POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: General Provisions

2) Code Citation: 35 Ill. Adm. Code 501

3)

Section Numbers:	Proposed Action:
501.103	New
501.104	New
501.200	Amend
501.201	Amend
501.223	New
501.236	New
501.238	New
501.241	Amend
501.242	New
501.244	New
501.252	New
501.253	New
501.254	New
501.261	New
501.263	New
501.267	New
501.295	Amend
501.305	Amend
501.310	Amend
501.312	New
501.313	New
501.325	Repeal
501.333	New
501.343	New
501.345	Amend
501.355	Amend
501.357	New
501.358	New
501.359	New
501.360	Amend
501.361	New
501.363	New
501.373	New
501.377	New
501.378	New

501.379	New
501.385	New
501.390	New
501.395	New
501.401	Amend
501.402	Amend
501.404	Amend
501.405	Amend
501.505	New

4) Statutory Authority: Implementing Sections 9, 12, 13, 21 and 22 of the Environmental Protection Act (Act) and authorized by Section 27of the Act [415 ILCS 5/9, 12, 13, 21, 22, and 27].

5) A Complete Description of the Subjects and Issues Involved: A more complete description of this proposal may be found in the Board's first-notice opinion and order of November 7, 2013, in docket R12-23.

The Illinois Environmental Protection Agency (Agency) initiated this proceeding by filing a rulemaking proposal to amend the Board's agriculture related pollution regulations. The Agency sought to amend Part 501 so that it would be consistent with, and as stringent as, the current federal Concentrated Animal Feeding Operations regulations. The Agency also sought to establish state technical standards required by the federal rule. The United States Environmental Protection Agency (USEPA) had directed that "Illinois still needs to establish standards that address the rate at which manure, litter, and process wastewater may be applied on crop or forage land where the risk of phosphorus transport is high, as well as standards for land application on frozen soil and snow." The Agency claimed that failure to amend these regulations could result in withdrawal of federal delegation to Illinois of the National Pollutant Discharge Elimination System (NPDES) permit program under the Clean Water Act.

6) Published studies or reports and sources of underlying data, used to compose this rulemaking: The Agency reported that it had not performed any new study or contracted with any other entity to perform one as a basis to develop its rulemaking proposal, so it had no "underlying data" to report.

The Agency stated that the following "provides a complete list of all documents and studies used in developing the proposal".

American Society of Agricultural and Biological Engineers

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Concentrated Animal Feeding Operations (2004)

United States Department of Agriculture – Natural Resource Conservation Service, Illinois Engineering Field Handbook, Illinois Hydrologic Soil Groups, Notice 29 (Oct. 2007), available at ftp://ftp-fc.sc.egov.usda.gov/IL/engineer/supplements/2-42.9to2-42.16.pdf (last modified Nov. 16, 2009, viewed Aug. 30, 2011)

United States Department of Agriculture – Natural Resource Conservation Service, Illinois NRCS Standard Grassed Waterway – Conservation Practice Standard – Code 412 (Mar. 2008)

United States Department of Agriculture – Natural Resource Conservation Service, Soil Survey of Piatt County (2010)

United States Department of Agriculture, Agricultural Research Service, Oxford Sedimentation Lab at http://www.ars.usda.gov/Research/docs.htm?docid=6010 (viewed Aug. 29, 2011)

United States Environmental Protection Agency, Method 350.1 Determination of Ammonia Nitrogen by Semi-Automated Colorimetry, Revision 2.0 (Aug. 1993)

United States Environmental Protection Agency, NPDES Permit Writer's Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations, (Dec. 2003)

Van Mullem, J.A., et al., Runoff Curve Number Method: Beyond the Handbook at ftp://ftp-fc.sc.egov.usda.gov/NWMC/CN_info/Van_Mullem_paper.doc (viewed Aug. 31, 2011)

Wisconsin Administrative Code NR 243 Animal Feeding Operations at http://legis.wiconsin.gov/rsb/code/nr/nr243.pdf

Zhang, X.Y., et al., A Review of Vegetated Buffers and a Meta-Analysis of Their Mitigation Efficiency in Reducing Nonpoint Source Pollution, Journal of Environmental Quality 39(1): 76-84

7) Will this rulemaking replace an emergency rule currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? Yes

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Management of Manure Odors, ASAE EP379.4 (Jan. 2007)
Design of Anaerobic Lagoons for Animal Waste Management, ASABE EP403.4 (R2011)

Illinois Agronomy Handbook, 24th Edition; University of Illinois College of Agriculture, Consumer and Environmental Sciences

MidWest Plan Service
Livestock Waste Facilities Handbook, Third Edition, Third Printing (MWPS-18) April 1998
Manure Characteristics, Section 1, Second Edition (MWPS-18) (2004)

Recommended Chemical Soil Test Procedures for the North Central Region, North Central Regional Publication No. 221 Missouri Agricultural Experiment Station Bulletin SB 1001 (Jan. 1998)

Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils, Bulletin No. 810 (2000), revised 1/15/01 to amend Table B810, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Optimum Crop Productivity Ratings for Illinois Soils, Bulletin No. 811 (2000), revised 1/15/01 to amend Table S2 B811, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Livestock Management Facilities Act (510 ILCS 77)

Livestock Management Facilities Act Regulations (8 Ill. Adm. Code 900)

68 Fed. Reg. 7176 (Feb. 12, 2003)

Waterkeeper v. USEPA, 399 F.3d 486 (2nd Cir. 2005)

73 Fed. Reg. 70418 (Nov. 20, 2008)

November 2008 Compiled CFO NPDES Regulations and Effluent Limitations Guidelines and Standards

National Pork Producers Council, et al. v. USEPA, 635 F.3d 738 (5th Cir. 2011)

76 Fed. Reg. 65431 (Oct. 21, 2011)

Allen, B.L. and A.P. Mallarino, Effects of Liquid Swine Manure Rate, Incorporation, and Timing of Rainfall on Phosphorus Loss with Surface Runoff, Journal of Environmental Quality 37: 125-37 (2008)

Standard Methods for the Examination of Water and Wastewater, 19th edition (1995), American Public Health Association

Good Environmental Livestock Production Practices: Concentrated Livestock Operations – Manure Utilization ANSI-GELPP 0004-2002

Curve Number Hydrology – State of the Practice, ASCE/EWRI Curve Number Hydrology Task Committee, American Society of Civil Engineers (2009)

Barker, J.C., Lagoon Design and Management for Livestock Waste Treatment and Storage North Carolina Cooperative Extension Service EBAE 103-83 (1996)

Brady, N.C., Nature and Properties of Soils, 8th Edition (1974)

Daverede, I.C., et al., Phosphorus Runoff: Effect of Tillage and Soil Phosphorus Levels, Journal of Environmental Quality 32: 1436-44 (2003)

Daverede, I.C., et al. Phosphorus Runoff from Incorporated and Surface-Applied Liquid Swine Manure and Phosphorus Fertilizer, Journal of Environmental Quality 33: 1535-44 (2004)

Dillaha, T.A., et al., Vegetative Filter Strips for Agricultural Non-Point Source Pollution Control, Trans. ASAE 32: 513-19 (1989)

Funk, T., et al., Developing and Managing Livestock Waste Lagoons in Illinois, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research Circular 1326

Garen, D.C. and D.S. Moore, Curve Number Hydrology in Water Quality Modeling, Uses, Abuses, and Future Directions, Journal of the American Water Resources Association, Paper No. 03127, 377-88 (2005)

Hawkins, R.H., et al., Continuing Evolution of Rainfall-Runoff and the Curve Number Precedent, Second Joint Federal Interagency Conference (2010)

Jones, D.J. and A.L. Sutton, Design and Operation of Livestock Waste Lagoons, Purdue

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University Cooperative Extension Service ID-120 (Sept, 1999)

Lewis, R.J., Hawley's Condensed Chemical Dictionary, 12th Edition (1993)

Mayer, P.M., et al., Meta-Analysis of Nitrogen Removal in Riparian Buffers, Journal of Environmental Quality 36: 1172-80 (2007)

Peters, J., et al. Recommended Methods of Manure Analysis (2003), available at http://uwlab.soils.wisc.edu/pubs/A3769.pdf (posted Mar. 4, 2003, verified Aug. 20, 2011)

Ponce, V.M. and R.H. Hawkins, Runoff Curve Number: Has It Reached Maturity, Journal of Hydrologic Engineering, ASCE 1(1) (Jan. 1996)

Pote, D.H. et al., Water Quality Effects of Incorporating Poultry Litter into Perennial Grassland Soils," Journal of Environmental Quality 32(6): 2392-98 (2003)

Sharpley, A.N., et al., Phosphorus Movement in the Landscape, J. Prod. Agric. 6: 492-500 (1993)

Sharpley, A.N., et al., Determining Environmentally Sound Soil Phosphorus Levels, J. Soil and Water Cons. 51(2): 160-66 (1996)

United States Department of Agriculture – Natural Resource Conservation Service, Nutrient Management Code 590, Illinois (Jan. 2002)

United States Department of Agriculture – Natural Resource Conservation Service, Waste Utilization Code 633, Illinois (Jan. 2002)

United States Department of Agriculture – Natural Resource Conservation Service, Nutrient Management Code 590, Illinois (Oct. 2003)

United States Department of Agriculture – Natural Resource Conservation Service, National Engineering Handbook, Part 630 Hydrology, Chapter 10 Estimation of Direct Runoff from Storm Rainfall (2004)

United States Environmental Protection Agency, Cost Methodology for the Final Revisions to the National Pollutant Discharge Elimination System Regulations and the Effluent Guidelines for Concentrated Animal Feeding Operations (Dec. 2002)

United States Environmental Protection Agency, Managing Manure Nutrients at

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10) Are there any other proposed amendments pending on this Part? No

11) Statement of Statewide Policy Objectives: These proposed amendments do not create or enlarge a state mandate as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3].

12) Time, Place, and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of publication. Comments should refer to docket R12-23 and be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may request copies of the Board's opinion and order in R12-23 by calling the Clerk's office at 312-814-3620, or may download copies from the Board's Web site at www.ipcb.state.il.us. For more information, contact the Clerk's Office at 312-814-3629.

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not for profit corporations affected: By aligning Illinois' rules with current federal CAFO regulations and implementing required technical standards, the proposed rules could apply to any livestock management facilities and livestock waste-handling facilities in Illinois.

B) Reporting, bookkeeping or other procedures required for compliance: The proposed amendments to Part 501 implement federal requirements and would require facilities to determine whether they are subject to National Pollutant Discharge Elimination System (NPDES) permitting requirements and to follow them where applicable. The proposed amendments to Part 501 would also require specified unpermitted facilities to submit basic information about their operations to the Agency.

C) Types of Professional skills necessary for compliance: The Board does not expect that professional skills beyond those currently required for recordkeeping and other requirements will be necessary for compliance.

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14) Regulatory Agenda in which these amendments were summarized: 7/13 (37 Ill. Reg. 9060)

The full text of the proposed rulemaking begins on the next page:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE E: AGRICULTURE RELATED POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 501
GENERAL PROVISIONS

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SUBPART B: DEFINITIONS AND INCORPORATIONS

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501.274	Liquid Livestock Waste
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501.350	Person
501.355	Pollutant
501.356	Populated Area
501.357	Process Wastewater
501.358	Production Area
501.359	Raw Materials Storage Area
501.360	Revised Universal Soil Loss Equation~~Settling Basin~~
501.361	Saturated
501.363	Setbacks
501.365	Silvicultural Point Source~~Settling Basin~~
501.370	Standard of Performance
501.372	Supernatant
501.373	Surface Land Application
501.375	Temporary Manure Stack
501.377	Vegetative Buffer
501.378	Vegetative Fence Row

SUBPART C: OPERATIONAL RULES FOR ALL LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE-HANDLING FACILITIES

SUBPART D: SUBMITTAL OF INFORMATION

AUTHORITY: Implementing and authorized by Sections 9, 12, 13, 21, 22 and 27 of the Environmental Protection Act [415 ILCS 5/9, 12, 13, 21, 22 and 27].

SOURCE: Filed and effective January 1, 1978; amended at 2 Ill. Reg. 44, p. 137, effective October 30, 1978; codified at 7 Ill. Reg. 10592; amended in R90-7 at 15 Ill. Reg. 10075, effective July 1, 1991; amended in R12-23 at 38 Ill. Reg. _____, effective _____.

SUBPART A: AUTHORITY AND POLICY

Section 501.103 Organization of this Chapter

The Board regulations adopted in 35 Illinois Administrative Code Subtitle E: Agriculture Related Pollution, Chapter I: Pollution Control Board are organized as provided in this Section.

a) Part 501 of this Chapter contains definitions and incorporations by reference applicable to Parts 501, 502 and 503, which are the Parts of this Chapter

administered by the Environmental Protection Agency. Subpart C of Part 501 also contains the requirements applicable to all livestock waste-handling facilities and livestock management facilities, whether or not those facilities are defined as animal feeding operations (AFOs) or concentrated animal feeding operations (CAFOs) and without regard to whether the facility is subject to National Pollutant Discharge Elimination System (NPDES) permitting requirements.

b) Part 502 identifies which AFOs are subject to NPDES permit requirements and specifies those requirements. Part 502 also provides the State technical standards applicable to permitted CAFOs. That Part also contains requirements applicable to land application activities from AFOs that are defined as large CAFOs and are not permitted under an NPDES permit.

c) Part 503 contains the requirements applicable to fish and aquatic animal production facilities, irrigation activities, and silvicultural activities and sources.

d) Part 506 implements the Livestock Management Facilities Act [510 ILCS 77]. Those rules and the Livestock Management Facilities Act are administered by the Illinois Department of Agriculture.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.104 Severability

If any provision of this Part is adjudged invalid, or if the application of this Part to any person or in any circumstance is adjudged invalid, that invalidity shall not affect the validity of this Chapter as a whole, or of any Part, Subpart, sentence or clause of this Part not adjudged invalid.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART B: DEFINITIONS AND INCORPORATION

Section 501.200 Incorporations by Reference

a) The Board incorporates the following material by reference:

ASABE~~ASAE~~. Available from American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph~~,~~ MI 49085 (269) 429-0300, fax (269) 429-3852, hq@asabe.org ~~9659 (616-429-0300)~~.

"Management~~Control~~ of Manure Odors," ASAE EP379.4~~EP379.1~~ (January 2007)~~(December 1986)~~.

"Design of Anaerobic Lagoons for Animal Waste Management," ASABE EP403.4 (R2011)~~ASAE EP403.1 (March 1990)~~.

"Illinois Agronomy Handbook, 24th Edition," University of Illinois, College of Agriculture, Consumer and Environmental Sciences. Urbana IL, July 2009. Available from University of Illinois, Office of Extension and Outreach, 111 Mumford Hall (MC-710), 1301 W. Gregory Dr., Urbana IL 61801 (217) 333-5900.

MWPS. Available from MidWest Plan Service, 122 Davidson Hall, Iowa State University, Ames IA 50011-3080 (515) 294-4337.

"Livestock Waste Facilities Handbook, Third Edition," MWPS-18. MidWest Plan Service. April 1993.

"Manure Characteristics," Section 1. Second Edition MWPS-18-S1. MidWest Plan Service. 2004.

"Recommended Chemical Soil Test Procedures for the North Central Region," North Central Regional Publication No. 221, Missouri Agricultural Experiment Station Bulletin SB 1001 (January 1998). Available from North Central Region-University of Missouri Soil Testing Lab, 23 Mumford Hall, University of Missouri, Columbia MO 65211 (573) 884-4288.

"Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils; Bulletin No. 810," University of Illinois, College of Agricultural, Consumer and Environmental Sciences, Office of Research (2000), revised January 15, 2011 to amend Table 2 for B810. Available from University of Illinois, College of Agricultural, Consumer, and Environmental Sciences, Office of Research, 228 Mumford Hall, 1301 W. Gregory Dr., Urbana IL 61801 (217) 333-0240.

"Optimum Crop Productivity Ratings for Illinois Soils; Bulletin 811," University of Illinois, College of Agricultural, Consumer and Environmental Sciences, Office of Research (2000), revised January 15, 2011 to amend Table S2 for B811. Available from University of Illinois, College of Agricultural, Consumer, and Environmental Sciences, Office of Research, 228 Mumford Hall, 1301 W. Gregory Dr., Urbana IL 61801 (217) 333-0240.

"NOAA Atlas 14: Precipitation Frequency Atlas of the United States," United States Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Volume 2, Version 3.0 (2004), revised 2006. Available from NOAA, NWS, Office of Hydrologic Development, 1325

East West Highway, Silver Spring MD 20910. (Available online at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume2.pdf).

