

**Objection to the Issuance of Confined Feeding Operation
NPDES Permit #INA006313
Union Go Dairy
Randolph County, Indiana
2008 OEA 163, (04-S-J-3448)**

OFFICIAL SHORT CITATION NAME: When referring to 2008 OEA 163, cite this case as
Union Go Dairy, 2008 OEA 163.

TOPICS:

hearing	discharge
confined feeding operation (CFO)	antibiotics
confined animal feeding operation (CAFO)	perimeter drain
individual NPDES permit	groundwater monitoring plan
ground water	seasonal high water table
surface water	dewater
freeboard	storage capacity
manure storage pond	liner
manure storage pond liner	seepage rate
manure use agreement	non-contact cooling water
land application	concrete
water quality standard	setbacks
ownership	acreage
manure management plan	

PRESIDING LAW JUDGE:

Catherine Gibbs

PARTY REPRESENTATIVES:

IDEM: Nancy Holloran, Esq.
Petitioners: Deborah Albright, Esq.; Monday, Rodeheffer, Jones & Albright
Permittee: Jack Van Kley, Esq.; Van Kley & Walker LLC

ORDER ISSUED:

December 17, 2008

INDEX CATEGORY:

Solid waste

FURTHER CASE ACTIVITY:

[none]

**Objection to the Issuance of Confined Feeding Operation
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STATE OF INDIANA)	BEFORE THE INDIANA OFFICE OF
)	ENVIRONMENTAL ADJUDICATION
COUNTY OF MARION)	

IN THE MATTER OF:)	
)	
OBJECTION TO THE ISSUANCE OF CONFINED)	
FEEDING OPERATION TO)	
UNION GO DAIRY)	
NPDES PERMIT #INA006313)	
<hr/>)	CAUSE NO. 04-S-J-3447
Environmentally Concerned Citizens of Randolph)	CAUSE NO. 04-S-J-3448
County,)	
Petitioners,)	
Union Go Dairy, Tony & Ivonne Goltstein,)	
Petitioners/Permittee,)	
Indiana Department of Environmental)	
Management,)	
Respondent,)	

FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL ORDER

This matter having come before the Court for the final hearing, held on November 27, 28 and 29, 2007 and January 10, 17 and 25, 2008 and February 28, 2008, on the Petition for Administrative Review and Request for Hearing by the Petitioner, Environmentally Concerned Citizens of Randolph County (the “ECCRC”), and on the Petition for Review by the Petitioner, Union Go Dairy LLC; and the Environmental Law Judge, being duly advised and having read the record, pleadings, briefs, and having heard and considered the evidence presented at the hearing, now finds that judgment may be made upon the record and makes the following findings of fact and conclusions of law and enters the following Final Order:

STATEMENT OF THE CASE

1. On March 25, 2004, Indiana Department of Environmental Management (“IDEM”) issued notice to Union-Go Dairy LLC (the “Dairy”) that the Dairy must apply for an individual NPDES permit under 327 IAC 16. On April 9, 2004, the Dairy filed a Petition for Administrative Review objecting to the IDEM’s requirement that the Dairy obtain an individual NPDES permit. This case was assigned Cause No. 04-W-J-3317.
2. On May 7, 2004, Allen Hutchinson, Lisa Watson, Barbara Pegg, Keith Kranz, Corvin Coats, Stephanie Pflasterer, John Zakelj and Wendy Carpenter filed a Verified Petition to Intervene. This Petition was granted on May 11, 2004.

