BRIEFING MEMO

Individual NPDES Permit for Optima Dairy Leasing LLC, Carroll County, Indiana
December 2007

Introduction

Optima Dairy, LLC has been designated as a Concentrated Animal Feeding Operation (CAFO). Optima Dairy Leasing, LLC has applied for a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit No. INA006559 is being proposed to regulate the manure, process wastewater, and stormwater generated at this facility.

Facility Description

Optima Nova Dairy Leasing, LLC plans to construct a dairy operation, housing 2,201 cows in three confinement barns and 40 calves in hutches located near the intersection of County Road 225 East and County Road 1000 North in Carroll County, Indiana. This facility meets the federal and state definition of a CAFO.

Wastewater Sources

Wastewater sources will be manure, wastewater, and process wastewater collected from the facility. The manure/ process wastewater from the operation will be vacuumed up and delivered to either a the concrete manure/ process wastewater separator reception pit, the sand/manure settling channel, a concrete manure/process wastewater pump separator pit, a concrete pad for solid manure/sand storage and dewatering, a concrete floored earthen manure/process wastewater storage lagoon and finally to a compacted clay two-staged earthen manure/process wastewater storage lagoon. Excess non-contact cooling water will be conveyed to an existing field drainage tile.

Receiving Stream

The nearest stream located is a tributary to Rock Creek is located approximately two and a half miles to the South of the proposed dairy operation.

Permit Conditions Rationale

Part I. Permit Construction Requirements

A. Project Description

In accordance with IC 13-18-10-1, construction is required to be approved by IDEM before starting.

B. Pre-construction Notification
Per 327 IAC 16-8-12(b) and 327 IAC 15-15-7(d) owner/operators are required to notify IDEM that they are starting construction so that staff can inspect during construction.

C. Erosion Control Requirements

The Indiana Storm Water Control Regulation 327 IAC 15-5 requires that proper control of storm water be practiced on all disturbed areas at construction sites equal to or greater than one acre.

D. Construction Compliance Inspections and Verifications

All confinement and waste storage structures must be constructed in accordance with the approved plans. Photographic evidence of construction compliance should be collected.

E. Facility Start-up and Populating with Animals

The requirement to notify IDEM of the completion of facility construction before introduction of animals is based in 327 IAC 16-8-12(d).

Part II. Effluent Limitations and Discharge Prohibitions

A. Effluent Limitations and Discharge Prohibitions

In accordance with rule 327 IAC 5-4-3 the permit requires no discharge except in the event of a twenty-five (25) year, twenty-four (24) hour wet weather event.

Indiana water quality standards require that discharges to a surface water shall meet the minimum requirements in rule 327 IAC 2-1-6. Part II. A. 5. of the permit contains requirements from rule 327 IAC 2-1-6(a). Compliance with these requirements in combination with the other requirements of this permit will be considered as meeting Indiana Water Quality Standards.

B. Performance Standards

The performance standards in the permit are based on the requirements in the Confined Feeding Operations rule 327 IAC 16-3-1.

C. Relationship with Confined Feeding Operation (CFO) Approval
In order to avoid duplicative permitting between the existing Confined Feeding Operation Rules and the NPDES Rules this section clarifies that only the NPDES permit needs to be maintained for operational purposes. If additional buildings or

waste management systems are proposed an application for construction approval must be submitted to IDEM.

D. Operational Requirements

The permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The manure storage structure requirements are based on the Confined Feeding Operations rule 327 IAC 16-9-1(c). The requirements for freeboard are based on rule 327 IAC 16-8-5(a). The self monitoring inspections requirements are based on Confined Feeding Operations Rule 327 IAC 15-15(e). Uncovered liquid manure storage structure requirements are based on the Confined Feeding Operations Rule 327 IAC 16-9-1(f).

E. Distributing and Marketing

Marketing and distributing are based on the Confined Feeding Operations Rule 327 IAC 16-10-5.

F. Land Application of Manure and Process Wastewater

The manure application rates are based on soil tests, the nutrient demand of the crop to be grown and the nitrogen and phosphorus content of the manure. The requirements of the manure applications setbacks are based on 327 IAC 15-15.

G. Special Conditions

The Nutrient Management Plan (NMP) equivalency requirement comes from 40 CFR 122.42 and additional conditions applicable to specified categories of NPDES permits. Requirements for soil conservation are based on 40 CFR 122.42. According to 40 CFR 122.26 (b)(14)(xi), facilities under Standard Industrial Classification (SIC) code 20 are considered to be engaging in "industrial activities" for purposes of 40 CFR 122.26(b), by developing and implementing a stormwater pollution prevention plan, the permittee satisfies the requirements in 327 IAC 15-6. The spill response and prevention requirements are based on the Confined Feeding Operations Rule 327 IAC 16-9-4 and Spills, Reporting, Containment, and Response 327 IAC 2-6.1. Crop nutrient requirements are contained in 40 CFR 412. The language for rainfall conditions are from the EPA CAFO Guidance Manual and Sample Permit for CAFO NPDES permits. Measuring rainfall allows the facility to document when a 25-year, 24-hour wet weather event has taken place. The limitations for manure additives are based on best professional judgment (BPJ) of the technology and corresponding limitations equivalent to the best conventional pollution control technology (BCT). The requirements for employee training are in accordance with Applicability of Best

Management Practices (BMPs) 327 IAC 5-9-2. Closure of manure storage structures are based on 327 IAC 16-11.

H. Site-specific Conditions

The additional site-specific conditions included in this permit addressing design and operational standards provide increased environmental safeguards. Specific design drawings are referenced as the approval design.