Code of Federal Regulations. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20401 (202) 783-3238:

7 CFR 610.12 (2013), Revised Universal Soil Loss Equation.

"Agricultural Waste Management Field Handbook," United States Department of Agriculture, Natural Resources Conservation Service (2009). Available from USDA, NRCS, 1400 Independence Ave., S.W., Washington DC 20250. (Available online at http://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21430).

b) This Section incorporates no later editions or amendments.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.201 Definitions

a) Except as otherwise~~hereinafter~~ stated in this Part, and unless a different meaning of the term is clear from its context, the definitions of terms used in this Chapter shall be the same as those used in the Act and 35 Ill. Adm. Code: Subtitle C, Chapter I.

b) The definitions contained in this Subpart are applicable to 35 Ill. Adm. Code 501, 502 and 503.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.223 Animal Confinement Area

Animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways and stables.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.236 Chemicals and Other Contaminants

Antibiotics, hormones, feed additives, pesticides, hazardous and toxic chemicals, petroleum products and by-products, other chemical products and by-products, and the residues and containers of any of these materials.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.238 Concentrated Animal Feeding Operation (CAFO)

An animal feeding operation (AFO) that is defined as a large CAFO pursuant to 35 Ill. Adm. Code 502.103 or as a medium CAFO pursuant to 35 Ill. Adm. Code 502.104, or that is designated as a CAFO pursuant to 35 Ill. Adm. Code 502.106.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.241 CWA

The Clean Water Act, as amended (33 USC 1251 et seq.)~~Federal Water Pollution Control Act (also known as the Clean Water Act), as amended, 33 U.S.C. 1251 et seq., Public Law 92-500, enacted by the Congress October 18, 1972, as amended by Public Law 95-217, enacted December 27, 1977, as amended~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.242 Dry Lot

A facility for growing ducks in confinement with a dry litter floor cover and no access to swimming areas.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.244 Erosion Factor T

An estimate of the maximum average annual rate, in tons per acre per year, of soil erosion by water that can occur without affecting crop productivity over a sustained period.

BOARD NOTE: Erosion Factor T for Illinois soils is available from the United States Department of Agriculture, Natural Resources Conservation Service's published soil surveys for Illinois at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.252 Frozen Ground

Soil that is frozen anywhere between the first ½ inch to 8 inches of soil as measured from the ground surface.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.253 Grassed Waterway

A natural or constructed waterway or outlet shaped or graded and established in suitable vegetation as needed for the conveyance of runoff from a field, diversion or other structure.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.254 Groundwater

Underground water which occurs within the saturated zone and geologic materials where the fluid pressure in the pore space is equal to or greater than atmospheric pressure [415 ILCS 5/3.210].

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.261 Incorporation

A method of land application of livestock waste in which the livestock waste is thoroughly mixed or completely covered with the soil within 24 hours. Any ponded liquid livestock waste remaining on the site after application is not considered to be thoroughly mixed or completely covered with the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.263 Injection

The placement of livestock waste 4 to 12 inches below the soil surface in the crop root zone using equipment specifically designed for that purpose, when the applied material is retained by the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.267 Land Application Area

Land under the control of an animal feeding operation owner or operator, whether it is owned, rented or leased, to which livestock waste from the production area is or may be applied.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.295 Livestock Waste

Manure, litter, process wastewater, overflow from watering systems, ~~Livestock excreta and associated feed losses, bedding,~~ wash waters, sprinkling waters from livestock cooling, precipitation polluted by falling on or flowing onto an animal feeding operation and other materials polluted by livestock, including but not limited to soils and sludges removed from livestock waste storage structures. Livestock waste does not include agricultural stormwater discharge.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.305 Man-made

Constructed by man ~~and used for the purpose of transporting waste~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.310 Man-made Ditch

A discrete fissure or channel excavated in the earth ~~for the purpose of transporting livestock waste directly to navigable waters. This is not to be confused with a vegetative filter or acceptable disposal area which is a treatment device and may take the form of a man-made terrace or grass waterway system~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.312 Manure

Animal excreta, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.313 Manure Storage Area

Includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under the house or pit storages, liquid impoundments, static piles, and composting piles.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.325 Navigable Waters (Repealed)

~~All waters of the United States as defined in Criteria and Standards for the National Pollutant Discharge Elimination System (40 CFR 125.1(p)).~~

~~a) All navigable waters of the United States;~~

~~b) Tributaries of navigable water of the United States;~~

~~c) Interstate waters;~~

~~d) Intrastate lakes, rivers and streams which are utilized by interstate travelers for recreational or other purposes;~~

~~e) Intrastate lakes, rivers and streams from which fish or shellfish are taken and sold in interstate commerce; and~~

~~f) Intrastate lakes, rivers and streams which are utilized for industrial purposes by industries in interstate commerce.~~

(Source: Repealed at 38 Ill. Reg. _____, effective _____)

Section 501.333 New Source

Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after either of the following dates:

a) after promulgation of standards of performance under section 306 of the Clean Water Act that are applicable to the source; or

b) after proposal of standards of performance in accordance with section 306 of the Clean Water Act that are applicable to the source, but only if the standards are promulgated in accordance with section 306 within 120 days after their proposal.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.343 Overflow

The discharge of livestock waste resulting from the filling of livestock waste storage structures beyond the point at which livestock waste or stormwater can no longer be contained by the structure.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.345 Owner/~~or~~ Operator

Any person who owns, leases, operates, controls or supervises a livestock management facility or livestock waste-handling facility.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.355 Pollutant

Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water, as defined in CWA.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.357 Process Wastewater

Water directly or indirectly used in the operation of the AFO for any of the following activities: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. It also includes any water that comes into contact with any raw materials, products, or byproducts, including manure, litter, feed, milk, eggs or bedding.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.358 Production Area

The part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.359 Raw Materials Storage Area

Includes, but is not limited to, feed silos, silage bunkers, and bedding materials stacks.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.360 Revised Universal Soil Loss Equation ~~Settling Basin~~

The equation for calculating soil loss due to water erosion as set forth in 7 CFR 610.12 (2013), incorporated by reference in Section 501.200:

$$A = R * K * LS * C * P$$

Where

A = the estimation of average annual soil loss in tons per acre caused by sheet and rill erosion;

R = the rainfall erosivity factor, which accounts for the energy and intensity of rainstorms;

K = the soil erodibility factor, which measures the susceptibility of a soil to erode under a standard condition and adjusts it bi-monthly for the effects of freezing and thawing, and soil moisture;

LS = the slope length and steepness factor, which accounts for the effect of length and steepness of slope on erosion based on the relationship of rill to interrill erosion; and

P = the support practice factor, which accounts for the effect of conservation support practices, such as cross-slope farming, strip cropping, buffer strips, and terraces on soil erosion.

BOARD NOTE: Soil loss may be calculated using Revised Universal Soil Loss Equation 2 (RUSLE2) software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm.

~~Any excavated, diked or walled structure or combination of structures designed as part of a livestock waste-handling facility to detain feedlot runoff for a sufficient time to permit solids to settle for later removal.~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.361 Saturated

Soils in which pore spaces are occupied by liquid to the extent that additional inputs of water or liquid wastes cannot infiltrate into the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.363 Setbacks

A specified distance from surface waters or potential conduits to surface waters where livestock waste may not be land applied. Examples of conduits to surface waters include, but are not limited to, open tile intake structures, sinkholes, and agriculture well heads.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.373 Surface Land Application

Application of livestock waste to the ground surface that is not incorporated or injected.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.377 Vegetative Buffer

Narrow, permanent strip of dense perennial vegetation established parallel to the contours of the land and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.378 Vegetative Fence Row

Narrow, permanent strip of perennial vegetation established at the edge of a field that is a minimum of 15 feet wide. The vegetative fence row slows water runoff and enhances water infiltration, reducing the risk of pollutants leaving the field.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.379 Waste Containment Area

Includes, but is not limited to, settling basins, and areas within berms and diversions that separate uncontaminated stormwater from livestock waste.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.385 Wet Lot

A confinement facility for raising ducks that is open to the environment, has a small number of sheltered areas, and has open water runs and swimming areas to which ducks have free access.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.390 25-Year, 24-Hour Precipitation Event

The maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years, as defined by NOAA Atlas 14: Precipitation Frequency Atlas of the United States, incorporated by reference in Section 501.200.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.395 100-Year, 24-Hour Precipitation Event

The maximum 24-hour precipitation event with a probable recurrence interval of once in 100 years, as defined by NOAA Atlas 14: Precipitation Frequency Atlas of the United States, incorporated by reference in Section 501.200.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART C: OPERATIONAL RULES FOR ALL LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE-HANDLING FACILITIES

Section 501.401 Purpose and Scope of Operational Rules for Livestock Management Facilities and Livestock Waste-Handling Facilities~~General Criteria~~

a) Besides the regulations contained within this Chapter, every person shall also comply with provisions of the Act and other Board regulations.

b) The owner or operator of any livestock management facility or livestock waste-handling facility shall comply with the CWA, NPDES filing requirements and the feedlot category of point source effluent guidelines. All livestock management facilities and livestock waste-handling facilities have the obligation to make a site specific determination of whether the facility is subject to NPDES permit requirements and to follow those requirements when and where they are applicable. CAFOs are subject to additional requirements applicable under 35 Ill. Adm. Code 502.

c) This Subpart~~These regulations~~ shall apply to stockyards and similar operations where animals are held briefly, as well as to conventional livestock operations.

d) The transportation of livestock wastes shall be planned and conducted so as not to cause, threaten, or allow any violation of the Act and applicable regulations.

e) Any runoff or overflow from a livestock management facility or a livestock waste-handling facility shall not cause a water quality violation pursuant to the Act or 35 Ill. Adm. Code Subtitle C: Water Pollution.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.402 Location of New Livestock Management Facilities and New Livestock Waste-Handling Facilities

a) No new livestock management facility or new livestock waste-handling facility shall contain within its boundaries any stream or other surface waters except small temporary accumulations of water occurring as a direct result of precipitation.

b) New livestock management facilities and new livestock waste-handling facilities located within a 10-year flood height as recorded by the United States Geological Survey or as officially estimated by the Illinois State Water Survey shall be protected against such flood.

c) Limitations Effective July 15, 1991

1) Upon July 15, 1991, new or expanded livestock management facilities and new or expanded livestock waste-handling facilities shall not be located within ½ mile of a populated area or within ¼ mile of a non-farm residence.

2) For purposes of this subsection (c), the following shall not be considered location of a new or expanded livestock management or waste-handling facility:

A) Commencement of operations at an idle facility which has livestock shelters left intact, and thatwhich has been operated as a livestock management facility or livestock waste-handling facility for four consecutive months at any time within the ten (10) previous years;

B) Commencement of operations at a facility reconstructed after partial or total destruction due to natural causes, i.e., tornado, fire, or earthquake.

3) Adequate odor control methods and technology shall be practiced by operators of new and existing livestock management facilities and livestock waste-handling facilities so as not to cause air pollution.

d) The setback requirements of subsection (c) shall not apply to any livestock management facility or livestock waste-handling facility thatwhich meets any of the following conditions:

1) The facility is located in an agricultural areaAgricultural Area, designated

as such pursuant to the Agricultural Areas Conservation and Protection Act~~,~~ [505 ILCS 5]~~Ill. Rev. Stat. 1989, ch. 5, para. 1001 et seq.~~;

2) The facility undergoes expansion, and the owner of the facility certifies and notifies the Agency in writing ~~as such~~ that the facility was operating as a livestock management facility or livestock waste-handling facility for at least one year prior to the existence of any non-farm residence within ¼ mile of the facility or of a populated area within ½ mile of the facility; or

3) The use of the facility as a livestock management or livestock waste handling facility is allowed by local zoning or municipal ordinance. If no local zoning or municipal ordinance exists that covers that~~such~~ use, the facility shall be exempt if the livestock are not raised or kept at the facility primarily for hire or the raising or keeping of livestock at the facility does not have financial profit as a primary aim.

e) A new livestock management facility or new livestock waste-handling facility that~~which~~ locates within ¼ mile of a neighboring farm residence shall locate at the maximum feasible location from that~~such~~ residence.

f) A new livestock management facility or new livestock waste-handling facility that~~which~~ locates within ¼ mile of a non-farm residence or within ½ mile of a populated area, as allowed by~~pursuant to~~ subsection (d), shall locate at the maximum feasible location from the~~such~~ residence or populated area.

g) New livestock management facilities or new livestock waste-handling facilities located on soil types or geological formations where the deposition of livestock waste is likely to cause groundwater pollution shall be constructed in such a way that pollution will be prevented, or supplementary measures shall be adopted that~~which~~ will prevent pollution.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.404 Handling and Storage of Livestock Waste

a) Any livestock waste stored in excess of six months shall be contained in a manure storage structure.

b) Temporary Manure Stacks

1) A temporary manure stack is a potential secondary source, as defined by the Act. As a potential secondary source, a temporary manure stack is subject to the minimum setback zones established in Title IV of the

Act~~Temporary manure stacks shall be constructed or established and maintained in a manner to prevent runoff and leachate from entering surface or groundwaters~~.

2) A temporary manure stack shall not be located within 75 feet from any water well, except monitoring wells~~No temporary manure stack shall be constructed within 100 feet of a water well~~.

3) A temporary manure stack shall be constructed or established and maintained in a manner to prevent runoff and leachate from entering surface waters or groundwaters. A cover and pad or other control must be provided to prevent runoff and leachate from entering surface waters and groundwater.

c) Livestock Waste-Holding Facilities

1) Liquid manure-holding tanks shall be impermeable and capable of withstanding pressures and loadings to which such a tank may be subjected.

2) Holding ponds and lagoons shall be impermeable or so sealed as to prevent groundwater or surface water pollution.

3) For livestock management facilities and livestock waste-handling facilities that are not required to obtain an NPDES permit, the~~The~~ contents of livestock waste-handling facilities shall be kept at levels such that there is adequate storage capacity so that an overflow does not occur except in the case of precipitation in excess of a 25-year 24-hour storm.

4) Liquid Livestock Waste

A) Existing livestock management facilities that~~which~~ handle the waste in a liquid form shall have adequate storage capacity in a liquid manure-holding tank, lagoon, holding pond, or any combination thereof so as not to cause air or water pollution as defined in the Act or applicable regulations. If inadequate storage time causes or threatens to cause a violation of the Act or applicable regulations, the Agency may require that additional storage time be provided. In such cases, interim pollution prevention measures may be required by the Agency.

B) New livestock waste-handling facilities that~~which~~ handle the waste in a liquid form shall provide a minimum of 120-day storage with a

liquid manure-holding tank, lagoon, holding pond, or any combination thereof unless the operator has justifiable reasons substantiating that a lesser storage volume is adequate. If inadequate storage volumes cause or threaten to cause a violation of the Act or applicable regulations, the Agency may require corrective measures.

d) Runoff Field Application Systems

Any livestock management facility not meeting the definition of a CAFO in Section 501.238 may construct and operate a runoff field application system for the treatment of livestock waste from fewer than 300 animal units, meeting the requirements of 35 Ill. Adm. Code 570, in lieu of utilizing liquid manure-holding tanks, holding ponds, or lagoons in compliance with subsection (c), or other livestock waste-handling systems thatwhich would assure compliance with the Act and this ~~35 Ill. Adm. Code.~~Subtitle E.

e) Subsections (a) through (d) shall not apply to livestock management facilities with fifty (50) or fewer animal units, provided that the following conditions exist:

1) The location of the facility relative to waters of the State is such that there is no discharge of livestock waste into waters of the State, in violation of Section 12 of the Act~~(Ill. Rev. Stat. 1989, ch. 111 ½, par. 1012)~~;

2) There is no discharge of livestock waste into waters of the State by means of a man-made ditch, flushing system or other similar man-made device, in violation of Section 12 of the Act~~(Ill. Rev. Stat. 1989, ch. 111 ½, par. 1012)~~; and

3) The facility is managed so that livestock waste is not allowed to accumulate to an extent thatwhich threatens to cause a discharge to waters of the State, in violation of Section 12 of the Act~~(Ill. Rev. Stat. 1989, ch. 111 ½, par. 1012)~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.405 Field Application of Livestock Waste

a) For livestock management facilities and livestock waste-handling facilities that are not required to obtain an NPDES permit, the~~The~~ quantity of livestock waste applied on soils shall not exceed a practical limit as determined by soil type, especially its permeability, the condition (frozen or unfrozen) of the soil, the percent slope of the land, cover mulch, proximity to surface waters and likelihood

of reaching groundwater, and other relevant considerations. These livestock waste application guidelines will be adopted pursuant to 35 Ill. Adm. Code 502.305, unless otherwise provided for by Board regulations. Facilities required to obtain an NPDES permit are subject to the requirements in 35 Ill. Adm. Code 502.Subpart F. Unpermitted large CAFOs claiming an agricultural stormwater exemption must comply with 35 Ill. Adm. Code 502.102 and 502.510(b).

b) Operators of livestock waste handling facilities shall practice odor control methods during the course of manure removal and field application so as not to affect a neighboring farm or non-farm residence or populated area by causing air pollution as described in Section 501.102(d). Odor control methods include, but are not limited to,

1) Soil injection or other methods of incorporation of waste into the soil, including disking or plowing;

2) Consideration of climatic conditions, including wind direction and inversions;

3) For liquid livestock waste: whether supernatant ~~which is~~ used for irrigation purposes has been stored in a livestock waste lagoon system that~~which~~ is designed and operated in accordance with "Design of Anaerobic Lagoons for Animal Waste Management", as incorporated by reference at Section 501.200.

4) Other methods as described in "Management~~Control~~ of Manure Odors", as incorporated by reference at Section 501.200.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

SUBPART D: SUBMITTAL OF INFORMATION

Section 501.505 Requirements for Certain CAFOs to Submit Information

a) Existing CAFOs not covered by an NPDES permit must submit to the Agency the information listed in subsection (c) as follows:

1) Large CAFOs must submit the information within 90 days after the effective date of this Section.