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3. On October 7, 2004, the Environmentally Concerned Citizens of Randolph County (the “ECCRC”), Allen Hutchison, Barbara Pegg, Keith Kranz, Robbie Davis, Wendy Carpenter, John Zakelj, Lisa Watson, Stephanie Pflasterer, Corvin Coats, and Scott Jester (hereinafter referred to collectively as the “ECCRC”) timely filed their Petition for Administrative Review objecting to the issuance of individual National Pollutant Discharge Elimination System (“NPDES”) Permit No. INA006313 (the “Permit”) to Union-Go Dairy, LLC. This case was assigned Cause No. 04-S-J-3447. The ECCRC has alleged numerous errors were made in the IDEM’s decision to issue this Permit. These errors are: (1) the IDEM has not made an adequate assessment of the facility’s potential to violate water quality standards of ground and surface water in the vicinity of the Dairy and its land application areas; (2) the Permit does not require sufficient freeboard in the manure storage pond; (3) the Dairy failed to disclose ownership of the property on which the Dairy is located; (4) the manure use agreements are not adequate to ensure that water quality standards are not violated during land application; (5) the application is deficient in that the actual location of the Dairy is incorrect; and (6) the Dairy has submitted several materials which are not sealed by a professional engineer.
4. On October 8, 2004, Union-Go Dairy, LLC filed a Petition for Administrative Review objecting to specific portions of the Permit. This case was assigned Cause No. 04-S-J-3448. The Dairy objected to the IDEM’s determination that an individual permit was necessary. This objection was later dismissed voluntarily by the Dairy. The Dairy also objected to the inclusion of the following additional design features and operational requirements: (1) the installation of a synthetic liner in addition to a clay liner in the manure storage pond; (2) the installation of a perimeter drain; (3) the installation and sampling of ground water monitoring wells; (4) excessive sampling frequencies; and (5) pre-construction soil testing.
5. The Dairy abandoned its dispute over IDEM’s directive to obtain an individual NPDES permit as well as its assignment of error concerning the special condition in the individual Permit requiring the Dairy to install and operate a groundwater monitoring system.
6. The Dairy presented evidence on two of its original assignments of error – the requirement to install a synthetic liner and a perimeter drain.
7. The three cases were consolidated on November 15, 2004 under Cause No. 04-S-J-3448.
8. The issues raised under the first appeal, Cause No. 04-S-J-3317, were dismissed by agreement of the parties on May 11, 2007.
9. Partial summary judgment was entered in favor of the Dairy on August 2, 2006. The Court held that the Permit does not apply to any land application area not owned, rented or otherwise controlled by the Dairy.

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10. A hearing on the merits was held in this case on November 27-29, 2007, January 10, 17, and 25, 2008, and February 28, 2008.

FINDINGS OF FACT

1. On or about November 3, 2003, Tony and Ivonne Goltstein, the operators of Union-Go Dairy, submitted a Notice of Intent (NOI) to construct and operate a confined animal feeding operation (CAFO) to the IDEM pursuant to the requirements in 327 IAC 15-15. On March 25, 2004, the IDEM notified the Dairy that it would have to apply for an individual NPDES permit and operate the proposed CAFO under 327 IAC 16.
2. In accordance with the IDEM's order to apply for an individual NPDES permit, on April 28, 2004, the Dairy, assisted by Vreba-Hoff Dairy Development, North Point Engineering, and Brian Daggy, submitted an Application for a Permit to Discharge Wastewater, Confined Animal Feeding Operations (the "April 2004 Application") to the IDEM.
3. Individual NPDES permit No. INA006313 was issued to Union-Go Dairy, LLC on September 24, 2004 for the construction and operation of a 1650-cow dairy (the "Facility"). Tony and Ivonne Goltstein are the owners of Union-Go Dairy, LLC. The Facility has been constructed and has been operating for a few years in Union Township, Randolph County, Indiana.
4. The Facility has more than 700 dairy cows and is therefore classified as a concentrated animal feeding operation (CAFO) which is required to obtain a permit under the NPDES program.
5. The Permit authorizes the construction and operation of three freestall barns, a milking parlor, and a waste collection and storage system. Manure and wastewater from the barns, milking parlor, concrete silage pad, feed storage areas, and the outdoor grounds must be directed to a concrete settling basin to settle out solid manure and sand bedding. These wastes are then pumped to an earthen manure storage pond for storage. The storage capacity of the Dairy is 20,129,576 gallons. *Joint Exhibit 1t, NPDES CAFO Permit Application, page 4.*
6. The estimated amount of total manure, litter and process wastewater that will be generated by the Dairy is 2,291,141.5 cubic feet. *Joint Exhibit 1t, NPDES CAFO Permit Application, page 3.* This estimate was based upon calculations made in accordance with IDEM guidance. Actual wastewater/manure production in 2006 and 2007 did not exceed 14,000,000 gallons in either year.

