly determined.

22. Calculation of the P index requires a determination of the total erosion factor. The total erosion factor includes rill erosion and interrill erosion (calculated by the RUSLE2 program), ephemeral gully erosion, and classical gully erosion. IDNR admits this. The NMP in this case uses only rill and interrill erosion, thus understating the total erosion and incorrectly calculating the P index for all 45 fields. It is inconceivable that ephemeral gully erosion would be zero for every one of 45 fields, most of which are designated highly erodible land. In its response, IDNR states "because ephemeral gullies are not apparent year-round, they are often not apparent at the time of plan submittal and therefore are not included in P index calculations." The required P index protocol specifically refers to procedures outlined in the Iowa Natural Resources Conservation Service Field Office Technical Guide for IDNR and applicants to use. These procedures provide an estimate of annual ephemeral gully erosion to be included in the total erosion factor required for use in the P index calculation.

23. The sediment delivery ratio (SDR) component of the P index is incorrectly low in at least 13 cases. The SDR value is a factor in the erosive P index term of the total P index equation. It derives directly from the estimated distance from field center to the nearest perennial or intermittent channeled stream. Iowa Administrative Code incorporates the procedures of Natural Resource Conservation Service (NRCS) Iowa Technical Note No. 25 (ITN 25), which requires measurement to intermittent streams because phosphorus attached to soil particles moves during rain events. 567 I.A.C. § 65.17(17); ITN 25 at p. 3. During rain events there is flow in intermittent streams carrying the phosphorus directly to perennial stream segments with aquatic life that must be protected. IDNR did not require the use of the USGS-EPA National Hydrologic Dataset (NHD) for Iowa in measuring distance-to-stream. This is the only accredited dataset that contains identifiable intermittent streams. The NMP overestimated the distance from field center to streams by 100% or more with respect to at least 14 fields. This results in an underestimation of the erosive P index value and the total P index value.

24. Pursuant to 567 I.A.C. § 65.17(17)(f)(4), manure cannot be applied to fields that have a P index greater than 5 unless conservation practices are in place. When appropriate RUSLE2 calculations (even without ephemeral gully soil loss included), are made, three application fields designated in the NMP have P index values greater than 5. In addition, there are numerous additional fields that may have P index values greater than 5 when ephemeral gully erosion is included in the P-index calculations. There is insufficient information in the NMP to make that determination, and thus, the NMP is deficient in calculating the P index.

25. Almost all (98%) of the manure application acres listed in the NMP are on what is designated as highly erodible land (HEL). 567 I.A.C. § 65.3(5)(f) states that manure application on fields with greater than 10% slopes should be limited to areas

where adequate soil erosion control practices exist. There is no indication in the NMP that any of the designated fields have adequate soil erosion control practices in place. To the contrary, IDNR has affidavits from landowners confirming the truthfulness of statements made in the RUSLE2 reports. No conservation practices or functioning conservation measures are claimed for these fields. The most appropriate documentation on this would be an NRCS approved conservation plan. No such plan is identified for any of the fields. The failure to document erosion control practices required the DNR to reject the NMP.

26. Approximately 92% of the designated application field acres have phosphorus soil test results in the High or Very High range. Therefore, they do not need any additional phosphorus. 567 I.A.C. § 65.65(3)(5)(19) states that manure should only be applied at rates equal to crop uptake when soil tests indicate adequate phosphorus levels. The current NMP complies with that guidance; however, in the face of possible field limitations or realistic estimates of total N and P, IDNR has stated that Supreme Beef need not comply with the 567 I.A.C. § 65.65(3)(5)(19) recommendations.

27. The facility now called Supreme Beef was initially, in 2017, called Walz Energy and was proposed as a waste-to-energy operation, using the manure from the cattle and other inputs to create methane as an energy source. On that basis, the earthen lagoon to store digestate, largely devoid of solids, was permitted for construction as an industrial wastewater system even though the cattle operation was an open feedlot. The permit was not accompanied by an NMP, as rules require for settled open feedlot effluent basin permits. Though not relevant to the calculation of nutrient content "as-excreted," as shown above, the proper designation of the manure "as-applied" is properly calculated. 28. Since Supreme Beef is now clearly an open feedlot operation it must comply with open feedlot regulations. 567 I.A.C. § 109(4) prohibits the construction of settled open feedlot effluent basins in karst terrain. Likewise, an unformed manure storage structure, such as Supreme Beef's earthen lagoon, cannot be located on karst terrain. 567 §65.15(8)(a). The IDNR AFO Siting Atlas shows that the area where Supreme Beef is located is in karst terrain. According to retired State Geologist Robert Libra:

Shallow karst affected rock aquifers below earthen waste structures are susceptible to seepage, especially from a very large lagoon [as Supreme Beef has]. In addition, seepage from the lagoon may result in sloughing of the underlying glacial materials into voids in the bedrock, under ponded conditions and up to 30feet of waste liquid above. Sloughing may result in collapse of the lagoon floor and the draining of the lagoon into the bedrock, as has occurred in Iowa and geologically similar areas.

This clearly shows the likelihood of a discharge of pollutants to water of the state.

29. Based on all of the points set out above, it must be presumed that the Supreme Beef operation will discharge pollutants to waters of the United States. Therefore, Supreme Beef must obtain an NPDES permit. It has not done so.

30. Rules adopted by the Environmental Protection Commission, codified at 567 I.A.C. § 61.2(2), provide for an antidegradation review for facilities if their operation is likely to cause degradation of water quality. Based on the above discussion, it is likely that Supreme Beef's storage, handling and application of manure will cause degradation to Bloody Run Creek, an Outstanding Iowa Water. As an Outstanding Iowa Water, Bloody Run Creek is entitled to what is called Tier 2.5 protection pursuant to the antidegradation policy. 567 I.A.C. § 61.2(2)(c).The rule requires that the water quality must be maintained and protected.

31. Antidegradation review is required for new and expanding operations. Since Supreme Beef is expanding its operation from 2,700 head of cattle to 11,600 head, it is definitely expanding its operation. This review requires Supreme Beef to show that its operation will not cause any degradation of the water quality in Bloody Run Creek.

32. The above-described flaws in the NMP clearly show that an antidegradation review must be part of IDNR's consideration of the NMP. The purpose of the NMP is to ensure that water quality is protected. That, in fact, is why IDNR is involved in permitting animal feeding operations. Otherwise, the issues are strictly about agricultural practices.

31. Based on the foregoing, IDNR's approval of the Supreme Beef NMP was:

a. Based upon a determination of fact clearly vested by a provision of law in the discretion of the agency that is not supported by substantial evidence in the record before the Court when that record is viewed as a whole.

b. Action inconsistent with a rule of the agency.

c. The product of a decision-making process in which the agency did not consider a relevant and important matter relating to the propriety or desirability of the action in question that a rational decision maker in similar circumstances would have considered prior to taking the action.

d. Based upon an irrational, illogical, or wholly unjustifiable interpretation of a provision of law whose interpretation has clearly been vested by a provision of law in the discretion of the agency.

e. Based upon an irrational, illogical, or wholly unjustifiable application of law to fact that has clearly been vested by a provision of law in the discretion of the agency.

f. Otherwise unreasonable, arbitrary, capricious, or an abuse of discretion.

RELIEF SOUGHT

WHEREFORE, Petitioner requests that the Court reverse the action of IDNR in approving the Supreme Beef NMP.

ısı Wallace Q. Taylor

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