2) CAFOs with the same or fewer animals as the numbers of animals provided in 35 Ill. Adm. Code 502.103 that propose to stable or confine additional animals must submit the information 30 days prior to increasing

the number of animals above the numbers provided in 35 Ill. Adm. Code 502.103.

b) New CAFOs that commence construction after the effective date of this Section and have a capacity for animals greater than the numbers provided in 35 Ill. Adm. Code 502.103 must submit the information in subsection (c) 30 days prior to the commencement of operations if no NPDES permit application has been filed at that time.

c) CAFOs covered by subsections (a) and (b) must submit the following information to the Agency:

1) name of all owners and operators of the facility and their mailing addresses and phone numbers;

2) location of the facility identified by the street address or latitude and longitude;

3) location of the facility according to township, county, section, and quarter section;

4) for the previous 12-month period, identification of each animal type stabled or confined at the facility and maximum number of each animal type;

5) identification of types of animal holding areas, including pastures, confinement barns, and open lots;

6) identification of types and capacity of livestock waste containment and storage units, including, but not limited to, anaerobic lagoons, manure stacks, underground storage pits, and storage tanks; and

7) date the information in this subsection (c) is submitted to the Agency.

d) When a CAFO that has provided information to the Agency under this Section ceases operation, the owner or operator must submit a notification of termination to the Agency within 30 days after closure of the facility.

e) Any CAFO required to submit information to USEPA pursuant to Section 308 of the Clean Water Act must submit the same information to the Agency simultaneously with the submittal to USEPA.

f) Any submittal required under this Section must be sent to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Permit Section
P.O. Box 19276
Springfield, Illinois 62794-9276.

(Source: Added at 38 Ill. Reg. _____, effective _____)

~~ILLINOIS REGISTER~~ JCAR350501-1318974r01

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TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE E: AGRICULTURE RELATED POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 501
GENERAL PROVISIONS

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501.295	Livestock Waste
501.300	Livestock Waste-Handling Facility
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SUBPART C: OPERATIONAL RULES FOR ALL LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE-HANDLING FACILITIES

Section

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501.406 Inspections and Disease Prevention

SUBPART D: SUBMITTAL OF INFORMATION

Section
~~501.505 Requirements for Certain CAFOs to Submit Information~~
~~501.APPENDIX A References to Previous Rules~~

501.505 Requirements for Certain CAFOs to Submit Information

501.APPENDIX A References to Previous Rules

AUTHORITY: Implementing and authorized by Sections 9, 12, 13, 21, 22 and 27 of the Environmental Protection Act [415 ILCS 5/9, 12, 13, 21, 22 and 27]~~(Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1009, 1012, 1013, 1021, 1022 and 1027)~~.

SOURCE: Filed and effective January 1, 1978; amended at 2 Ill. Reg. 44, p. 137, effective October 30, 1978; codified at 7 Ill. Reg. 10592; amended in R90-7 at 15 Ill. Reg. 10075, effective July 1, 1991; amended in R12-23 at 38 Ill. Reg. ———, effective _____.

SUBPART A: AUTHORITY AND POLICY

Section 501.103 Organization of this Chapter

The Board regulations adopted in 35 Illinois Administrative Code Subtitle E: Agriculture Related Pollution, Chapter I: Pollution Control Board are organized as provided in this Section.

~~(a)~~ a) Part 501 of this Chapter contains definitions and incorporations by reference applicable to Parts 501, 502 and ~~503~~503, which are the Parts of this Chapter administered by the Environmental Protection Agency. Subpart C of Part 501 also contains the requirements applicable to all ~~Livestock Waste Handling Facilities and Livestock Management Facilities~~livestock waste-handling facilities and livestock management facilities, whether or not those facilities are defined as ~~Animal Feeding Operations (AFOs) or Concentrated Animal Feeding Operations~~animal feeding operations (AFOs) or concentrated animal feeding operations (CAFOs) and without regard to whether the facility is subject to National Pollutant Discharge Elimination System (NPDES) permitting requirements.

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~~(b)~~ b) Part 502~~ of this Chapter~~ identifies which AFOs are subject to NPDES permit requirements and specifies those requirements. Part 502 also provides the ~~state~~State technical standards applicable to permitted CAFOs. ~~This~~That Part also contains requirements applicable to land application activities from AFOs ~~which~~that are defined as ~~Large~~large CAFOs and are not permitted under an NPDES permit.

~~(c)~~ c) Part 503~~ of this Chapter~~ contains the requirements applicable to fish and aquatic animal production facilities, irrigation activities, and silvicultural activities and sources.

~~(d)~~ ~~The~~ d) Part 506 ~~rules implement~~implements the Livestock Management Facilities Act [510 ILCS 77]. ~~These~~Those rules and the Livestock Management Facilities Act are administered by the Illinois Department of Agriculture.

(Source: Added at 38 Ill. Reg. _____ _____, effective _____ __)

Section 501.104 Severability

If any provision of ~~these rules or regulations~~this Part is adjudged invalid, or if the application ~~thereof~~of this Part to any person or in any circumstance is adjudged invalid, ~~such~~that invalidity shall not affect the validity of this ~~chapter~~Chapter as a whole, or of any ~~part, subpart~~Part, Subpart, sentence or clause ~~thereof~~of this Part not adjudged invalid.

(Source: Added at 38 Ill. Reg. _____ _____, effective _____ __)

SUBPART B: DEFINITIONS AND ~~INCORPORATIONS~~INCORPORATION

Section 501.200 Incorporations by Reference

a) The Board incorporates the following material by reference:

~~ASABE~~ASAE~~ASABE~~. Available from American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph~~,~~ MI 49085~~-9659 (616-429-6300)~~ (269~~-~~) 429-~~0300);~~0300, fax (269~~-~~) 429-3852, hq@asabe.org.

~~"Management~~Control "Management of Manure Odors,~~"~~" ASAE EP379.4~~EP379.1~~ (January 2007)~~(December 1986)~~.

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~~"~~ "Design of Anaerobic Lagoons for Animal Waste Management,~~"~~ ~~ASABEASAE~~" ASABE EP403.4~~EP403.1~~ (R2011)~~(March 1999).~~

~~"~~"Illinois Agronomy Handbook, 24th Edition,~~"~~ University of Illinois, College of Agriculture, Consumer and Environmental Sciences. Urbana, IL, July 2009. Available from University of Illinois, Office of Extension and Outreach, 111 Mumford Hall (MC-710), 1301 W. Gregory Dr., Urbana, IL 61801 (217) 333-~~59005~~900.

MWPS. Available from MidWest Plan Service, 122 Davidson Hall, Iowa State University, Ames, IA 50011-3080 (515) 294-4337.

~~"~~"Livestock Waste Facilities Handbook, Third Edition,~~"~~ MWPS-18. MidWest Plan Service. April 1993.

~~"~~"Manure Characteristics,~~"~~ Section 1. Second Edition MWPS-18-S1. MidWest Plan Service. 2004.

~~"~~"Recommended Chemical Soil Test Procedures for the North Central Region,~~"~~ North Central Regional Publication No. 221, Missouri Agricultural Experiment Station Bulletin SB 1001 (January 1998). Available from North Central Region-University of Missouri Soil Testing Lab, 23 Mumford Hall, University of Missouri, Columbia, MO 65211 (573) 884-4288.

~~"~~"Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils; Bulletin No. 810,~~"~~ University of Illinois, College of Agricultural, Consumer and Environmental Sciences, Office of Research (2000), revised January 15, 2011 to amend Table 2 for B810. Available from University of Illinois, College of Agricultural, Consumer, and Environmental Sciences, Office of Research, 228 Mumford Hall, 1301 W. Gregory Dr., Urbana, IL 61801 (217) 333-0240.

~~"~~"Optimum Crop Productivity Ratings for Illinois Soils; Bulletin 811,~~"~~ University of Illinois, College of Agricultural, Consumer and Environmental Sciences, Office of Research (2000), revised January 15, ~~2011,~~2011 to amend Table S2 for B811. Available from University of Illinois, College of Agricultural, Consumer, and Environmental Sciences, Office of Research, 228 Mumford Hall, 1301 W. Gregory Dr., Urbana, IL 61801 (217) 333-0240.

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"NOAA Atlas 14: Precipitation- Frequency Atlas of the United States," United States Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Volume 2, Version 3.0 (2004), revised 2006. Available from NOAA, NWS, Office of Hydrologic Development, 1325 East West ~~highway~~Highway, Silver Spring, MD 20910. (Available online at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume2.pdf).

Code of Federal Regulations. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20401 (202) 783-3238:

7 CFR 610.12 (2013), Revised Universal Soil Loss Equation.

"Agricultural Waste Management Field Handbook," United States Department of Agriculture, Natural Resources Conservation Service (2009). Available from USDA, NRCS, 1400 Independence Ave., S.W., Washington, DC 20250. (Available online at http://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21430).

b) This Section incorporates no later editions or amendments.

(Source: ~~Added~~ Amended at 38 Ill. Reg. _____, effective _____)

Section 501.201 Definitions

a) Except as ~~hereinafter~~otherwise stated in this Part, and unless a different meaning of the term is clear from its context, the definitions of terms used in this Chapter shall be the same as those used in the Act and 35 Ill. Adm. Code: Subtitle C, Chapter I.

b) The definitions contained in this Subpart are applicable to 35 Ill. Adm. Code ~~Parts~~ 501, 502 and 503.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.223 Animal Confinement Area

Animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways and stables.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.236 Chemicals and Other Contaminants

Antibiotics, hormones, feed additives, pesticides, hazardous and toxic chemicals, petroleum products and by-products, other chemical products and by-products, and the residues and containers ~~thereof~~of any of these materials.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.238 Concentrated Animal Feeding Operation (CAFO)

An ~~Animal Feeding Operation~~animal feeding operation (AFO) that is defined as a ~~Large~~large CAFO pursuant to ~~Section~~35 Ill. Adm. Code 502.103 or as a ~~Medium~~medium CAFO pursuant to ~~Section~~35 Ill. Adm. Code 502.104, or that is designated as a CAFO pursuant to ~~Section~~35 Ill. Adm. Code 502.106.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.241 CWA

The Clean Water Act, as amended, (33 ~~U.S.C.~~USC 1251 et seq.~~Federal Water Pollution Control Act (also known as the Clean Water Act), as amended, 33 U.S.C 1251 et seq., Public Law 92-500, enacted by the Congress October 18, 1972, as amended by Public Law 95-217, enacted December 27, 1977, as amended.~~).

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.242 Dry Lot

A facility for growing ducks in confinement with a dry litter floor cover and no access to swimming areas.

(Source: Added at 38 Ill. Reg. _____, effective _____)

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Section 501.244 Erosion Factor T

An estimate of the maximum average annual rate, in tons per acre per year, of soil erosion by water that can occur without affecting crop productivity over a sustained period.

BOARD NOTE: Erosion Factor T for Illinois soils is available from the United States Department of Agriculture, Natural Resources Conservation Service's published soil surveys for Illinois at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.252 Frozen Ground

Soil that is frozen anywhere between the first ~~1/2~~½ inch to 8 inches of soil as measured from the ground surface.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.253 Grassed Waterway

A natural or constructed waterway or outlet shaped or graded and established in suitable vegetation as needed for the conveyance of runoff from a field, diversion or other structure.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.254 Groundwater

Underground water which occurs within the saturated zone and geologic materials where the fluid pressure in the pore space is equal to or greater than atmospheric pressure [415 ILCS 5/3.210].

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.261 Incorporation

A method of land application of livestock waste in which the livestock waste is thoroughly mixed or completely covered with the soil within 24 hours. Any ponded liquid livestock waste remaining on the site after application is not considered to be thoroughly mixed or completely covered with the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.263 Injection

~~Means the~~The placement of livestock waste 4 to 12 inches below the soil surface in the crop root zone using equipment specifically designed for that purpose ~~and where~~, when the applied material is retained by the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.267 Land Application Area

Land under the control of an ~~Animal Feeding Operation~~animal feeding operation owner or operator, whether it is owned, rented~~,~~ or leased, to which livestock waste from the production area is or may be applied.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.295 Livestock Waste~~Livestock excreta and associated feed losses, bedding,~~

Manure, litter, process wastewater, overflow from watering systems, wash waters, sprinkling waters from livestock cooling, precipitation polluted by falling on or flowing onto an ~~a~~Animal ~~f~~Feeding ~~o~~Operationanimal feeding operation and other materials polluted by livestock, including but not limited to soils and sludges removed from livestock waste storage structures. Livestock waste does not include agricultural stormwater discharge.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.305 Man-made

Constructed by man ~~and used for the purpose of transporting waste~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.310 Man-made Ditch

A discrete fissure or channel excavated in the earth ~~for the purpose of transporting livestock waste directly to navigable waters. This is not to be confused with a vegetative filter or~~

~~acceptable disposal area which is a treatment device and may take the form of a man-made terrace or grass waterway system.~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.312 Manure

~~Manure includes animal~~Animal excreta, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.313 Manure Storage Area

~~Manure storage area includes~~Includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under the house or pit storages, liquid impoundments, static piles, and composting piles.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.325 Navigable Waters (Repealed)

~~All waters of the United States as defined in Criteria and Standards for the National Pollutant Discharge Elimination System (40 CFR 125.1(p)):~~

~~a)~~ ~~All navigable waters of the United States;~~

~~b)~~ ~~Tributaries of navigable water of the United States;~~

~~c)~~ ~~Interstate waters;~~

~~d)~~ ~~Intrastate lakes, rivers and streams which are utilized by interstate travelers for recreational or other purposes;~~

~~e)~~ ~~Intrastate lakes, rivers and streams from which fish or shellfish are taken and sold in interstate commerce; and~~

~~f)~~ ~~Intrastate lakes, rivers and streams which are utilized for industrial purposes by industries in interstate commerce.~~

(Source: Repealed at 38 Ill. Reg. _____, effective _____)

Section 501.333 New Source

Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after either of the following dates:

a) after promulgation of standards of performance under section 306 of the Clean Water Act ~~which~~that are applicable to ~~such~~the source~~,~~; or

b) after proposal of standards of performance in accordance with section 306 of the Clean Water Act ~~which~~that are applicable to ~~such~~the source, but only if the standards are promulgated in accordance with section 306 within 120 days ~~of~~after their proposal.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.343 Overflow

The discharge of livestock waste resulting from the filling of livestock waste storage structures beyond the point at which livestock waste or stormwater can no longer be contained by the structure.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.345 Owner /~~or~~ Operator

Any person who owns, leases, operates, controls or supervises a livestock management facility or livestock waste-handling facility.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.355 Pollutant

Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water, as defined in CWA.

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(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.357 Process Wastewater

Water directly or indirectly used in the operation of the AFO for any of the following activities: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. It also includes any water ~~which~~that comes into contact with any raw materials, products, or byproducts, including manure, litter, feed, milk, eggs or bedding.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.358 Production Area

The part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.359 Raw Materials Storage Area

~~Raw materials storage area includes~~Includes, but is not limited to, feed silos, silage bunkers, and bedding materials stacks.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.360 Revised Universal Soil Loss ~~Equation~~~~Settling Basin~~Equation

~~Any excavated, diked or walled structure or combination of structures designed as part of a livestock waste handling facility to detain feedlot runoff for a sufficient time to permit solids to settle for later removal.~~

The equation for calculating soil loss due to water erosion as set forth in 7 CFR 610.12 (2013), incorporated by reference in Section 501.200:

$$A = R * K * LS * C * P$$

Where

A ~~is~~ = the estimation of average annual soil loss in tons per acre caused by sheet and rill erosion;

R ~~is~~ = the rainfall erosivity factor, which accounts for the energy and intensity of rainstorms;

K ~~is~~ = the soil erodibility factor, which measures the susceptibility of a soil to erode under a standard condition and adjusts it bi-monthly for the effects of freezing and thawing, and soil moisture;

LS ~~is~~ = the slope length and steepness factor, which accounts for the effect of length and steepness of slope on erosion based on the relationship of rill to interrill erosion; and

P ~~is~~ = the support practice factor, which accounts for the effect of conservation support practices, such as cross-~~slop~~slope farming, strip cropping, buffer strips, and terraces on soil erosion.

BOARD NOTE: Soil loss may be calculated using Revised Universal Soil Loss Equation 2 (RUSLE2) software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.361 Saturated

~~Means soils where~~Soils in which pore spaces are occupied by liquid ~~such~~to the extent that additional inputs of water or liquid wastes cannot infiltrate into the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.363 Setbacks

A specified distance from surface waters or potential conduits to surface waters where livestock waste may not be land applied. Examples of conduits to surface waters include, but are not limited to, open tile intake structures, sinkholes, and agriculture well heads.

~~ILLINOIS REGISTER~~ JCAR350501-1318974r01

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(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.373 Surface Land Application

Application of livestock waste to the ground surface that is not incorporated or injected.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.377 Vegetative Buffer

Narrow, permanent strip of dense perennial vegetation established parallel to the contours of the land and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.378 Vegetative Fence Row

Narrow, permanent strip of perennial vegetation established at the edge of a field that is a minimum of 15 feet wide. The vegetative fence row slows water runoff and enhances water infiltration ~~thereby,~~ reducing the risk of pollutants leaving the field.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.379 Waste Containment Area

~~Waste containment area includes~~Includes, but is not limited to, settling basins, and areas within berms and diversions ~~which~~that separate uncontaminated stormwater from livestock waste.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.385 Wet Lot

A confinement facility for raising ducks ~~which~~that is open to the environment, has a small number of sheltered areas, and ~~with~~has open water runs and swimming areas to which ducks have free access.