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7. The waste is land applied on various fields. Pursuant to applicable IDEM guidance, the minimum acreage necessary for land application of waste from the Dairy is approximately 825 acres. The Dairy has agreements with property owners allowing for land application on approximately 1300 acres.
8. A Manure Management Plan (MMP) was submitted with the application. A Nutrient Management Plan was developed after the Permit was issued after the Dairy had an opportunity to take soil and manure samples.
9. The water body that receives drainage from the production area is Sparrow Creek. *Joint Exhibit 1t, NPDES CAFO Permit Application, page 3.*
10. The Dairy is permitted as a non-discharge facility, with several limited exceptions: (1) the Dairy may discharge manure and wastewater from its production area into Sparrow Creek in the event that a 25-year, 24-hour rainfall event causes an overflow of its facilities, provided that these facilities have been constructed and operated in accordance with the Permit conditions designed to minimize the likelihood of such a discharge; (2) the Dairy may discharge non-contact cooling water from its milk coolers through a tile into Sparrow Creek; and (3) the Permit authorizes the Dairy to discharge storm water uncontaminated by the Dairy's manure and wastewater into Sparrow Creek from a detention basin northwest of the Dairy ("Detention Basin").
11. A shallow sand lens is located beneath the Facility at the 1145-foot elevation ("1145 sand"). The 1145 sand is a localized zone of saturation, not a regional aquifer in connection with the water zone used by wells in the vicinity. None of the water wells in the region of the dairy use the 1145 sand as an aquifer. All of these wells are significantly deeper than the 1145 sand. The lens is very thin and discontinuous. It is fairly localized to the dairy site. It disappears off-site and is not connected with sand formations being used off-site for water. It is too shallow to be used for drinking water as a well cannot be developed in it in compliance with Indiana's casing law. A layer of low permeable material is located above the 1145 sand, so this minimizes the seepage of contaminants into the lens. The 1145 sand is not interconnected with the deeper aquifer that produces water for the region's wells, including the dairy's well.
12. The manure storage pond was designed to hold the manure and wastewater produced by the Dairy in one year. The calculations for the size of the pond included precipitation, normal runoff and runoff from a 25-year 24-hour storm event from the facility into the settling basin, runoff (both normal and from a 25-year 24-hour storm event) and leachate seepage from the silage pad. To accommodate the residual solids that would be left in the manure pond, 5% additional capacity was added to ensure that the pond would have the requisite capacity. *Jt. Ex 1-Z, page 4 of 8; testimony of David Gerdeman, transcript pages 9 through 18.* The 5% was taken from NRCS Conservation Practice Standard 313, Waste Storage Facility.

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13. The Permit required that the Dairy install a recompacted clay liner and a 30 mil PVC geomembrane liner with a permeability value of 2×10^{-11} cm/sec. The design of the manure storage pond was modified during construction to include a 40-mil HDPE (high density polyethylene) liner instead of the 30 mil PVC geomembrane. In addition, bentonite was added to the recompacted clay liner. Over time, solids that settle to the bottom of the storage pond would act to further decrease permeability.
14. A concrete pad was installed in the manure storage pond so that manure/wastewater could be removed from the storage pond and the operation of the removal equipment would not damage the liner.
15. *Joint Exhibit 1-Z, sheet 8 of 8*, sets out the specifications for the concrete structures at the Dairy. Sulfate corrosion should not occur at the Dairy because the design and specifications of the structures prevent the accumulation of hydrogen sulfide on the surface. The structures are not capped so the sulfides will be carried off by water. The silage leachate is minimal and will also be washed away from the silage storage pad. The specifications for the concrete itself, such as air entrainment and type of concrete, are consistent with recommended industry practices for dairies.
16. Cleaning solutions and antibiotics used by the Dairy in the production area are discharged along with the manure/wastewater into the manure storage pond. These solutions are diluted to a point where there is no appreciable affect either on the biodegradation occurring in the storage pond or on the land application areas.
17. A perimeter drain was installed to dewater the area of the manure storage pond during construction and to continue to dewater the seasonal high water table away from the manure storage pond. The perimeter drain was constructed partially around the manure pond. The perimeter drain drains into the detention basin, constructed to hold storm water runoff. A portion of the manure storage pond berm is 10 feet above grade.
18. While some biological degradation occurs, the manure storage pond was not designed to act as nor does it serve as a treatment device for the manure/wastewater.
19. During construction of the barns and other structures, an exploratory trench was dug around the production area at a depth intended to intersect any field tiles that lie within the area. Any field tiles encountered were removed or redirected. Such tiles, once removed or redirected, would not serve as a conduit for manure/wastewater to contaminate surface water. Any tiles left in place within this area would not act as a conduit as these tiles have no outlet.
20. The permit's groundwater monitoring plan requires sampling for the parameters such as ammonia and nitrate that are useful for detecting the seepage of manure. Four monitoring wells were installed. Two of these wells were located in the 1146 sand; the remaining two are deeper.