I. Reopening Clause

IDEM reserves the right to modify the permit in accordance with any new federal regulations implementing the Federal Water Pollution Control Act. The modification would be done in order to allow new permit conditions or new or revised permit conditions for the reasons stated in the permit.

Part III. Monitoring, Record Keeping, and Reporting

A. The owner/operator shall inspect all waste management systems to ensure compliance with the permit in accordance with 40 CFR 412.37.

B. Operating Record Requirements

The requirements for operating record keeping are based on the Confined Feeding Operations Rule 327 IAC 16-9-5 and 40 CFR 412. Production area and manure or process wastewater application area records are in compliance with 40 CFR 412.37.

C. Reporting Requirements

The annual reporting requirements are based on 40 CFR 412. Transferability of the permit is in accordance with rule 327 IAC 5-2-6.

Part IV. Standard Permit Conditions

A. General Conditions

The conditions contained in this part of the permit are taken from 327 IAC 5 and 40 CFR 122.23. This section must be included in all NPDES permits in accordance with Federal regulations and the Clean Water Act.

B. Management Requirements

Management requirement are in compliance with 327 IAC 5-2-8(8).

C. Additional Reporting Requirements

Planned Changes in Facility or Discharge requirements are pursuant to 327 IAC 5-2-8(10)(F). The monitoring requirements for discharges are in accordance with 327 IAC 2-6.1

(As referenced in permit as:) **ATTACHMENT 1. Storm Water Pollution Prevention Plan**

By developing and implementing a storm water pollution prevention plan, the permittee satisfies the requirements in 327 IAC 15-6.

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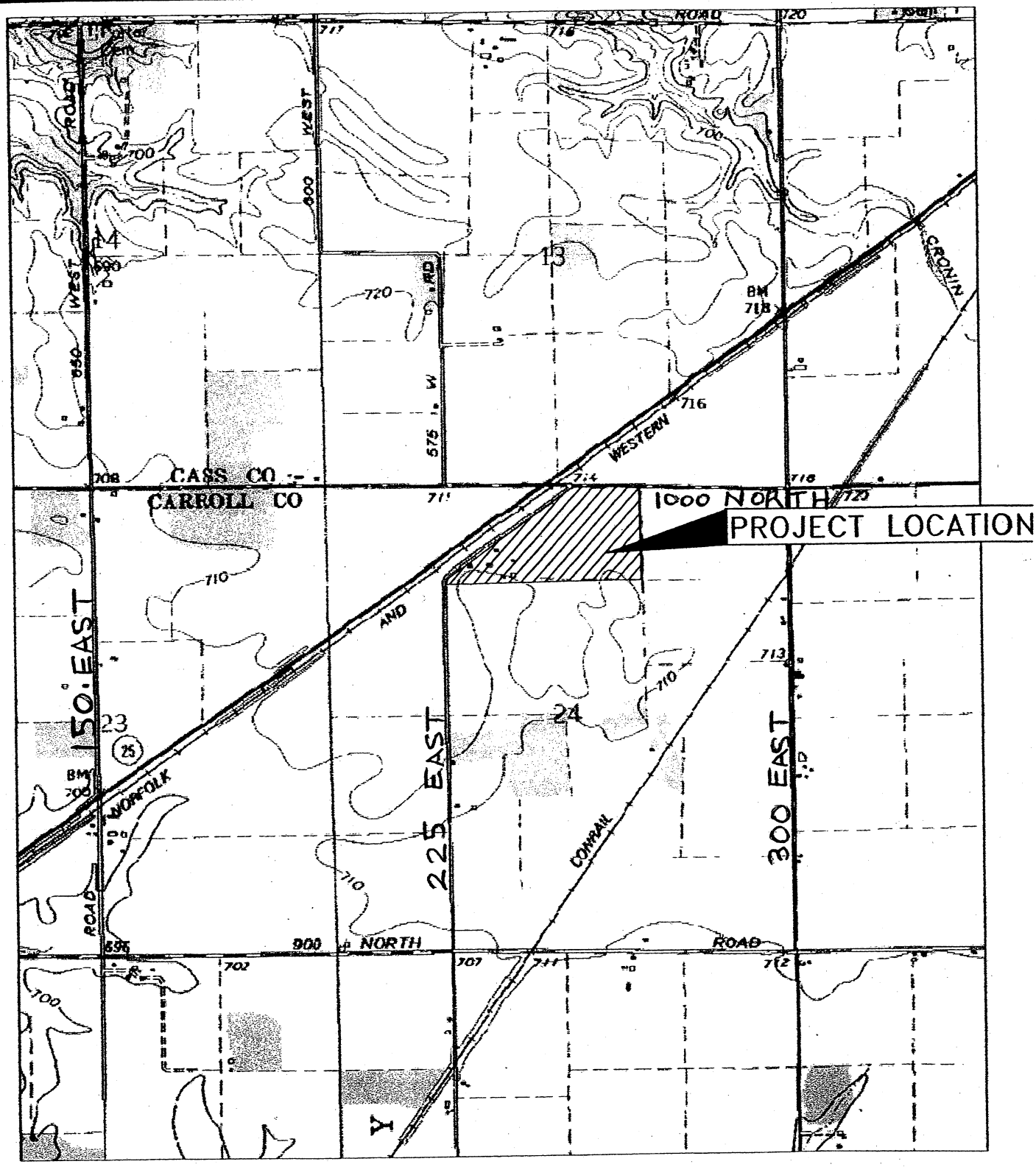
NORTH

Briefing Memo Attachment A



AREA MAP

NOT TO SCALE