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(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.390 25-Year, 24-Hour Precipitation Event

The maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years, as defined by NOAA Atlas 14; Precipitation Frequency Atlas of the United States, incorporated by reference in Section 501.200.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 501.395 100-Year, 24-Hour Precipitation Event

The maximum 24-hour precipitation event with a probable recurrence interval of once in 100 years, as defined by NOAA Atlas 14; Precipitation Frequency Atlas of the United States, incorporated by reference in Section 501.200.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART C: OPERATIONAL RULES FOR ALL LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE-HANDLING FACILITIES

Section 501.401 Purpose and Scope of Operational Rules for Livestock Management Facilities and Livestock Waste-Handling Facilities ~~General Criteria~~

a) Besides the regulations contained within this Chapter, every person shall also comply with provisions of the Act and other Board regulations.

b) The owner or operator of any livestock management facility or livestock waste-handling facility shall comply with the CWA, NPDES filing requirements and the feedlot category of point source effluent guidelines. All livestock management facilities and livestock waste-handling facilities have the obligation to make a site specific determination of whether the facility is subject to NPDES permit requirements and to follow those requirements when and where they are applicable. CAFOs are subject to additional requirements applicable under ~~Part~~35 Ill. Adm. Code 502.

c) ~~The These regulations in this subpart~~This Subpart shall apply to stockyards and similar operations where animals are held briefly, as well as to conventional livestock operations.

d) The transportation of livestock wastes shall be planned and conducted so as not to cause, threaten, or allow any violation of the Act and applicable regulations.

e) Any runoff or overflow from a livestock management facility or a livestock waste-handling facility shall not cause a water quality violation pursuant to the Act or 35 Ill. Adm. Code Subtitle C: Water Pollution.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.402 Location of New Livestock Management Facilities and New Livestock Waste-Handling Facilities

~~**Section 501.402 Location of New Livestock Management Facilities and New Livestock Waste-Handling Facilities**~~

a) No new livestock management facility or new livestock waste-handling facility shall contain within its boundaries any stream or other surface waters except small temporary accumulations of water occurring as a direct result of precipitation.

b) New livestock management facilities and new livestock waste-handling facilities located within a 10-year flood height as recorded by the United States Geological Survey or as officially estimated by the Illinois State Water Survey shall be protected against such flood.

c) Limitations Effective July 15, 1991

1) Upon July 15, 1991, new or expanded livestock management facilities and new or expanded livestock waste-handling facilities shall not be located within ~~1/2~~½ mile of a populated area or within ~~1/4~~¼ mile of a non-farm residence.

2) For purposes of this subsection (c), the following shall not be considered location of a new or expanded livestock management or waste-handling facility:

A) Commencement of operations at an idle facility which has livestock shelters left intact, and ~~which~~that has been operated as a livestock management facility or livestock waste-handling facility

for four consecutive months at any time within the ~~ten (10)~~ previous years;

B) Commencement of operations at a facility reconstructed after partial or total destruction due to natural causes, i.e., tornado, fire, or earthquake.

3) Adequate odor control methods and technology shall be practiced by operators of new and existing livestock management facilities and livestock waste-handling facilities so as not to cause air pollution.

d) The setback requirements of subsection (c) shall not apply to any livestock management facility or livestock waste-handling facility ~~which~~that meets any of the following conditions:

1) The facility is located in an ~~Agricultural Area~~agricultural area, designated as such pursuant to the Agricultural Areas Conservation and Protection Act~~,~~ [505 ILCS 5~~/1 Ill. Rev. Stat. 1989, ch. 5, para. 1001 et seq.;~~];

2) The facility undergoes expansion, and the owner of the facility certifies and notifies the Agency in writing ~~as such~~ that the facility was operating as a livestock management facility or livestock waste-handling facility for at least one year prior to the existence of any non-farm residence within ~~1/4~~¼ mile of the facility or of a populated area within ~~1/2~~½ mile of the facility; or

3) The use of the facility as a livestock management or livestock waste handling facility is allowed by local zoning or municipal ordinance. If no local zoning or municipal ordinance exists that covers ~~such~~that use, the facility shall be exempt if the livestock are not raised or kept at the facility primarily for hire or the raising or keeping of livestock at the facility does not have financial profit as a primary aim.

e) A new livestock management facility or new livestock waste-handling facility ~~which~~that locates within ~~1/4~~¼ mile of a neighboring farm residence shall locate at the maximum feasible location from ~~such~~that residence.

f) A new livestock management facility or new livestock waste-handling facility ~~which~~that locates within ~~1/4~~¼ mile of a non-farm residence or within ~~1/2~~½ mile

of a populated area, ~~pursuant to~~as allowed by subsection (d), shall locate at the maximum feasible location from ~~such~~the residence or populated area.

g) New livestock management facilities or new livestock waste-handling facilities located on soil types or geological formations where the deposition of livestock waste is likely to cause groundwater pollution shall be constructed in such a way that pollution will be prevented, or supplementary measures shall be adopted ~~which~~that will prevent pollution.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.404 Handling and Storage of Livestock Waste

a) Any livestock waste stored in excess of six months shall be contained in a manure storage structure.

b) Temporary Manure Stacks

1) A temporary manure stack is a potential secondary source, as defined by the Act. As a potential secondary source, a temporary manure stack is subject to the minimum setback zones established in Title IV of the Act. ~~Temporary manure stacks shall be constructed or established and maintained in a manner to prevent runoff and leachate from entering surface or groundwaters.~~

2) A temporary manure stack shall not be located within 75 feet from any water well, except monitoring wells. ~~No temporary manure stack shall be constructed within 100 feet of a water well.~~

3) A temporary manure stack shall be constructed or established and maintained in a manner to prevent runoff and leachate from entering surface waters or groundwaters. A cover and pad or other control must be provided to prevent runoff and leachate from entering surface waters and groundwater.

c) Livestock Waste-Holding Facilities

1) Liquid manure-holding tanks shall be impermeable and capable of withstanding pressures and loadings to which such a tank may be

subjected.

2) Holding ponds and lagoons shall be impermeable or so sealed as to prevent groundwater or surface water pollution.

3) For livestock management facilities and livestock waste -handling facilities that are not required to obtain an NPDES permit, ~~the~~The~~the~~ contents of livestock waste-handling facilities shall be kept at levels such that there is adequate storage capacity so that an overflow does not occur except in the case of precipitation in excess of a 25-year 24-hour storm.

4) Liquid Livestock Waste

A) Existing livestock management facilities ~~which~~that handle the waste in a liquid form shall have adequate storage capacity in a liquid manure-holding tank, lagoon, holding pond, or any combination thereof so as not to cause air or water pollution as defined in the Act or applicable regulations. If inadequate storage time causes or threatens to cause a violation of the Act or applicable regulations, the Agency may require that additional storage time be provided. In such cases, interim pollution prevention measures may be required by the Agency.

B) New livestock waste-handling facilities ~~which~~that handle the waste in a liquid form shall provide a minimum of 120-day storage with a liquid manure-holding tank, lagoon, holding pond, or any combination thereof unless the operator has justifiable reasons substantiating that a lesser storage volume is adequate. If inadequate storage volumes cause or threaten to cause a violation of the Act or applicable regulations, the Agency may require corrective measures.

d) Runoff Field Application Systems

Any livestock management facility not meeting the definition of a CAFO in Section 501.238 may construct and operate a runoff field application system for the treatment of livestock waste from fewer than 300 animal units, meeting the requirements of 35 Ill. Adm. Code 570, in lieu of utilizing liquid manure-holding tanks, holding ponds, or lagoons in compliance with subsection (c), or other

livestock waste-handling systems ~~which~~that would assure compliance with the Act and ~~35 Ill. Adm. Code.~~this Subtitle E.

e) Subsections (a) through (d) shall not apply to livestock management facilities with fifty (50) or fewer animal units, provided that the following conditions exist:

1) The location of the facility relative to waters of the State is such that there is no discharge of livestock waste into waters of the State, in violation of Section 12 of the Act; ~~[415 ILCS 5/12](Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1012);~~

2) There is no discharge of livestock waste into waters of the State by means of a man-made ditch, flushing system or other similar man-made device, in violation of Section 12 of the Act ~~[415 ILCS 5/12](Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1012)~~; and

3) The facility is managed so that livestock waste is not allowed to accumulate to an extent ~~which~~that threatens to cause a discharge to waters of the State, in violation of Section 12 of the Act ~~[415 ILCS 5/12](Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1012).~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 501.405 Field Application of Livestock Waste

a) For livestock management facilities and livestock waste ~~-~~handling facilities that are not required to obtain an NPDES permit, the ~~The~~ quantity of livestock waste applied on soils shall not exceed a practical limit as determined by soil type, especially its permeability, the condition (frozen or unfrozen) of the soil, the percent slope of the land, cover mulch, proximity to surface waters and likelihood of reaching groundwater, and other relevant considerations. These livestock waste application guidelines will be adopted pursuant to ~~Section~~35 Ill. Adm. Code 502.305, unless otherwise provided for by Board regulations. Facilities required to obtain an NPDES permit are subject to the requirements in 35 Ill. Adm. Code 502.Subpart F ~~of Part 502.~~. Unpermitted ~~Large~~large CAFOs claiming an agricultural stormwater exemption must comply with ~~Sections~~35 Ill. Adm. Code 502.102 and 502.510(b).

b) Operators of livestock waste handling facilities shall practice odor control

methods during the course of manure removal and field application so as not to affect a neighboring farm or non-farm residence or populated area by causing air pollution as described in Section 501.102(d). Odor control methods include, but are not limited to,

1) Soil injection or other methods of incorporation of waste into the soil, including disking or plowing;

2) Consideration of climatic conditions, including wind direction and inversions;

3) For liquid livestock waste: whether supernatant ~~which is~~ used for irrigation purposes has been stored in a livestock waste lagoon system ~~which~~that is designed and operated in accordance with "Design of Anaerobic Lagoons for Animal Waste Management", as incorporated by reference at Section 501.200.

4) Other methods as described in ~~"Management Control"~~"Management of Manure ~~Odor"~~Odors", as incorporated by reference at Section 501.200.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

SUBPART D: SUBMITTAL OF INFORMATION

Section 501.505 Requirements for Certain CAFOs to Submit Information

~~(~~a) Existing CAFOs not covered by an NPDES permit must submit to the Agency the information listed in subsection (c) as follows~~:~~:

~~(~~1) Large CAFOs must submit the information within 90 days after the effective date of this Section.

~~(~~2) CAFOs with the same or fewer animals as the numbers of animals provided in 35 Ill. Adm. Code 502.103 that propose to stable or confine additional animals must submit the information 30 days prior to increasing the number of animals above the numbers provided in 35 Ill. Adm. Code 502.103.

~~(~~b) New CAFOs that commence construction after the effective date of this ~~section~~Section and have a capacity for animals greater than the numbers provided in 35 Ill. Adm. Code 502.103 must submit the information in subsection (c) 30 days prior to the commencement of operations if no NPDES permit application has been filed at that time.

~~(~~c) CAFOs covered by ~~subsections~~subsections (a) and (b) must submit the following information to the Agency:

1) name of all owners and operators of the facility and their mailing addresses and phone numbers;

2) location of the facility identified by the street address or latitude and longitude;

3) location of the facility according to township, county, section, and quarter section;

4) for the previous 12-month period, identification of each animal type stabled or confined at the facility and maximum number of each animal type;

5) identification of types of animal holding areas, including pastures, confinement barns, and open lots;

6) identification of types and capacity of livestock waste containment and storage units, including, but not limited to, anaerobic lagoons, manure stacks, underground storage pits, and storage tanks; and

7) date the information in this subsection (c) is submitted to the Agency.

~~(~~d) When a CAFO that has provided information to the Agency under this Section ceases operation, the owner or operator must submit a notification of termination to the Agency within 30 days after closure of the facility.

~~(~~e) Any CAFO required to submit information to USEPA pursuant to Section 308 of the Clean Water Act must submit the same information to the Agency simultaneously with the submittal to USEPA.

~~(~~f) Any submittal required under this Section must be sent to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn.: Permit Section
P.O. Box 19276
Springfield, Illinois 62794-9276.

(Source: Added at 38 Ill. Reg. _____, effective _____)

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NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Permits

2) Code Citation: 35 Ill. Adm. Code 502

3)

Section Numbers:	Proposed Action:
502.101	Amend
502.102	Amend
502.103	Amend
502.104	Amend
502.105	Amend
502.106	Amend
502.201	Amend
502.202	Amend
502.203	Repeal
502.204	Amend
502.205	Repeal
502.207	Amend
502.304	Amend
502.310	New
502.315	New
502.320	New
502.325	New
502.500	New
502.505	New
502.510	New
502.515	New
502.520	New
502.600	New
502.605	New
502.610	New
502.615	New
502.620	New
502.625	New
502.630	New
502.635	New
502.640	New
502.645	New
502.710	New
502.720	New
502.730	New

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502.800	New
502.810	New
502.820	New
502.830	New
502.840	New

4) Statutory Authority: Implementing Sections 9, 10, 12, 13, 21, and 22 of the Environmental Protection Act (Act) and authorized by Section 27of the Act [415 ILCS 5/9, 10, 12, 13, 21, 22, and 27].

5) A Complete Description of the Subjects and Issues Involved: A description of this proposal may be found in the Board's first-notice opinion and order of November 7, 2013, in docket R12-23.

The Illinois Environmental Protection Agency (Agency) initiated this proceeding by filing a rulemaking proposal to amend the Board's agriculture related pollution regulations. The Agency seeks to amend Part 502 so that it will be consistent with, and as stringent as, the current federal Concentrated Animal Feeding Operations (CAFO) regulations. The Agency also seeks to establish State technical standards required by the federal rule. The USEPA directed that Illinois needs to establish standards that address the rate at which manure, litter and process wastewater may be applied on crop or forage land where the risk of phosphorus transport is high, as well as standards for land application on frozen soil and snow. The Agency claimed that failure to amend these regulations could result in withdrawal of federal delegation to Illinois of the National Pollutant Discharge Elimination System (NPDES) permit program under the Clean Water Act.

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The Agency reported that it had not performed any new study or contracted with any other entity to perform one as a basis to develop its rulemaking proposal, so it had no "underlying data" to report.

The Agency stated that the following "provides a complete list of all documents and studies used in developing the proposal."

American Society of Agricultural and Biological Engineers
Management of Manure Odors, ASAE EP379.4 (Jan. 2007)
Design of Anaerobic Lagoons for Animal Waste Management, ASABE EP403.4 (R2011)

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Illinois Agronomy Handbook, 24th Edition; University of Illinois College of Agriculture, Consumer and Environmental Sciences

MidWest Plan Service
Livestock Waste Facilities Handbook, Third Edition, Third Printing (MWPS-18) April 1998
Manure Characteristics, Section 1, Second Edition (MWPS-18) (2004)

Recommended Chemical Soil Test Procedures for the North Central Region, North Central Regional Publication No. 221 Missouri Agricultural Experiment Station Bulletin SB 1001 (Jan. 1998)

Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils, Bulletin No. 810 (2000), revised 1/15/01 to amend Table B810, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Optimum Crop Productivity Ratings for Illinois Soils, Bulletin No. 811 (2000), revised 1/15/01 to amend Table S2 B811, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Livestock Management Facilities Act (510 ILCS 77)

Livestock Management Facilities Act Regulations (8 Ill. Adm. Code 900)

68 Fed. Reg. 7176 (Feb. 12, 2003)

Waterkeeper v. USEPA, 399 F.3d 486 (2nd Cir. 2005)

73 Fed. Reg. 70418 (Nov. 20, 2008)

November 2008 Compiled CFO NPDES Regulations and Effluent Limitations Guidelines and Standards

National Pork Producers Council, et al. v. USEPA, 635 F.3d 738 (5th Cir. 2011)

76 Fed. Reg. 65431 (Oct. 21, 2011)

Allen, B.L. and A.P. Mallarino, Effects of Liquid Swine Manure Rate, Incorporation, and Timing of Rainfall on Phosphorus Loss with Surface Runoff, Journal of Environmental Quality 37: 125-37 (2008)

Standard Methods for the Examination of Water and Wastewater, 19th edition (1995), American Public Health Association

Good Environmental Livestock Production Practices: Concentrated Livestock Operations – Manure Utilization ANSI-GELPP 0004-2002

Curve Number Hydrology – State of the Practice, ASCE/EWRI Curve Number Hydrology Task Committee, American Society of Civil Engineers (2009)

Barker, J.C., Lagoon Design and Management for Livestock Waste Treatment and Storage North Carolina Cooperative Extension Service EBAE 103-83 (1996)

Brady, N.C., Nature and Properties of Soils, 8th Edition (1974)

Daverede, I.C., et al., Phosphorus Runoff: Effect of Tillage and Soil Phosphorus Levels, Journal of Environmental Quality 32: 1436-44 (2003)

Daverede, I.C., et al. Phosphorus Runoff from Incorporated and Surface-Applied Liquid Swine Manure and Phosphorus Fertilizer, Journal of Environmental Quality 33: 1535-44 (2004)