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21. Bicarbonates occur naturally in ground water and are produced by many species of animals.
22. The Dairy's NPDES application included the following information: (1) topographic map of the facility – *Jt. Ex. 1-t*; (2) plumbing diagrams from the milking parlor/barns to the sand settling basin or storage pond (*Jt. Ex. 1-M, AD-8*).
23. The access point for perimeter drain was identified after construction of the Facility on the as-built drawings.

CONCLUSIONS OF LAW

1. The Office of Environmental Adjudication ("OEA") has jurisdiction over the decisions of the Commissioner of the IDEM and the parties to the controversy pursuant to I.C. § 4-21.5-7-3.
2. Findings of fact that may be construed as conclusions of law and conclusions of law that may be construed as findings of fact are so deemed.
3. This office must apply a *de novo* standard of review to this proceeding when determining the facts at issue. *Indiana Dept. of Natural Resources v. United Refuse Co., Inc.*, 615 N.E.2d 100 (Ind. 1993). Findings of fact must be based exclusively on the evidence presented to the ELJ, and deference to the agency's initial factual determination is not allowed. *Id.*; I.C. § 4-21.5-3-27(d). "*De novo* review" means that:

all issues are to be determined anew, based solely upon the evidence adduced at that hearing and independent of any previous findings.

Grisell v. Consol. City of Indianapolis, 425 N.E.2d 247 (Ind.Ct.App. 1981).

4. The Petitioners, both the ECCRC and the Dairy, have the burden to produce substantial and reliable evidence to prove that the IDEM has erred in issuing this Permit.
5. IDEM is given the authority through the Clean Water Act (33 U.S.C 1251 *et seq.*) I.C. § 13-18-10 and the corresponding rules to regulate CAFOs based on water quality concerns. Concerns relative to odors and air emissions are outside of IDEM's authority, and therefore outside of the OEA's authority, to address through the permitting process.
6. The OEA will not overturn an IDEM approval upon speculation that the regulated entity will not operate in accordance with the law. *In the Matter of: 327 Article 3 Construction Permit Application Plans and Specifications for Sidney Wastewater Treatment Plant and Sanitary Sewer System Permit Approval No. 16684*, 2004 In. Env. Lexis 22 (Ind. Off. Env. Adjud., November 5, 2004). So, any allegations that surface water will be contaminated due to violations of the Permit are not sufficient grounds to conclude that the Permit was issued improperly.

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7. Neither IDEM nor the Office of Environmental Adjudication (“OEA”) may require an applicant to include information or to perform actions in excess of that required by law. *See In the Matter of: Objection to the Issuance of Approval No. AW-5499 Concentrated Animal Feeding Operation, Talara Lykins, Jackson County, Indiana, Cause No. 05-W-J-3602, 2007 OEA 114, aff’d., Marion County Superior Court Civil Division, Room F-12, Cause No. 49F12-0708-MI-32019 (April 4, 2008).*
8. The ECCRC request that this Court order the IDEM to require the Dairy to provide additional information to ensure that the Dairy will not violate the Permit. However, the Indiana Legislature and the Solid Waste Management Board have already specified the information that they believe is necessary to ensure that human health and the environment are protected. As stated above, the OEA does not have the authority to require more than what is in the statutes and regulations.¹
9. I.C. § 13-18-10-2(a) requires permit applications for confined feeding operations (CFOs) to contain the following information:

Application for approval of the construction of a confined feeding operation must be made on a form provided by the department. An applicant must submit the completed application form to the department together with the following:

- (1) Plans and specifications for the design and operation of manure treatment and control facilities.
- (2) A manure management plan that outlines procedures for the following:
 - (A) Soil testing.
 - (B) Manure testing.
- (3) Maps of manure application areas.
- (4) Supplemental information that the department requires, including the following:
 - (A) General features of topography.
 - (B) Soil types.
 - (C) Drainage course.
 - (D) Identification of nearest streams, ditches, and lakes.
 - (E) Location of field tiles.
 - (F) Location of land application areas.
 - (G) Location of manure treatment facilities.
 - (H) Farmstead plan, including the location of water wells on the site.

¹ The Petitioners have not specifically challenged any of the regulations promulgated by the SWMB. They may seek redress from the legislature and the SWMB if they think that the statutes and regulations are inadequate.

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10. IDEM's rules provide three permit options for confined animal feeding operations. Facilities defined as "confined feeding operations" or "CFOs" by 327 IAC 16-2-5 must submit permit applications for CFO approvals under 327 IAC 16-7. If a CFO is also a "concentrated animal feeding operation" ("CAFO") due to its larger size or other characteristics, it must instead obtain an NPDES permit under 327 IAC 5-4-3(a), which is issued in lieu of a CFO permit pursuant to 327 IAC 5-4-3(j). A CAFO may submit a Notice of Intent (NOI) applying for coverage under the IDEM general permit under 327 IAC 15-15-7 or submit an application for an individual NPDES permit under 327 IAC 5-4-3(e).
11. While Union-Go Dairy originally submitted a NOI pursuant to 327 IAC 15-15 applying for coverage under IDEM's general CAFO permit, IDEM directed Union-Go Dairy to apply for an individual NPDES permit under the authority of 327 IAC 15-15-9(a). IDEM issues individual NPDES permits pursuant to 327 IAC 5-4-3. See 327 IAC 5-4-3(j); 327 IAC 15-15-2(e); 327 IAC 15-15-6(h).
12. Under 327 IAC 5-4-3(e), as it existed on September 24, 2004 when the permit was issued, applications for individual NPDES permits had to contain the following information:
 - (e) In addition to the requirements of 327 IAC 5-2-3, the owners or operators of new and existing CAFOs applying for an individual NPDES permit shall provide to the department the following:
 - (1) The following information on forms provided by the department:
 - (A) Name, telephone number, and mailing address of the owner and operator.
 - (B) Name, location, and address of the operation. Contact person and telephone number.
 - (C) Type and number of animals at the operation.
 - (D) Type of containment and storage and total capacity for manure, litter, and process wastewater storage (ton/gallons).
 - (E) Total number of acres under control of the applicant available for land application.
 - (F) Estimated amount of manure, litter, and process wastewater generated per year (tons/gallons).
 - (G) Estimated amount of manure, litter, and process wastewater transferred to other persons per year (tons/gallons).
 - (H) List of other environmental permits held and permit numbers including, if applicable, the CFO farm ID number provided on state CFO approval under 327 IAC 16.
 - (I) A soil survey map of the geographic area in which the CAFO is located showing the location of the production area facility and land application areas.
 - (J) SIC code for the operation.
 - (K) Name of water body receiving drainage from the production area.
 - (L) Telephone number and title of person signing the application.