Dillaha, T.A., et al., Vegetative Filter Strips for Agricultural Non-Point Source Pollution Control, Trans. ASAE 32: 513-19 (1989)

Funk, T., et al., Developing and Managing Livestock Waste Lagoons in Illinois, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research Circular 1326

Garen, D.C. and D.S. Moore, Curve Number Hydrology in Water Quality Modeling, Uses, Abuses, and Future Directions, Journal of the American Water Resources Association, Paper No. 03127, 377-88 (2005)

Hawkins, R.H., et al., Continuing Evolution of Rainfall-Runoff and the Curve Number Precedent, Second Joint Federal Interagency Conference (2010)

Jones, D.J. and A.L. Sutton, Design and Operation of Livestock Waste Lagoons, Purdue University Cooperative Extension Service ID-120 (Sept, 1999)

Lewis, R.J., Hawley's Condensed Chemical Dictionary, 12th Edition (1993)

Mayer, P.M., et al., Meta-Analysis of Nitrogen Removal in Riparian Buffers, Journal of Environmental Quality 36: 1172-80 (2007)

Peters, J., et al. Recommended Methods of Manure Analysis (2003), available at http://uwlab.soils.wisc.edu/pubs/A3769.pdf (posted Mar. 4, 2003, verified Aug. 20, 2011)

Ponce, V.M. and R.H. Hawkins, Runoff Curve Number: Has It Reached Maturity, Journal of Hydrologic Engineering, ASCE 1(1) (Jan. 1996)

Pote, D.H. et al., Water Quality Effects of Incorporating Poultry Litter into Perennial Grassland Soils," Journal of Environmental Quality 32(6): 2392-98 (2003)

Sharpley, A.N., et al., Phosphorus Movement in the Landscape, J. Prod. Agric. 6: 492-500 (1993)

Sharpley, A.N., et al., Determining Environmentally Sound Soil Phosphorus Levels, J. Soil and Water Cons. 51(2): 160-66 (1996)

United States Department of Agriculture – Natural Resource Conservation Service, Nutrient Management Code 590, Illinois (Jan. 2002)

United States Department of Agriculture – Natural Resource Conservation Service, Waste Utilization Code 633, Illinois (Jan. 2002)

United States Department of Agriculture – Natural Resource Conservation Service, Nutrient Management Code 590, Illinois (Oct. 2003)

United States Department of Agriculture – Natural Resource Conservation Service, National Engineering Handbook, Part 630 Hydrology, Chapter 10 Estimation of Direct Runoff from Storm Rainfall (2004)

United States Environmental Protection Agency, Cost Methodology for the Final Revisions to the National Pollutant Discharge Elimination System Regulations and the Effluent Guidelines for Concentrated Animal Feeding Operations (Dec. 2002)

United States Environmental Protection Agency, Managing Manure Nutrients at Concentrated Animal Feeding Operations (2004)

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NOTICE OF PROPOSED AMENDMENTS

Illinois Engineering Field Handbook, Illinois Hydrologic Soil Groups, Notice 29 (Oct. 2007), available at ftp://ftp-fc.sc.egov.usda.gov/IL/engineer/supplements/2-42.9to2-42.16.pdf (last modified Nov. 16, 2009, viewed Aug. 30, 2011)

United States Department of Agriculture – Natural Resource Conservation Service, Illinois NRCS Standard Grassed Waterway – Conservation Practice Standard – Code 412 (Mar. 2008)

United States Department of Agriculture – Natural Resource Conservation Service, Soil Survey of Piatt County (2010)

United States Department of Agriculture, Agricultural Research Service, Oxford Sedimentation Lab at http://www.ars.usda.gov/Research/docs.htm?docid=6010 (viewed Aug. 29, 2011)

United States Environmental Protection Agency, Method 350.1 Determination of Ammonia Nitrogen by Semi-Automated Colorimetry, Revision 2.0 (Aug. 1993)

United States Environmental Protection Agency, NPDES Permit Writer's Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations, (Dec. 2003)

Van Mullem, J.A., et al., Runoff Curve Number Method: Beyond the Handbook at ftp://ftp-fc.sc.egov.usda.gov/NWMC/CN_info/Van_Mullem_paper.doc (viewed Aug. 31, 2011)

Wisconsin Administrative Code NR 243 Animal Feeding Operations at http://legis.wiconsin.gov/rsb/code/nr/nr243.pdf

Zhang, X.Y., et al., A Review of Vegetated Buffers and a Meta-Analysis of Their Mitigation Efficiency in Reducing Nonpoint Source Pollution, Journal of Environmental Quality 39(1): 76-84

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? No

10) Are there any other proposed rulemakings pending on this Part? No

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

11) Statement of Statewide Policy Objective: These proposed amendments do not create or enlarge a state mandate as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3].

12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of publication. Comments should refer to docket R12-23 and be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may request copies of the Board's opinion and order in R12-23 by calling the Clerk's office at 312-814-3620, or may download copies from the Board's Web site at www.ipcb.state.il.us. For more information, contact the Clerk's Office at 312-814-3620.

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not for profit corporations affected: By aligning Illinois' rules with current federal CAFO regulations and implementing required technical standards, the proposed rules could apply to any livestock management facilities and livestock waste-handling facilities in Illinois.

B) Reporting, bookkeeping or other procedures required for compliance: The proposed amendments to Part 502 implement federal requirements and would require specified facilities to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Permit applications would be required to include specified information. The proposed amendments to Part 502 also require specified facilities to maintain records of and submit an annual report of their operations.

C) Types of professional skills necessary for compliance: Although the proposed amendments to Part 502 would require that a nutrient management plan indicate whether it was prepared by a certified nutrient management planner, the proposal does not require that a certified planner prepare it. The Board does not expect that professional skills beyond those currently required for recordkeeping and other requirements will be necessary for compliance.

POLLUTION CONTROL BOARD

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14) Regulatory Agenda in which these amendments were summarized: 7/13 (37 Ill. Reg. 9060

The full text of the proposed rulemaking begins on the next page:

JCAR350502-1319005r01

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE E: AGRICULTURE RELATED POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 502
PERMITS

SUBPART A: PERMITS REQUIRED

Section

SUBPART B: PERMIT APPLICATIONS

Section

SUBPART C: PERMIT ISSUANCE AND CONDITIONS

Section

SUBPART D: APPEAL AND ENFORCEMENT

Section

502.800 Applicability

502.810 Production Area Requirements

502.820 Land Application Area Requirements

502.830 Alternative Best Management Practice Livestock Waste Discharge Limitations

502.840 Technical Evaluation

502.APPENDIX A References to Previous Rules

AUTHORITY: Implementing Sections 9, 10, 12, 13, 21, and 22 of the Environmental Protection Act [415 ILCS 5/9, 10, 12, 13, 21, 22] and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/27].

SOURCE: Filed and effective January 1, 1978; amended at 2 Ill. Reg. 44, p. 137, effective October 30, 1978; codified at 7 Ill. Reg. 10594; amended at 38 Ill. Reg. _____, effective _____.

SUBPART A: PERMITS REQUIRED

Section 502.101 NPDES Permit Requirement and Duty to Maintain Permit Coverage

a) A controlled animal feeding operation (CAFO) is a point source. Any discharge of pollutants into waters of the United States from a CAFO is prohibited unless authorized by an NPDES permit or unless the discharge is an agricultural stormwater discharge as described in Section 502.102(b). No person shall cause or allow a discharge from a CAFO in violation of federal or State law, including but not limited to the Clean Water Act (CWA) (33 USC 1251), the Act or Board regulations.

b) The owner or operator of a CAFO must seek coverage under an NPDES permit if the CAFO discharges.

c) The owner or operator of a CAFO that discharges must either apply for an individual NPDES permit or submit a notice of intent for coverage under an NPDES general permit. If the Agency has not made a general permit available to the CAFO, the CAFO owner or operator must submit an application for an individual permit to the Agency. All permit applications and applications for permit modifications must contain the information set forth in Subpart B.

d) Any permitted CAFO shall apply for reissuance of the NPDES permit not less than 180 days prior to the expiration date of the permit unless the CAFO will not discharge after the expiration date of the NPDES permit.

e) The owner or operator of a new CAFO that will discharge must apply for NPDES permit coverage at least 180 days prior to the time that the CAFO commences operation.

f) Once an animal feeding operation (AFO) is defined as a CAFO for at least one type of animal, the NPDES permit requirements for CAFOs apply with respect to the all animals in confinement at the animal feeding operation and all livestock waste generated by those animals or the production of those animals.

~~No person specified in Sections 502.102, 502.103 or 502.104 or required to have a permit under the conditions of Section 502.106 shall cause or allow the operation of any new livestock management facility or livestock waste handling facility, or cause or allow the modification of any livestock management facility or livestock waste handling facility, or cause or allow the operation of any existing livestock management facility or livestock waste handling facility without a National Pollutant Discharge Elimination System (NPDES) permit. Facility expansions, production increases, and process modifications which significantly increase the amount of livestock waste over the level authorized by the NPDES permit must be reported by submission of a new NPDES application.~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.102 Land Application Discharges and Agricultural Stormwater~~Twenty-five Year Storm Event~~

a) The discharge of livestock waste to waters of the United States from a CAFO as a result of the livestock waste application by the CAFO to land application areas is a discharge from that CAFO subject to NPDES permit requirements, except when it is an agricultural stormwater discharge and therefore exempt from the definition of a point source under section 502 of the Clean Water Act.

b) Where livestock waste has been land applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the livestock waste and in compliance with Section 502.510 for permitted CAFOs and Section 502.510(b) for unpermitted Large CAFOs, a precipitation-related discharge of livestock waste from land application areas of an unpermitted large CAFO or a permitted CAFO is an agricultural stormwater discharge.

c) Unpermitted large CAFOs must maintain the documentation specified in Section 502.510(b)(16), either on site or at a nearby office, or otherwise make that documentation readily available to the Agency upon request.

~~An NPDES permit shall be required for an animal feeding operation which falls within the~~

~~criteria set forth in Section 502.103 or Section 502.104 below; provided, however, that no animal feeding operation shall require a permit if it discharges only in the event of a 25-year 24-hour storm event.~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.103 ~~Very~~ Large CAFOs~~Operators~~

An animal feeding operation is defined as a large CAFO if at least~~NPDES permit is required if more than~~ the numbers of animals specified in any of the following categories are stabled or confined:

Number of Animals	Kind of Animals
700	Mature dairy cows, whether milked or dry
1,000	Veal calves
1,000	Cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs.
2,500	Swine, each weighing 55 pounds or more
10,000	Swine, each weighing less than 55 pounds
500	Horses
10,000	Sheep or lambs
55,000	Turkeys
30,000	Laying hens or broilers, if the AFO uses a liquid manure handling system
125,000	Chickens (other than laying hens), if the AFO uses other than a liquid manure handling system
82,000	Laying hens, if the AFO uses other than a liquid manure handling system
30,000	Ducks, if the AFO uses other than a liquid manure handling system
5,000	Ducks, if the AFO uses a liquid manure handling system

~~Number of Animals~~	~~Kind of Animals~~
~~1000~~	~~Brood cows and slaughter and feeder cattle~~
~~700~~	~~Milking dairy cows~~
~~500~~	~~Horses~~
~~2500~~	~~Swine weighing over 55 pounds~~
~~10,000~~	~~Sheep, lambs or goats~~
~~50,000~~	~~Turkeys~~
~~100,000~~	~~Laying hens or broilers (if the facility has continuous overflow watering)~~
~~30,000~~	~~Laying hens or broilers (if the facility has a~~

	~~liquid manure handling system)~~
~~5000~~	~~Ducks~~
~~1000~~	~~Animal units~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.104 Medium CAFOs~~Large Operators~~

a) An animal feeding operation is defined as a medium CAFO~~NPDES permit is required~~ if ~~more than~~ the following numbers ~~and types~~ of animals specified in any of the following categories are stabled or confined and the provisions of subsection ~~either condition~~ (b), ~~or~~ (c) or (d) ~~below~~ of this Section is met:

Number of Animals	Kind of Animals
200 to 699	Mature dairy cows, whether milked or dry
300 to 999	Veal calves
300 to 999	Cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs.
750 to 2,499	Swine, each weighing 55 pounds or more
3,000 to 9,999	Swine, each weighing less than 55 pounds
150 to 499	Horses
3,000 to 9,999	Sheep or lambs
16,500 to 54,999	Turkeys
9,000 to 29,999	Laying hens or broilers, if the AFO uses a liquid manure handling system
37,500 to 124,999	Chickens (other than laying hens), if the AFO uses other than a liquid manure handling system
25,000 to 81,999	Laying hens, if the AFO uses other than a liquid manure handling system
10,000 to 29,999	Ducks, if the AFO uses other than a liquid manure handling system
1,500 to 4,999	Ducks, if the AFO uses a liquid manure handling system

~~Number of Animals~~	~~Kind of Animals~~
~~300~~	~~Brood cows and slaughter and feeder cattle~~
~~200~~	~~Milking dairy cows~~
~~750~~	~~Horses~~
~~150~~	~~Swine weighing over 55 pounds~~
~~3000~~	~~Sheep, lambs or goats~~
~~16,000~~	~~Turkeys~~
~~30,000~~	~~Laying hens or broilers (if the facility has~~

~~continuous overflow watering)~~
~~9000 Laying hens or broilers (if the facility has a liquid manure handling system)~~
~~1000 Ducks~~
~~300 Animal units~~

b) Pollutants are discharged into ~~navigable~~ waters of the United States through a man-made ditch, flushing system or other similar man-made device; ~~or~~

c) Pollutants are discharged directly into ~~navigable~~ waters of the United States that~~which~~ originate outside of and pass over, across, through or otherwise come into direct contact with the animals confined in the operation; or~~.~~

d) The AFO is designated as a CAFO by the Agency pursuant to Section 502.106.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.105 Small CAFOs~~Voluntary Applications~~

An animal feeding operation is a small CAFO if it is designated as a CAFO by the Agency pursuant to Section 502.106, and it is not a Medium CAFO.~~None of the requirements listed in this subpart precludes the voluntary filing of an NPDES application by the owner or operator of an animal feeding operation.~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.106 Case-By-Case~~Case-by-case~~ Designation Requiring NPDES Permits

a) Notwithstanding any other provision of this Part, the Agency may require any animal feeding operation~~animal feeding operation~~ not falling within Section~~Sections 502.102,~~ 502.103 or 502.104 to obtain an NPDES~~a~~ permit by designating the AFO as a CAFO upon determining that it is a significant contributor of pollutants so waters of the United States. In making the determination of whether the AFO is a significant contributor of pollutants, ~~such designation~~ the Agency shall consider the following factors:

1) The size of the AFO~~animal feeding operation~~ and the amount of livestock wastes reaching ~~navigable~~ waters of the United States;

2) The location of the AFO~~animal feeding operation~~ relative to ~~navigable~~ waters of the United States;

3) The means of conveyance of livestock~~animal~~ wastes ~~and process~~

~~wastewaters~~ into ~~navigable~~ waters of the United States;

4) The slope, vegetation, rainfall and other factors relative to the likelihood or frequency of discharge of livestock waste~~animal wastes and process wastewaters~~ into ~~navigable~~ waters of the United States; and

5) Other such factors bearing on the significance of the pollution problem sought to be regulated.

b) The Agency, however, may not require a permit under subsection (a)~~paragraph a)~~ for any AFO~~animal feeding operation~~ with less than the number of animals~~animal units (300)~~ set forth in Section 502.104 ~~above~~, unless it meets either of the following conditions:

1) Pollutants are discharged into ~~navigable~~ waters of the United States through a man-made ditch, flushing system or other similar man-made device; or

2) Pollutants are discharged directly into ~~navigable~~ waters of the United States that~~which~~ originate outside of and pass over, across, through or otherwise come into direct contact with the animals confined in the operation.

c) In no case may a permit application be required from an AFO~~animal feeding operation~~ designated pursuant to this Section~~section~~ until there has been an onsite inspection of the operation and a determination that the operation should and could be regulated under the permit program. ~~In addition, no application may be required from an owner or operator of an animal feeding operation designated pursuant to this section unless the owner or operator is notified in writing of the requirement to apply for a permit.~~

d) Upon receipt of the Agency's notification that an NPDES permit is required pursuant to this Section.~~paragraph b)~~ the operator shall make application to the Agency within 90~~60~~ days. The Agency may issue an NPDES permit with a compliance schedule detailing interim steps to be taken along with a final date, not to exceed 14 months from the date the permit is issued, by which compliance with the Act and all applicable regulations shall be achieved.

e) The Agency will notify the owner or operator in writing of the Agency's decision to designate the AFO as a CAFO under this Section and the grounds for the designation. The owner or operator may file an appeal of the Agency's decision with the Board within 35 days after the date on which the Agency served the decision pursuant to Section 40(a) of the Act and 35 Ill. Adm. Code 105.~~No~~

~~animal feeding operation may be required to have a permit if it discharges only in the event of a 25-year 24-hour storm event.~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

SUBPART B: PERMIT APPLICATIONS

Section 502.201 Permit Applications~~Contents~~

a) All applications from a new or existing CAFO for any permit, including an individual permit or a general permit, required under this Chapter shall contain, where appropriate, the following information and documents:

1) The name of the owner or operator;

2) The facility location and mailing addresses;

3) The latitude and longitude at the entrance to the production area;

4) Specific information about the average and maximum number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other); ~~Kinds and numbers of livestock~~;

5~~2~~) A statement as to any projected changes in the size of the livestock operation and when they may occur during the term of the permit;

6~~3~~) The type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter, and process wastewater storage (in tons or gallons); ~~Description of land areas used for the livestock management facilities and livestock waste handling facilities and land areas used for livestock waste disposal;~~

7~~4~~) A topographic map of the geographic area in which the CAFO is located showing the specific location of the production area and land application areas, and indicating the following: ~~A sketch of the existing and/or proposed facility indicating the following:~~

~~A) Approximate overall dimensions of the facility;~~

AB) Direction and location of surface and subsurface drainage and other discharges from the facility; and

BC) LocationGeneral location of waterways in the area;

D) Location of area for manure disposal; and

E) A marked-up aerial photograph or U.S. Geological Survey map of the area involved is desirable in lieu of a sketch.