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13. Under 327 IAC 5-4-3(j), a CAFO with an individual NPDES permit “is not required to obtain or renew the CFO approval pursuant to 327 IAC 16-7.” Consistent with that provision, Union-Go Dairy’s permit states that the dairy is not required to obtain a CFO approval under 327 IAC 16. *IDEM Exh. AA, p. 5, ¶ II. C. 1.* Accordingly, the contents for an individual NPDES permit application in 327 IAC 5-4-3(e) replace the permit application contents required for a CFO application in 327 IAC 16-7. Moreover, 327 IAC 5-4-3(f) requires IDEM to “process the application in accordance with the procedures specified in 327 IAC 5-3 and further that “the permit will require the applicant to comply with nutrient management and water quality standards under 327 IAC 15-15 and 327 IAC 16.” Consequently, the approval process for this type of facility in 327 IAC 5-3 replaces the approval procedures of 327 IAC 16-7.
14. The ECCRC, to a substantial degree, object to the issuance of the Permit on the basis the application did not require sufficient information on several aspects of the Facility. However, the ECCRC failed to produce substantial evidence in support of these contentions. Kathy Martin, the ECCRC’s expert witness, admitted in cross examination that some of the ECCRC’s contentions that the application contained incorrect information were wrong. *Partial transcript of cross examination of Kathy Martin, pgs. 94 to 97.* In addition, some of the concerns were based upon speculation that specific aspects of the Facility would not operate as designed. Any allegations that the Facility will violate the Permit are not sufficient to support a conclusion that the Permit or terms and conditions contained therein were improper. Also, as required by the Permit and the applicable regulations, some of the allegedly missing information did not need to be submitted until after the construction of the facility. Information that the ECCRC incorrectly identifies as missing from the application includes: (1) topographic map of the facility (which was actually included in *Jt. Ex. 1-t*, the NPDES CAFO Permit Application, dated April 27, 2004); (2) access point for perimeter drain not identified (identified on as-built drawings required to be submitted after construction); and (3) plumbing diagrams from the milking parlor/barns to the sand settling basin or storage pond (*Jt. Ex. 1-M, AD-8, Union-Go Dairy Parlor Drains and Utilities*).
15. Further, the ECCRC’s contentions that the Permit was improperly issued because the Dairy failed to disclose ownership of the property on which the Dairy is located; the application is deficient in that the actual location of the Dairy is incorrect; or the Dairy has submitted several materials which are not sealed by a professional engineer are not supported by the evidence. Any deficiencies in the Permit regarding these allegations are minor and were corrected during the permit application process.

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16. 327 IAC 16-8-1 prohibits construction of a new waste management system for manure (such as Union-Go's manure storage pond) in soil that is expected to be in the seasonal high water table unless the water table is lowered to keep it from the bottom of the waste management system. The Dairy presented sufficient information regarding the nature and extent of the high seasonal water table and addressed this regulation by elevating the end of the manure storage pond above the high seasonal water table (the 1145 sand lens) and by installing a perimeter drain to dewater the area during construction and to continue to drain the high water table away from the manure storage pond. The Dairy has complied with this regulation.
17. 327 IAC 16-8-4 requires the Dairy to have sufficient storage capacity to store 180 days of wastewater.² The ECCRC argues that the IDEM and the Dairy did not properly calculate the amount of wastewater being generated and failed to properly consider wastewater and solids from various sources, such as the sand settling basin, waste milk and milking parlor washwater. However, the undisputed testimony was that the manure storage pond, at over 20 million gallons, has sufficient capacity to store more than one year of wastewater (reported at approximately 13,000,000 gallons in 2007) even taking into account the disputed sources and that the Dairy was not at full capacity in 2006 or 2007. The Dairy has presented substantial evidence that, in calculating (1) the amount of manure and wastewater produced by the Dairy and (2) the necessary capacity of the storage pond that it complied with industry practices and guidance approved by the IDEM. The Dairy has complied with this regulation.
18. 327 IAC 16-8-7 sets out the performance standards for manure storage pond liners. It states:
- (a) In addition to sections 1 through 5 of this rule, and the performance standards of 327 IAC 16-3-1, new earthen manure storage structures must meet the requirements of this section.
 - (b) New earthen manure storage structures for liquid manure must not have a seepage rate that exceeds one-sixteenth (1/16) inch per day.
 - (c) Designs for new earthen storage structures for liquid manure must be certified by a professional engineer registered in Indiana.
 - (d) If determined to be necessary to protect the environment, the commissioner may require additional design standards, such as:
 - (1) monitoring systems;
 - (2) liners;
 - (3) higher compaction;
 - (4) innovative technology; or
 - (5) other protective measures.
 - (e) The commissioner shall provide written documentation describing the basis for requiring additional design standards.

² This includes manure, bedding, net average rainfall, rainfall and runoff from the production area as a result of a 25-year, 24 hour storm event

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19. 327 IAC 16-8-7(b) requires a manure storage structure “must not have a seepage rate that exceeds one-sixteenth (1/16) inch per day.” The Permit required that the Dairy install a recompacted clay liner and a 30 mil PVC geomembrane liner with a permeability value of 2×10^{-11} cm/sec. This kind of liner has a seepage rate that is 132 times less than the rule’s allowable seepage rate. The Dairy installed a recompacted clay liner with a 40-mil HDPE liner with a seepage rate that is 100 times more protective than the 30 mil PVC liner. The Dairy has complied with this regulation. The ECCRC has failed to present sufficient evidence that this is not protective of ground water.
20. The ECCRC also requests that the Dairy calculate mass loadings for the manure storage structure. This request was based on their calculations using the maximum amount of seepage allowed under the regulation. However, the actual seepage rate from the manure pond is less than the maximum amount allowed because of the addition of bentonite to the recompacted clay liner and the installation of a synthetic liner. The ECCRC’s calculations do not consider this decreased rate. In addition, a layer of low permeable material located above the 1145 sand lens minimizes the seepage of contaminants into the lens. The ECCRC has failed to present sufficient evidence to support its contention that the Permit should not have been issued until mass loadings were calculated.
21. Given the agency’s and the ECCRC’s concerns regarding the seasonal high water table, it was reasonable and within the IDEM’s discretion to require the 30 mil PVC geomembrane liner in the Permit. The Dairy has failed to present substantial evidence that this Permit condition was unreasonable or outside the scope of the IDEM’s discretion.
22. Any overflow of manure and process wastewater during a 25-year, 24-hour storm event must meet the state water quality standards. Non-contact cooling water may be discharged if its heat has dissipated prior to discharge. Storm water runoff must comply with the best management practices set out in the Permit. These discharge points have been identified. No other discharge is permissible. The Dairy’s failure to comply with these standards would constitute a violation of the Permit. As stated previously, allegations that a facility might violate its permit do not constitute sufficient grounds to invalidate a permit.
23. The ECCRC’s allegations, that the design and construction specifications for the concrete structures are insufficient to assure adequate protection of ground or surface water, are unsupported by the evidence. The evidence supports a conclusion that the concrete structures have been designed in accordance with industry and IDEM standards and regulations.
24. The ECCRC’s allegation that the Dairy and the agency have not identified the exact discharge points is insufficient to support a conclusion that the Permit was improperly issued.

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25. The ECCRC failed to present sufficient evidence that the ground water monitoring plan or groundwater monitoring parameters did not comply with the regulations or that more stringent requirements were necessary. The ECCRC contends that the ground water monitoring plan is insufficient, specifically, that the Dairy should be required to monitor for bicarbonates, salts and pathogens. Monitoring for bicarbonates and pathogens are not required by Indiana's regulations.³ It was not unreasonable for IDEM to decline to add the bicarbonate component of total dissolved solids to the list of parameters to monitor, because high levels of bicarbonate occur naturally in ground water, are produced by many species of animals, and are not a useful means to differentiate between Union-Go Dairy's waste and other potential sources of contamination. Also, monitoring for salts is not necessary for Indiana because precipitation exceeds the rate of evaporation. Under these conditions, salts do not present a danger to ground water as they do not tend to accumulate in the soil. Monitoring for pathogens is not necessary as pathogens in animal manure do not present the same level of risk as human waste and the exposure to sunlight and soil bacteria, through land application tend to kill off the pathogens found in animal waste. The Permit requires compliance with all water quality standards. The ECCRC failed to produce sufficient evidence to support its assertion that monitoring for these additional parameters is required by the regulations or necessary to assure compliance with water quality standards.
26. The ECCRC did not present sufficient evidence that disinfection waste, such as cleaning solutions, or antibiotics would create a water quality issue. The evidence supports a conclusion that because of dilution, these components would not have an adverse impact on surface or ground water quality through either a discharge or land application. Similarly, dilution would prevent biological oxygen demand from affecting water quality. The evidence does not support a conclusion that these substances would have an adverse impact on the storage pond particularly as the storage pond was designed for storage rather than treatment of the manure/wastewater. The evidence presented proved that the only impact that disinfection waste may have on the storage pond would be to increase the odors coming from the pond. However, odors are not regulated by the IDEM. Therefore, the ECCRC has not presented substantial evidence that the Permit should not have been issued because of the IDEM's failure to consider the impact of disinfection waste, antibiotics or a high level of biological oxygen demand.