8) Estimated amounts of livestock waste generated per year (in tons or gallons);

9) The total number of acres of land application area and the estimated amount of waste to be applied to those acres per year;

10) Estimated amount of livestock waste transferred to other persons per year (in tons or gallons);

11) A nutrient management plan that is consistent with the requirements of Subpart E;

12) A stormwater pollution prevention plan;

13) A spill control and prevention plan; and

145) A statement identifying and justifying any departure from current design criteria promulgated by the Agency.

b) The Agency may adopt procedures requiring such additional information as is necessary to determine whether the CAFOlivestock management facility or livestock waste handling facility will meet the requirements of the Act and applicable Board regulationsrequlations.

c) Applicable requirements of 35 Ill. Adm. Code 309: Subpart A shall apply to applications for NPDES permits required by this Chapterchapter. The Agency may prescribe the form in which information required under this Sectionsection shall be submitted.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.202 Permit Application SubmissionsRegistered or Certified Mail

All permit applications shall be mailed, ~~or~~ delivered or electronically submitted to the appropriate address designated by the Agency. ~~Any application or revised application sent by mail shall be sent by registered or certified mail, return receipt requested. Applications which are hand-delivered shall be delivered to and receipted for by any authorized person employed in the Permit Section of the Agency's Division of Water Pollution Control.~~

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.203 New Applications (Repealed)

~~Any person now discharging whose discharge was not covered by the Refuse Act permit program (33 U.S.C. 407), but which is subject to the NPDES program, must apply for an NPDES permit on the effective date of this chapter. However, for purposes of this chapter, any person who has applied for an NPDES permit from the U.S. Environmental Protection Agency and whose application has not been denied, shall be considered to have applied for an NPDES permit unless the discharge described in the Application for an NPDES Permit has substantially changed in nature, volume, or frequency; in which case another NPDES permit application shall be submitted.~~

(Source: Repealed at 38 Ill. Reg. _____, effective _____)

Section 502.204 Renewal

Permittees seeking reissuance of their NPDES permit pursuant to Section 502.101(d) ~~who wish to continue to discharge subsequent to the expiration date of their permit~~ must apply for reissuance of the permit, using proper forms, not less than 180 days prior to the permit expiration date. The Agency will notify those ~~such~~ persons of the need for renewal at least 60 days prior to the date on which the renewal application must be submitted; however, failure to do so does not excuse non-compliance with this Chapter ~~chapter~~.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.205 New Operations (Repealed)

~~Any person whose livestock waste handling facility or livestock management facility is required by Sections 502.101, 502.102, 502.103 or 502.104 to obtain a permit and will begin operation on or after the effective date of these Regulations must apply for an NPDES permit no later than 180 days in advance of the date on which the facility is to commence operation minus the number of days available storage time for installed manure storage structures.~~

(Source: Repealed at 38 Ill. Reg. _____, effective _____)

Section 502.207 Disclosure Required for Land Trusts

An applicant filing for an NPDES permit shall satisfy the requirements of the Land Trust Beneficial Interest Disclosure Act [735 ILCS 405]~~"An Act to Require disclosure, under certification of perjury, of all beneficial interests in real property held in a land trust, in certain cases" (Ill. Rev. Stat. 1981, ch. 148, par. 72)~~ before the Agency grants the applicant its permit.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

SUBPART C: PERMIT ISSUANCE AND CONDITIONS

Section 502.304 Issuance and Conditions

a) The provisions of 35 Ill. Adm. Code 309: Subpart A shall apply to the issuance, conditions and modification of NPDES permits under this Chapter~~chapter~~ in the same manner as those~~such~~ provisions apply to NPDES permits issued pursuant to 35 Ill. Adm. Code 309. Specific provisions applicable to CAFOs seeking coverage under NPDES general permits are found in Section 502.310.

b) In addition to specific conditions authorized under this Part, the Agency may impose such conditions in any permit issued pursuant to this Part as may be necessary to accomplish the purposes of the Act or Board regulations.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.310 CAFOs Seeking Coverage Under NPDES General Permits

a) CAFO owners or operators must submit a notice of intent that meets the requirements of Section 502.201 and Subpart E of this Part when seeking authorization to discharge under a general permit.

b) When additional information is necessary to complete the notice of intent or to clarify, modify, or supplement previously submitted material, the Agency may request that information from the owner or operator as provided in 35 Ill. Adm. Code 309.106.

c) The Agency must notify the public of its proposal to grant coverage under the general permit to the CAFO. This public notice must include the CAFO's nutrient management plan.

d) The process for submitting public comments and hearing requests, and the hearing process if a request for a hearing is granted, will follow the procedures applicable to draft individual permits found in 35 Ill. Adm. Code 309.109(b) and 309.115 through 309.118.

e) The time period for the public to comment and request a hearing is 30 days following the date of the notice issued pursuant to subsection (c).

f) When a public hearing is held, the Agency must respond to significant comments received during the comment period as provided in 35 Ill. Adm. Code 309.119 and 309.120, except that notice and transmission to the USEPA Regional Administrator is not required. If no hearing is held, the Agency shall follow the procedures in 35 Ill. Adm. Code 309.112 and 309.120 for Agency action after the comment period. If necessary, the Agency will require the CAFO owner or operator to revise the nutrient management plan in order to be granted permit coverage.

g) When the Agency authorizes coverage for the CAFO owner or operator under the general permit, the terms of the nutrient management plan shall become incorporated as terms and conditions of the permit for the CAFO. This incorporation of terms and conditions does not require a modification of the general permit.

h) The Agency shall notify the CAFO owner or operator and inform the public that coverage has been authorized and of the terms of the nutrient management plan incorporated as terms and conditions of the permit applicable to the CAFO.

i) Nothing in this Section shall limit the Agency's authority to require an individual NPDES permit pursuant to Section 39(b) of the Act.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.315 CAFO Permit Requirements

NPDES permits issued to CAFOs under this Part must include:

a) Requirements to implement a nutrient management plan that meets the provisions of Subpart E.

b) Requirements for the permittee to create, maintain for five years from creation on site, and make available to the Agency, upon request, a complete copy of the records required in Section 502.320.

c) Annual reporting requirements for permitted CAFOs. The permittee must submit an annual report to the Agency. The annual report must include the information specified in Section 502.325.

d) Requirements to comply with the livestock waste discharge limitations in Subparts F, G and H, if applicable.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.320 Recordkeeping Requirements

The permittee must create, maintain for five years, and make available to the Agency, upon request, the following records:

a) A copy of all applicable records identified pursuant to Section 502.510(b)(16);

b) A copy of the information required under Section 502.201;

c) Records documenting the visual inspections required under Section 502.610(c);

d) Weekly records of the depth of the manure and process wastewater in the liquid livestock waste storage as indicated by the depth marker, as described in Section 502.610(d);

e) Records documenting any actions taken to correct deficiencies as required by Section 502.610(e) and (f). Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction;

f) Records of mortalities management and practices used by the facility to meet the requirements of Section 502.610(g);

g) Records documenting the current design of any livestock waste storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;

h) Records of the date, time, and estimated volume of any overflow;

i) A copy of the facility's site-specific nutrient management plan;

j) Expected crop yields for land application areas;

k) The dates livestock waste is applied to each land application area;

l) Records documenting subsurface drainage inspections conducted according to the plan developed pursuant to Section 502.510(b)(13);

m) Results from livestock waste and soil sampling;

n) Explanation of the basis for determining livestock waste application rates;

o) Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than livestock waste;

p) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;

q) The method used to apply the livestock waste;

r) Date of livestock waste application equipment inspection;

s) Maximum number and type of animals, whether in open confinement or housed under roof by the following types: beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, turkeys, ducks, other;

t) All records necessary to prepare the annual report required by Section 502.325;

u) Total number of acres of land application area covered by the nutrient management plan;

v) The quantity of livestock waste removed when a manure storage area or waste containment area is dewatered;

w) The following information for each day during which livestock wastes are applied to land:

1) the amount applied to each field in either gallons, wet tons or dry tons per acre;

2) soil water conditions at the time of application (such as dry, saturated, flooded, frozen, snow-covered);

3) an estimate of the amount of precipitation 24 hours prior to, and for 24 hours after, the application;

4) the type of application method used (surface, surface with incorporation, or injection);

5) the location of the field where livestock waste was applied;

6) the results of leak inspection of livestock waste application equipment;

7) the name and address of off-site recipients of livestock waste, the amount of waste transferred to each off-site recipient in gallons or dry tons, off-site location on a topographic map, and acreage of each site used by the off-site recipient;

8) Weather conditions, including precipitation, air temperature, wind speed, wind direction and dew point, at time of land application and for 24 hours prior to and for 24 hours following application; and

9) Records of the weather forecasts required to be maintained pursuant to Sections 502.620(d) and 502.630(b)(3), (4), and (5);

x) The laboratory analysis sheets reporting the analysis of the livestock waste samples shall be kept on file at the facility for the term of the permit and for 5 years after expiration of the permit; and

y) Records documenting the test methods and sampling protocols for manure, litter and process wastewater and soil analyses.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.325 Annual Report

a) The NPDES permit must specify annual reporting requirements for the CAFO. The annual report must be submitted to the Agency.

b) The annual report must contain the following minimum elements:

1) Maximum number and type of animals, whether in open confinement or housed under roof by the following types: beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, turkeys, ducks, other;

2) Quantity of livestock waste generated by the facility in the previous 12 months (tons/gallons);

3) Quantity of livestock waste transferred to another person by the facility in the previous 12 months (in tons or gallons);

4) Total number of acres of land application area covered by the nutrient management plan;

5) Total number of acres the CAFO used for land application of livestock waste in the previous 12 months and were under the control of the CAFO through ownership, lease, or consent agreement;

6) A statement indicating whether the current version of the CAFO's nutrient management plan for land application of livestock waste was developed or approved by a certified nutrient management planner and by whom the certification was issued;

7) Summary of all livestock waste discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume;

8) A report of instances of non-compliance with the NPDES permit in the previous 12 months;

9) The actual crops planted and actual yields for each field;

10) The actual nitrogen and phosphorus content of the livestock waste;

11) The results of calculations conducted in accordance with Section 502.515(d)(3) and (e)(3);

12) The amount of livestock waste land applied to each field during the previous 12 months;

13) For any CAFO that implements a nutrient management plan that addresses rates of application in accordance with Section 502.515(e):

a) the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months;

b) data used in calculations conducted in accordance with Section 502.515(e)(3); and

c) the amount of any supplemental fertilizer applied during the previous 12 months; and

14) Annual review of the nutrient management practices to be implemented and an update of the nutrient management plan when there is a change in the nutrient management practices.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

SUBPART E: REQUIREMENTS FOR DEVELOPING AND IMPLEMENTING NUTRIENT MANAGEMENT PLANS

Section 502.500 Purpose, Scope and Applicability

The requirements in this Subpart are intended to minimize the transport of nitrogen and phosphorus to waters of the United States in compliance with the nutrient management plan developed by the CAFO owner or operator.

a) The requirements in this Subpart apply to CAFOs required to obtain an NPDES permit. Unpermitted large CAFOs claiming an agricultural stormwater exemption must comply with Sections 502.102 and 502.510(b).

b) The CAFO owner or operator shall develop, submit and implement a site specific nutrient management plan. This plan shall specifically identify and describe practices that will be implemented to assure compliance with this Subpart and the livestock waste discharge limitations and technical standards of Subparts F, G, and H.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.505 Nutrient Management Plan Information

The nutrient management plan shall contain, at a minimum, the following items:

a) Name, address, and phone number of the owners of the CAFO;

b) Name, address, and phone number of the managers or operators if different than the owners;

c) Address, phone number, and plat location of the CAFO production area;

d) Name of the person who developed the nutrient management plan and a statement indicating whether it was developed or approved by a certified nutrient management planner and by whom the certification was issued;

e) Type of waste storage for the CAFO;

f) Species, size and maximum number of animals at the CAFO;

g) Scaled aerial photos or maps depicting each field available and intended for livestock waste applications with available acreage listed and indicating residences, non-farm businesses, common places of assembly, streams, wells, waterways, lakes, ponds, rivers, drainage ditches, subsurface drainage systems, other water sources, 10-year flood plain, buffers, slope, locations of structural Best Management Practices, setbacks and areas restricted from application by this Subpart E;

h) For land application areas not owned or rented by the owner or operator of the CAFO, copies of the statement of consent between the owner or operator of the livestock facilities and the owner of the land where livestock waste will be applied;

i) Cropping schedule for each field for the past year, anticipated crops for the current year, and anticipated crops for the five year term of the permit;

j) Realistic crop yield goal for each crop in each field;

k) An estimate of the nutrient value of the livestock waste or results of livestock waste analysis determined pursuant to Section 502.625(c);

l) Livestock waste application methods;

m) Results of the Bray P1 or Mehlich 3 test for soil phosphorus, in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200, reported in pounds of elemental phosphorus per acre. If the livestock waste is to be land applied based on a single year or multi-year phosphorus application on the land application area, the following items must be provided:

1) An estimate of the volume of livestock waste to be disposed of annually;

2) The phosphorus content of the livestock waste;

3) The phosphorus amount needed for each crop in the planned crop rotation, expressed as pounds of P_2O_5 per acre, obtained from the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at 35 Ill. Adm. Code 501.200; and

4) The maximum livestock waste application rate based on phosphorus for each field, determined pursuant to Section 502.625(g).

n) Calculations showing the following:

1) An estimate of the volume of livestock waste to be disposed of annually;

2) Nitrogen loss due to the method of storage, if applicable;

3) Amount of nitrogen available for application;

4) Nitrogen loss due to the method of application;

5) Amount of plant-available nitrogen including first-year mineralization of organic nitrogen;

6) Amount of nitrogen required by each crop in each field based on realistic crop yield goal;

7) Nitrogen credits from previous crops, from other sources of fertilizer applied for the growing season, and from any livestock waste applications during the previous three years for each field;

8) Livestock waste application rate based on nitrogen for each field; and

9) Land area required for application;

o) A listing of fields and the planned livestock waste application amounts for each field.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.510 Nutrient Management Plan Requirements

a) Any permit issued to a CAFO must include a requirement to implement a nutrient management plan by the date of permit coverage that, at a minimum, contains best management practices necessary to meet the requirements of this Section and the applicable livestock discharge limitations and technical standards in 35 Ill. Adm. Code 501 and 502.

b) The nutrient management plan must specify and demonstrate:

1) The livestock waste application rate of nitrogen in a single year and phosphorus in a single year or multiple years, not to exceed the single year crop nitrogen and single year or multi-year phosphorus requirements for realistic crop yield goals in the rotation;

2) Adequate land application area for livestock waste application, which may include:

A) land owned by the CAFO owner or operator;

B) land leased by the CAFO;

C) land covered by a consent agreement between the CAFO owner or operator and the property owner; or

D) any combination of the land described in subsection (b)(2)(A) through (C);

3) Adequate storage of livestock waste, including procedures to ensure proper operation and maintenance of the storage facilities;

4) Proper management of mortalities to ensure that they are not disposed of in a liquid livestock waste or stormwater storage or treatment system that is not specifically designed to treat animal mortalities;

5) That clean water is diverted, as appropriate, from the production area;

6) Prevention of direct contact of confined animals with waters of the United States;

7) That chemicals and other contaminants handled on-site are not disposed of in any livestock waste or stormwater storage or treatment system unless specifically designed to treat those chemicals and other contaminants;

8) Appropriate site specific conservation practices to be implemented, including, as appropriate, buffers or equivalent practices, to control runoff of pollutants to waters of the United States;

9) Protocols for appropriate testing of livestock waste and soil. Livestock waste must be analyzed a minimum of once annually for nitrogen and phosphorus content, and soil analyzed a minimum of twice every five years for phosphorus content. The results of these analyses are to be used in determining application rates for livestock wastes;

10) Protocols to land apply livestock waste in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the livestock waste;

11) Livestock waste shall not be applied within the distance from residences provided in Section 502.645(a) and within the areas prohibited from land application by this Part;

12) A winter time land application plan that meets the requirements of Section 502.630;

13) The plan for the inspection, monitoring, management and repair of subsurface drainage systems at the livestock waste application site. Inspection of subsurface drainage systems shall include visual inspection prior to land application to determine failures that may cause discharges and visual inspection during and after land application to identify discharges;

14) A spill prevention and control plan;

15) Annual review of the nutrient management practices to be implemented and an update of the nutrient management plan when there is a change in the nutrient management practices;

16) Specific records that will be maintained to document the implementation and management of the minimum elements described in subsections (b)(2) through (15); and

17) A description of the storage provisions and schedules provided for livestock waste when cropping practices, soil conditions, weather conditions or other conditions prevent the application of livestock waste to land or prevent other methods of livestock waste disposal.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.515 Terms of Nutrient Management Plan

Any permit issued to a CAFO must require compliance with the terms of the CAFO's site-specific nutrient management plan. These terms include:

a) The terms of the nutrient management plan are the information, protocols, best management practices, and other conditions in the nutrient management plan

determined by the Agency to be necessary to meet the requirements of Sections 502.505 and 502.510.

b) The terms of the nutrient management plan, with respect to protocols for land application of livestock waste as required by Subpart F, must include:

1) the fields available for land application;

2) field-specific rates of application properly developed pursuant to subsection (d) or (e) to ensure appropriate agricultural utilization of the nutrients in the livestock waste; and

3) any timing limitations identified in the nutrient management plan concerning land application on the fields available for land application.

c) The terms of the nutrient management plan must address rates of application using either the linear approach as described in subsection (d) or the narrative rate approach as described in subsection (e), unless the Agency specifies that only one of these approaches may be used.

d) The linear approach is an approach that expresses rates of application as pounds of nitrogen and phosphorus, according to the following specifications:

1) The terms include maximum application rates from livestock waste for each year of permit coverage, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Agency, in pounds per acre, per year, for each field to be used for land application, and certain factors necessary to determine those rates.