³ As Ms. Martin admits in her cross examination, the only state that she knows of that requires monitoring for bicarbonates is Oklahoma and that this monitoring is limited to a specific area of the state. See pages 105 -109, partial transcript of Kathy Martin.

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27. The ECCRC has failed to present sufficient evidence that the Dairy does not have adequate acreage on which to land apply the waste. The evidence consisted of speculation by the ECCRC's witnesses that the Dairy had failed to take setbacks into consideration when calculating the amount of acreage available. As stated previously, speculation that a regulated entity will not comply with a permit does not constitute grounds for invalidating the permit. The Dairy presented evidence that, in compliance with applicable guidance, it determined the amount of acreage needed (825 acres) and increased that by 50% for a total of 1300 acres in order to account for the loss of acreage due to setbacks and other factors such as crop rotation or the time of year. The Dairy has adequate acreage for land application.
28. The ECCRC has failed to identify any deficiencies in the manure land use agreements. The regulations do not require the manure land use agreements to include (1) the location of water wells; (2) field identification numbers; (3) the crops; (4) expected crop yields; (5) location of ground and surface waters; (6) identification of highly erodible soils; (7) expected yield per soil type; (8) expected concentration of nutrients in the waste; and (9) location of field tiles. This information must be collected and maintained as part of the on-site records or as part of the Soil Conservation Plan, which must be developed after the Permit is issued. Failure to comply with setbacks for water wells, tile inlets, and surface water would be a violation of the permit, which, as previously mentioned, does not constitute a deficiency in the permit. This is reasonable in light of the fact that this information is highly variable and can change from year to year as the conditions of each land application area changes. The remaining deficiencies listed by the ECCRC, such as (1) soil type descriptions and (2) setback provisions were included in the permit application or were detailed in the Permit itself. If the manure is land applied in a manner that is inconsistent with the best management practices, contained in the Permit, given the changing conditions at each land application area, a violation may occur. The allegation that the Dairy will violate the Permit does not support a conclusion that the Permit was improperly issued.
29. The Manure Management Plan meets the requirements of 327 IAC 16-7-11. The ECCRC failed to present substantial evidence that the MMP was not adequate or that water quality standards would be violated through the use of the MMP. The Nutrient Management Plan and the MMP, if complied with, would not violate the terms and conditions of the Permit.
30. The ECCRC asserts that the Dairy failed to properly identify the location and owners of the land application areas and the Facility. The ECCRC has failed to produce sufficient evidence that was true or that this deficiency constitutes sufficient grounds to invalidate the Permit.

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31. While the ECCRC has presented evidence of other management practices that may be as effective as those chosen by the IDEM, it has not presented sufficient evidence to support its contentions that the IDEM did not act in accordance with the regulations or exercise its discretion in a reasonable manner. The ECCRC has not presented sufficient evidence that the Dairy was not constructed in accordance with the requirements in the Permit or the regulations. The ECCRC has not presented sufficient evidence to show that the Dairy's NPDES application was deficient.
32. The Dairy installed a partial perimeter drain around the manure storage pond. The evidence presented was insufficient to support a conclusion that the Permit required that the perimeter drain be installed around the entire manure storage pond.

FINAL ORDER

AND THE COURT, being duly advised, **ORDERS, ADJUDGES AND DECREES** that the ECCRC has failed to present sufficient evidence in support of its Petition for Review. Union Go Dairy LLC has failed to present sufficient evidence to support its contentions that the IDEM improperly required the installation of a synthetic liner in the manure storage pond. The IDEM properly issued Individual NPDES Permit No. INA006313 to Union Go Dairy LLC.

You are hereby further notified that pursuant to provisions of I.C. § 4-21.5-7.5, the Office of Environmental Adjudication serves as the Ultimate Authority in the administrative review of decisions of the Commissioner of the Indiana Department of Environmental Management. This is a Final Order subject to Judicial Review consistent with applicable provisions of I.C. § 4-21.5. Pursuant to I.C. § 4-21.5-5-5, a Petition for Judicial Review of this Final Order is timely only if it is filed with a civil court of competent jurisdiction within thirty (30) days after the date this notice is served.

IT IS SO ORDERED this 17th day of December, 2008 in Indianapolis, IN.

Hon. Catherine Gibbs
Environmental Law Judge