2) At a minimum, the factors that are terms must include:

A) the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field;

B) the crops to be planted in each field or any other uses of a field, such as pasture or fallow fields;

C) the realistic yield goal for each crop or use identified for each field;

D) the nitrogen and phosphorus recommendations, according to Section 502.625, for each crop or use identified for each field;

E) credits for all nitrogen in the field that will be plant available;

F) consideration of multi-year phosphorus application;

G) accounting for all other additions of plant available nitrogen and phosphorus to the field;

H) the form and source of livestock waste to be land applied;

I) the timing and method of land application; and

J) the methodology by which the nutrient management plan accounts for the amount of nitrogen and phosphorus in the livestock waste to be applied.

3) CAFOs that use this linear approach must calculate the maximum amount of livestock waste to be land applied at least once each year using the results of the most recent representative livestock waste tests for nitrogen and phosphorus taken within 12 months after the date of land application required by Section 502.635.

e) The narrative rate approach is an approach that expresses rates of application as a narrative rate of application that results in the amount, in tons or gallons, of livestock waste to be land applied, according to the provisions of this subsection (e).

1) The terms include:

A) maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Agency, in pounds per acre, for each field, and certain factors necessary to determine those amounts;

B) the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field;

C) the crops to be planted in each field or any other uses, such as pasture or fallow fields, including alternative crops identified in accordance with subsection (e)(1)(G);

D) the realistic yield goal for each crop or use identified for each field;

E) the nitrogen and phosphorus recommendations according to Section 502.625 for each crop or use identified for each field;

F) the methodology by which the nutrient management plan accounts for the following factors when calculating the amounts of livestock waste to be land applied:

i) results of soil tests conducted in accordance with protocols identified in the nutrient management plan, as required by Section 502.510(b)(9);

ii) credits for all nitrogen in the field that will be plant available;

iii) the amount of nitrogen and phosphorus in the livestock waste to be applied;

iv) consideration of multi-year phosphorus application;

v) accounting for all other additions of plant nitrogen and phosphorus to the field;

vi) the form and source of livestock waste;

vii) the timing and method of land application; and

viii) volatilization of nitrogen and mineralization of organic nitrogen;

G) alternative crops identified in the CAFO's nutrient management plan that are not in the planned crop rotation.

i) When a CAFO includes alternative crops in its nutrient management plan, the crops must be listed by field, in addition to the crops identified in the planned crop rotation for that field, and the nutrient management plan must include realistic crop yield goals and the nitrogen and phosphorus recommendations according to Section 502.625 for each crop.

ii) Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of livestock waste to be applied must be determined in accordance with the

methodology described in subsections (e)(1)(A) through (F).

2) For CAFOs using this narrative approach, the following projections must be included in the nutrient management plan submitted to the Agency, but are not terms of the nutrient management plan:

A) the CAFO's planned crop rotations for each field for the period of permit coverage;

B) the projected amount of livestock waste to be applied;

C) projected credits for all nitrogen in the field that will be plant available;

D consideration of multi-year phosphorus application;

E) accounting for all other additions of plant available nitrogen and phosphorus to the field;

F) the predicted form, source, and method of application of livestock waste for each crop; and

G) timing of application for each field, insofar as it concerns the calculation of rates of application.

3) CAFOs that use this narrative rate approach must calculate maximum amounts of livestock waste to be land applied at least once each year using the methodology required in subsections (e)(1)(A) through (F) before land applying livestock waste and must rely on the following data:

A) a field-specific determination of nitrogen that will be plant available consistent with the methodology required by subsections (e)(1)(A) through (F), and for phosphorus, the results of the most recent soil test conducted in accordance with soil testing requirements approved by the Agency; and

B) the results of most recent representative livestock waste tests for nitrogen and phosphorus taken within 12 months after the date of land application, in order to determine the amount of nitrogen and phosphorus in the livestock waste to be applied.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.520 Changes to the Nurient Management Plan

When a CAFO owner or operator makes changes to the CAFO's nutrient management plan previsouly submitted to the Agency, the procedures in this Section are applicable.

a) The CAFO owner or operator must identify changes to the nutrient management plan, except that the results of calculations made in accordance with the requirements of Section 502.515(d)(3) and (e)(3) are not subject to the requirements of this Section. These calculation may be revised without submittal to the Agency provided the calculation revisions do not change the terms of the nutrient management plan.

b) The Agency must determine whether the changes to the nutrient management plan necessitate revision to the terms of the nutrient management plan incorporated into the permit issued to the CAFO.

1) If revision to the terms of the nutrient management plan is not necessary, the Agency must notify the CAFO owner or operator and, upon that notification, the CAFO may implement the revised nutrient management plan.

2) If revision to the terms of the nutrient management plan is necessary, the Agency must determine whether the changes are substantial changes as described in subsection (d).

3) If the Agency determines that the changes to the terms of the nutrient management plan are not substantial, the Agency must notify the owner or operator and inform the public of any changes to the terms of the nutrient management plan that are incorporated into the permit.

c) If the Agency determines that the changes to the terms of the nutrient management plan are substantial, the Agency must notify the public and make the proposed changes and the information submitted by the CAFO owner or operator available for public review and comment.

1) The process and time limits for submitting public comments and hearing requests, the hearing process if a request for a hearing is granted, and the process for responding to significant comments received during the comment period will follow the procedures applicable to draft general permits found in Section 502.310(d) through (f).

2) The Agency will require the CAFO owner or operator to further revise the nutrient management plan, if necessary, in order to approve the revision to the terms of the nutrient management plan incorporated into the CAFO's permit.

3) Once the Agency incorporates the revised terms of the nutrient management plan into the permit, the Agency must notify the owner or operator and inform the public of the final decision concerning the revisions to the terms and conditions of the permit.

d) Substantial changes to the terms of the nutrient management plan incorporated as terms and conditions of a permit include, but are not limited to:

1) Addition of new land application areas not previously included in the CAFO's nutrient management plan; except that, if the land application area that is being added to the nutrient management plan is covered by the terms of a nutrient management plan incorporated into an existing NPDES permit in accordance with the requirements of Section 502.515, and the CAFO owner or operator applies livestock waste on the newly added land application area in accordance with the existing field-specific permit terms applicable to the newly added land application area, addition of new land would be a change to the new CAFO owner's or operator's nutrient management plan but not a substantial change for purposes of this Section;

2) For nutrient management plans using the linear approach as set forth in Section 502.515(d), changes to the field-specific maximum annual rates of land application (pounds of nitrogen and phosphorus from livestock waste). For nutrient management plans using the narrative rate approach, changes to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop;

3) Addition of any crop or other uses not included in the terms of the CAFO's nutrient management plan and corresponding field-specific rates of application expressed in accordance with Section 502.515; and

4) Changes to site-specific components of the CAFO's nutrient management plan, when the changes are likely to increase the risk of nitrogen and phosphorus transport to waters of the United States.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART F: LIVESTOCK WASTE DISCHARGE LIMITATIONS AND TECHNICAL STANDARDS

Section 502.600 Applicability

This Subpart provides livestock waste discharge limitations and technical standards for permitted CAFOs. Permitted CAFOs must achieve the livestock waste discharge limitations and technical standards in this Subpart as of the date of permit coverage. Unpermitted large CAFOs claiming an agricultural stormwater exemption must comply with Sections 502.102 and 502.510(b) and are subject to portions of this Subpart to the extent required by Section 502.510(b). This Subpart does not apply to CAFOs that stable or confine horses, sheep or ducks. CAFOs that stable or confine horses or sheep are subject to applicable production area livestock waste discharge limitations and technical standards found in Section 502.720. CAFOs that confine ducks in either a dry lot or wet lot are subject to applicable production area livestock waste discharge limitations and technical standards found in Section 502.730.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.605 Livestock Waste Discharge Limitations for the Production Area for Permitted CAFOs

a) Except as provided in subsections (a)(1), (a)(2) and (c), there must be no discharge of livestock wastes into waters of the United States from the CAFO production area. Whenever precipitation causes an overflow of livestock wastes from the containment or storage structure, livestock wastes in the overflow may be discharged into waters of the United States provided:

1) The production area is designed, constructed, operated and maintained to contain all livestock wastes, including the runoff and the direct precipitation from a 25-year, 24-hour precipitation event, except that, for swine, poultry or veal, large CAFOs that are new sources must comply with Subpart H, and

2) The production area is operated in accordance with the additional measures and records required by Section 502.610.

b) Any point source subject to this Subpart must achieve the livestock waste discharge limitations in this Section as of the date of the permit coverage.

c) Voluntary Alternative Performance Standards. Any CAFO subject to this Subpart may request the Agency to establish NPDES permit livestock waste discharge limitations based upon site-specific alternative technologies that achieve a quantity of pollutants discharged from the production area equal to or less than

the quantity of pollutants that would be discharged under the baseline performance standards as provided by subsection (a).

1) In requesting site-specific livestock waste discharge limitations to be included in the NPDES permit, the CAFO owner or operator must submit a supporting technical analysis and any other relevant information and data that would support those site-specific livestock waste discharge limitations within the time frame provided by the Agency.

2) The supporting technical analysis must include calculation of the quantity of pollutants discharged, on a mass basis when appropriate, based on a site-specific analysis of a system designed, constructed, operated, and maintained to contain all livestock waste, including the runoff from a 25-year, 24-hour rainfall event.

3) The technical analysis of the discharge of pollutants must include:

A) all daily inputs to the storage system, including livestock waste, direct precipitation, and runoff;

B) all daily outputs from the storage system, including losses due to evaporation, sludge removal, and removal of wastewater for use on cropland at the CAFO or transport off site;

C) a calculation determining the predicted median annual overflow volume based on a 25-year period of actual rainfall data applicable to the site;

D) site-specific pollutant data, including nitrogen, phosphorus, BOD_5 and total suspended solids, for the CAFO from representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data; and

E) predicted annual average discharge of pollutants, expressed, when appropriate, as a mass discharge on a daily basis (lbs/day), and calculated considering subsections (c)(3)(A) through (D).

4) The Agency has the discretion to request additional information to supplement the supporting technical analysis, including inspection of the CAFO.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.610 Additional Measures for CAFO Production Areas

Each CAFO subject to this Subpart must implement the following:

a) The CAFO owner or operator must at all times properly operate and maintain all structural and operational aspects of the facilities, including all systems for livestock waste treatment, storage, management, monitoring and testing.

b) Livestock within a CAFO production area shall not come into contact with waters of the United States.

c) Visual Inspections. There must be routine visual inspections of the CAFO production area. At a minimum, the following must occur:

1) Weekly inspections of all stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to the wastewater and manure storage and containment structure;

2) Daily inspection of water lines in the production areas, including drinking water or cooling water lines; and

3) Weekly inspections of the livestock waste storage facilities. The inspection will note the level in the liquid livestock waste storage facility using the depth marker required in subsection (d).

d) Depth Marker. All open surface liquid livestock waste storage facilities must have a depth marker that clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. In the case of new sources subject to livestock waste discharge limitations established pursuant to Section 502.830, all open surface livestock waste storage structures associated with the sources must include a depth marker that clearly indicates the minimum capacity necessary to contain the maximum runoff and direct precipitation associated with the design storm used in sizing the storage facility for no discharge.

e) Corrective Actions. Any deficiencies found as a result of these inspections must be corrected as soon as possible.

f) In addition to the requirement in subsection (e), deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction.

g) Discharge to waters of the United States of pollutants from dead livestock or dead animal disposal facilities is prohibited. Dead livestock and water contaminated by dead livestock shall not be disposed of in the liquid manure storage structures, egg wash wastewater facilities, egg processing wastewater facilities, or areas used to hold products, by-products or raw materials that are set aside for disposal, or contaminated stormwater facilities, other than facilities used solely for disposal of dead livestock.

h) Chemicals and other contaminants shall not be disposed of in any livestock waste or stormwater storage or treatment system unless specifically designed to treat those chemicals and other contaminants.

i) A CAFO owner or operator utilizing an earthen lagoon or other earthen manure storage area or waste containment area shall inspect all berm tops, exterior berm sides, and non-submerged interior berm sides for evidence of erosion, burrowing animal activity, and other indications of berm degradation on a frequency of not less than once every week.

j) The CAFO owner or operator shall perform periodic removal of livestock waste solids from liquid manure storage areas and the waste containment area to maintain proper operation of the storage structures. Soils that are contaminated with livestock waste removed from earthen manure storage structures shall be considered livestock waste.

k) Requirements Relating to Transfer of Livestock Waste to Other Persons.

1) Prior to transferring livestock waste to other persons, CAFOs must provide the recipient of the livestock waste with the most current nutrient analysis.

2) The analysis provided must be consistent with applicable requirements to sample livestock wastes in Section 502.635(b).

3) CAFOs must retain for five years records of the date, recipient name and address, and approximate amount of livestock waste transferred to another person.

l) Livestock Waste Storage Requirements

1) Livestock waste storage structures at the CAFO production area shall be designed to contain a volume equal to or greater than the sum of the volumes of the following:

A) the amount of waste generated during a 180-day period of operation at design capacity;

B) the runoff volumes generated during a 180-day period, including all runoff and precipitation from lots, roofs and other surfaces where precipitation is directed into the storage structure;

C) the volume of all wash down liquid generated during the 180-day period that is directed into the manure storage structure;

D) the volume of runoff and precipitation directed to the storage structure during a 25-year, 24-hour storm event;

E) the design volatile solids loading volume, if applicable;

F) the sludge accumulation volume, if applicable; and

G) a freeboard of 2 feet, except for structures with a cover or otherwise protected from precipitation.

2) The storage volume requirements in this subsection (l) do not apply to pump stations, settling tanks, pumps, piping or other components of the CAFO production area that temporarily hold or transport waste to a storage facility meeting the requirements of this subsection (l).

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.615 Nutrient Transport Potential

a) Field Assessment. An individual field assessment of the potential for nitrogen and phosphorus transport from the field to surface waters must be conducted and the results contained in the nutrient management plan. The following factors must be identified for each field to determine nitrogen and phosphorus transport potential to waters of the United States:

1) Soil type;

2) Slope;

3) Conservation practices;

4) Soil erodibility or potential for soil erosion;

5) Soil test phosphorus;

6) Tile inlet locations;

7) Distance to surface waters;

8) Proximity to wells;

9) Location of conduits to surface water, including preferential flow paths; and

10) Subsurface drainage tiles.

b) The applicant shall utilize the field assessment information obtained in subsection (a) to determine the appropriate phosphorus-based or nitrogen-based application rate for each assessed field. The determination of phosphorus-based or nitrogen-based application of livestock waste on an assessed field must be consistent with subsection (c) or (d) and Sections 502.620, 502.625, 502.630, and 502.635.

c) Nitrogen-based application of livestock waste must be conducted consistent with the following requirements:

1) livestock waste is applied consistent with the setback requirements in Section 502.645;

2) available soil phosphorus (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200) is equal to or less than 300 pounds per acre;

3) the soil loss calculated using the Revised Universal Soil Loss Equation 2 (RUSLE2) is less than the erosion factor T;

BOARD NOTE: Soil loss may be calculated using the RUSLE2 software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm and Erosion Factor T for Illinois soils is available from the United States Department of Agriculture Natural Resources Conservation Service's (USDA-NRCS) published soil surveys at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

4) if conduits on the field are less than 400 feet from surface waters, the setback requirements in Section 502.645(b)(2) do not apply. Instead, the following setbacks apply:

A) Livestock waste application shall be conducted no closer than:

i) 150 feet from a tile inlet, agricultural well head, sinkhole, or edge of a ditch that has no vegetative buffer; or

ii) 50 feet from a tile inlet, agricultural well head, sinkhole, or edge of a ditch that has a 50 foot vegetative buffer or 50 feet from the center of a grass waterway;

B) These setbacks do not apply if the CAFO is able to demonstrate to the Agency that a setback or buffer is not necessary because implementation of alternative conservation practices (including, but not limited to, injection and incorporation) or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 150-foot setback under subsection (c)(4)(A)(i) or the 50-foot setback under subsection (c)(4)(A)(ii);

5) if conduits on the field are more than 400 feet from surface waters, the setback requirements in subsection (c)(4) do not apply;

6) where surface waters are on the assessed field or within 200 feet of the field, the livestock waste applied to the field shall be injected or incorporated within 24 hours after the application or equivalent conservation practices must be installed and maintained on the field pursuant to USDA-NRCS practice standards; and

7) if nitrogen-based application cannot be conducted in accordance with this subsection (c), then phosphorus-based application must be conducted as specified in subsection (d).

d) Phosphorus-based application of livestock waste must be conducted consistent with the following requirements:

1) livestock waste must be applied consistent with the setback requirements in Section 502.645;

2) the livestock waste application rate must not exceed the annual agronomic nitrogen demand of the next crop grown as provided in Section 502.625(a);

3) if the soil contains greater than 50 pounds of available soil phosphorus per acre (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200), phosphorus-based application rates must be neutral during the nutrient management plan period;

4) if the soil contains greater than 300 pounds of available soil phosphorus per acre (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200), the amount of phosphorus applied in the livestock waste must not exceed the amount of phosphorus removed by the next year's crop grown and harvested; and

5) livestock waste shall not be applied to fields with available soil phosphorus (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200) greater than 400 pounds per acre.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.620 Protocols to Land Apply Livestock Waste

a) Livestock wastes shall not be applied to waters of the United States. Livestock waste application shall not cause runoff to waters of the United States during non-precipitation events. Livestock waste application shall not occur on land that is saturated at the time of application. Livestock waste shall not be applied onto land with ponded water.

b) Discharge of livestock waste to waters of the United States or off-site during dry weather through subsurface drains is prohibited.

c) Livestock waste shall not be applied during precipitation when runoff of livestock waste will be produced.

d) Surface land application of livestock waste shall not occur within 24 hours preceding a forecast of 0.5 inches or more of precipitation in a 24-hour period as measured in liquid form. The CAFO owner or operator shall use one of the

following two methods for determining whether these conditions exist and shall maintain a record of the forecast from the source used:

1) A prediction of a 60 percent or greater chance of 0.5 inches or more of precipitation in a 24-hour period as measured in liquid form, obtained from the National Weather Service's Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring MD 20910 for the location nearest to the land application area; or

BOARD NOTE: The prediction in subsection (d)(1) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/.

2) A prediction of 0.5 inches or more of precipitation in a 24-hour period as measured in liquid form and identified as higher than Quantitative Precipitation Forecast(QPF) category 3, obtained from the National Weather Service's Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring, MD 20910 for the land application area location.

BOARD NOTE: The prediction in subsection (d)(2) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

e) Determination of soil loss must be made for each field using Revised Universal Soil Loss Equation 2 (RUSLE2).

BOARD NOTE: Soil loss may be determined using the RUSLE2 software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm.

f) Surface land application may be used when the land slope is no greater than 5% or when the yearly average soil loss calculated using RUSLE2 is equal to or less than 5 tons per acre per year or Erosion Factor T, whichever is less, regardless of slope. Injection or incorporation within 24 hours shall be used when the land slope is greater than 5% and the yearly average soil loss calculated using RUSLE2 is greater than 5 tons per acre per year or Erosion Factor T, whichever is less.

BOARD NOTE: Soil loss may be determined using the RUSLE2 software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_

Index.htm and Erosion Factor T for Illinois soils is available from the USDA United States Department of Agriculture Natural Resources Conservation Service's published soil surveys at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

g) Land application of livestock waste is prohibited on slopes greater than 15%.

h) Liquid livestock waste shall not be applied to land with less than 36 inches of soil covering fractured bedrock, sand or gravel.

i) Livestock waste shall not be applied to bedrock outcrops.

j) Livestock waste shall be applied at no greater than 50 percent of the agronomic nitrogen rate determined pursuant to Section 502.625 when there is less than 60 inches of unconsolidated material over bedrock.

k) Livestock waste shall be applied at no greater than 50 percent of the agronomic nitrogen rate determined pursuant to Section 502.625 when the minimum soil depth to seasonal high water table is less than or equal to 2 feet.

l) Livestock waste shall not be applied at rates that exceed the infiltration rates of the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.625 Determination of Livestock Waste Application Rates

a) Livestock waste application shall not exceed the agronomic nitrogen rate, which is defined as the annual application rate of nitrogen that can be expected to be required for a realistic crop yield goal. Multi-year phosphorus application is allowed when the application is specified in a nutrient management plan and meets the requirements in Section 502.615. Any such application must be consistent with nutrient management plan requirements. The agronomic rate must be determined in a manner consistent with this Section and Section 502.615.

b) Livestock Waste Volumes. The estimate of the annual volume of available livestock waste for application shall be obtained by multiplying the number of animals constituting the maximum design capacity of the facility by the appropriate amount of waste generated by the animals. For purposes of this Section, "maximum design capacity" means the maximum number of animals that can be housed at any time for a minimum of 45 days at a CAFO. The following sources may be used to obtain the amount of waste generated:

1) Livestock Waste Facilities Handbook, Third Edition, Table 2-1, incorporated by reference at 35 Ill. Adm. Code 501.200(a);

2) 35 Ill. Adm. Code 560.Table 1;

3) Manure Characteristics, 2nd ed., 2004 (MWPS-18 Section 1), MidWest Plan Service, incorporated by reference at 35 Ill. Adm. Code 501.200(a);

4) NRCS Agricultural Waste Management Field Handbook Chapter 4; and

5) ASABE Standard Data ASAE D384.2 MAR 2005 (R2010).

c) Nutrient Value of Livestock Waste. For new livestock facilities that have not generated livestock waste, the owner or operator must prepare a plan based on an average of the minimum and maximum numbers in the table values derived from Livestock Waste Facilities Handbook, Third Edition, Table 2-1, 10-6, or 10-7, or Manure Characteristics, incorporated by reference at 35 Ill. Adm. Code 501.200, or 35 Ill. Adm. Code 560.Table 1 or Table 2. If "as produced" or "as excreted" nutrient values are used, the nitrogen value shall be adjusted to account for losses due to the type of storage system utilized using an average of the ranges in Livestock Waste Facilities Handbook, Third Edition, Table 10-1. Other sources of nutrient values may be used if approved by the Agency. Owners or operators of existing livestock facilities must prepare the plan based on representative sampling and analysis of the livestock waste generated by the CAFOs in accordance with Section 502.635(b).

d) Adjustments to Nitrogen Availability. Adjustments shall be made to nitrogen availability to account for the following:

1) Nitrogen loss from livestock waste due to method of application, based on an average of the ranges in Livestock Waste Facilities Handbook, Third Edition, Table 10-2; and

2) The first-year mineralization of organic nitrogen into a plant available form, as obtained from Livestock Waste Facilities Handbook, Third Edition, Table 10-5.

e) Realistic Crop Yield Goal

1) The realistic crop yield goal shall be determined for each field where the livestock waste is to be land applied. The realistic crop yield goal shall be determined using an average yield over a five-year period from the field where livestock waste is to be land applied. The source of data to be

utilized to determine the realistic crop yield goal is provided in subsection (e)(2).

2) Whenever five years of data is available for the field where livestock waste is to be land applied, proven yields shall be used in calculating the realistic crop yield, unless there is an agronomic basis for predicting a different realistic crop yield goal. The owner or operator shall indicate the method used to determine the proven yield. Data from years with crop disasters may be discarded.

A) If five years of proven yield data is not available for the field where the livestock waste is to be land applied, or if an agronomic basis exists for predicting a different realistic crop yield goal, the owner or operator may calculate the realistic crop yield goal using crop insurance yields or Farm Service Agency USDA yields. If either of these sources is used, a copy of the insurance or assigned crop yields shall be included with the nutrient management plan.

B) If data is not available on proven yields, crop insurance yields or Farm Service Agency yields, or if an agronomic basis exists for predicting a different realistic crop yield goal, soils based yield data from the University of Illinois "Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils; Bulletin No. 810" (Bulletin 810) or "Optimum Crop Productivity Ratings for Illinois Soils; Bulletin 811" (Bulletin 811), incorporated by reference at 35 Ill. Adm. Code 501.200, shall be used by the owner or operator to calculate the realistic crop yield goal pursuant to subsection (e)(1).

i) If Bulletin 810 or 811 is used to calculate the realistic crop yield goal, a soil map of the land application areas shall be included in the nutrient management plan.

ii) If Bulletin 810 or 811 is used, the realistic crop yield goal shall be determined by a weighted average of the soil interpretation yield estimates for the fields where livestock waste is to be land applied.

iii) If Bulletin 811 is used, the owner or operator shall demonstrate in the nutrient management plan that the operational management and field conditions of the facility and land application areas meet the requirements for optimum conditions as provided in Bulletin 811.

f) Nitrogen Credits

1) Nitrogen credits shall be calculated by the CAFO owner or operator, pursuant to Section 502.505(n)(7), for nitrogen-producing crops grown the previous year, for other sources of nitrogen applied for the growing season, and for mineralized organic nitrogen in livestock waste applied during the previous three years.

2) Nitrogen credits shall be calculated by the CAFO owner or operator for the mineralized organic nitrogen in livestock waste applied during the previous three years at the rate of 50%, 25%, and 12.5%, respectively, of that mineralized during the first year.

g) Phosphorus. The plan shall be developed or amended by the CAFO owner or operator to determine the maximum livestock waste application rate for each field. The plan for that field shall contain the following:

1) The phosphorus content of the livestock waste shall be determined in accordance with subsection (c);

2) The realistic crop yield goal of each crop in the field, obtained pursuant to subsection (e)(1);

3) The phosphorus amount needed for each crop in the planned crop rotation, expressed as P_2O_5, obtained from the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at 35 Ill. Adm. Code 501.200. The determination of this phosphorus amount shall be based on the realistic crop yield goal for each planned crop and the soil test for available phosphorus (Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200);

4) The phosphorus carryover from previous years' application of phosphorus or livestock waste;

5) Soil test phosphorus results for that field; and

6) The maximum livestock waste application rate, consistent with nitrogen-based or phosphorus-based applications allowed under Section 502.615.

h) Nitrogen and phosphorus fertilization rates for the realistic crop yield goal may be obtained from the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at 35 Ill. Adm. Code 501.200, or 35 Ill. Adm. Code 560.Appendix A.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.630 Protocols to Land Apply Livestock Waste During Winter

a) Winter Application Prohibition

1) Surface land application of livestock waste on frozen, ice covered or snow covered ground is prohibited, unless:

A) No practical alternative measures are available to handle the livestock waste within storage facilities or to dispose of the livestock waste at other sites. Examples of practical alternative measures include, but are not limited to, the transfer of waste to another waste handling facility or sewage treatment plant, rental or acquisition of a storage tank, reduction of herd size or depopulation, and protection of the facility from direct precipitation and clean stormwater runoff;

B) Liquid livestock waste cannot be injected or incorporated within 24 hours due to soil conditions;

C) Prior to December 1, the owner or operator has taken steps to provide 120 days of available storage capacity of manure storage areas. Examples of steps that could be taken include, but are not limited to, land application of livestock waste, transfer of waste to another party, protection of waste storage structures from direct precipitation and stormwater runoff, and depopulating facilities to reduce the amount of waste generated;

D) The owner or operator has complied with subsection (a)(1)(C) and yet the storage volume available on December 1 of that winter season is less than 120 days of storage;

E) The owner or operator has notified the Agency in writing on December 1 of that winter season that the CAFO has less than 120 days storage available; and

F) The discharge of livestock waste from the structure to the surface waters is expected to occur due to shortage in storage capacity.

2) The storage volume calculation in subsection (a)(1)(C) must include runoff and direct precipitation plus the volume of livestock excreta, wash

water and other process wastewater generated and expected to enter the storage structure during the period of December 1 to April 1. Runoff volume calculations must meet the following requirements:

A) Runoff calculations must be based on the runoff transferred into the storage structure under frozen ground conditions;

B) Direct precipitation that will reduce the available storage volume must be based on normal precipitation for the December 1 to April 1 period for the nearest weather station and, for facilities exposed to precipitation, the 25-year, 24-hour storm event volume or the design storm event volume determined under Subpart H for swine, poultry and veal large CAFOs that are new sources. The determination of normal precipitation shall be based on National Weather Service or State Water Survey Records;

BOARD NOTE: The following sources may be used to determine normal precipitation:

http://www.isws.illinois.edu/atmos/statecli/newnormals/newnormals.htm or http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl.

C) The owner or operator shall keep a record of the precipitation value used and the source from which the value was obtained; and

D) Calculations must allow for a freeboard of two feet.

3) In the event winter land application is necessary, it must be conducted pursuant to a winter application plan described in subsection (b) and according to the conditions of subsection (c).

b) Winter Application Plan
In order to conduct surface land application on frozen, ice covered, or snow covered ground, the requirements of this subsection (b) must be met.

1) No land application may occur within ¼ mile of a non-farm residence.

2) No discharge may occur during land application of livestock waste.

3) Surface land application on frozen ground shall not occur within 24-hours preceding a forecast of 0.25 inches or more of precipitation in a 24-hour period as measured in liquid form. The CAFO owner or operator shall use

one of the following two methods for determining whether these conditions exist and shall maintain a record of the forecast from the source used:

A) A prediction of a 60 percent or greater chance of 0.25 inches or more of precipitation in a 24-hour period as measured in liquid form, obtained from the National Weather Service's Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring MD 20910, for the location nearest to the land application area; or

BOARD NOTE: The prediction in subsection (b)(3)(A) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/.

B) A prediction of 0.25 inches or more of precipitation in a 24-hour period as measured in liquid form and identified as higher than QPF category 2 obtained from the National Weather Service Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring MD 20910, for the land application area location.

BOARD NOTE: The prediction in subsection (b)(3)(B) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

4) Surface land application of livestock waste on ice covered or snow covered land shall not occur within 24 hours preceding a forecast of 0.1 inches or more of precipitation in a 24 hour period as measured in liquid form. The CAFO owner or operator shall use one of the two methods provided below for determining whether or not these conditions exist and shall maintain a record of the forecast from the source used.

A) A prediction of a 60 percent or greater chance of 0.1 inches or more of precipitation in a 24-hour period as measured in liquid form obtained from the National Weather Service's Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring MD 20910 for the location nearest to the land application area; or

BOARD NOTE: The prediction in subsection (b)(4)(A) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/.

B) A prediction of 0.1 inches or more of precipitation in a 24-hour period as measured in liquid form and identified as higher than QPF category 1 obtained from the National Weather Service's Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring MD 20910 for the land application area location.

BOARD NOTE: The prediction in subsection (b)(4)(B) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

5) If the land application of livestock waste is on ice covered or snow covered land, surface land application shall not occur when the predicted high temperature exceeds 32 degrees F on the day of land application or on any of the 7 days following land application as predicted by the National Weather Service's Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring MD 20910 for the location nearest to the land application area. The owner or operator shall maintain a record of the forecast from the source used.

BOARD NOTE: The predicted high temperature in subsection (b)(5) may be obtained from the National Weather Service at http://www.nws.noaa.gov/mdl/forecast/graphics/MEX/index.html or http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

6) If the surface land application of livestock waste is on ice covered or snow covered land, the CAFO owner or operator shall visually monitor for runoff from the site. The CAFO owner or operator must monitor each ice covered or snow covered field where land application has been conducted daily when the ambient temperature is 32 degrees F or greater following winter land application until all the ice or snow melts from the land application area.

7) If the surface land application of livestock waste is on ice covered or snow covered land and a runoff from the land application area occurs, the CAFO owner or operator shall report any discharge of livestock waste within 24 hours after the discovery of the discharge as follows:

A) The report shall be made to the Agency through the Illinois Emergency Management Agency by calling 1-800-782-7860 or 1-217-782-7860;

B) Within 5 days after this telephone report, the CAFO owner or operator shall file a written report with the Agency that includes the name and telephone number of the person filing the report, location of the discharge, an estimate of the quantity of the discharge, time and duration of the discharge, actions taken in response to the discharge, and observations of the condition of the discharge with regards to turbidity, color, foaming, floatable solids and other deleterious conditions of the runoff for each day of each runoff event until the ice or snow melts off the site.

c) Availability of Individual Fields for Winter Application

If livestock waste is to be surface applied on frozen ground, ice covered land or snow covered land, the land application may only be conducted on land that meets the following requirements:

1) Adequate erosion and runoff control practices exist, including, but not limited to, vegetative fence rows around the site, contour farming, terracing, catchment basins and buffer areas that intercept surface runoff from the site;

2) A crop stubble, crop residue or vegetative buffer of 200 feet exists between the land application area and surface waters, waterways, open tile line intake structures, sinkholes, agricultural wellheads, or other conduits to surface water and the vegetative buffer zone is down gradient of the livestock waste application area;

3) Application on land with slopes greater than 5% is prohibited;

4) Application may only occur on sites that have field specific soil erosion loss, calculated using Revised Universal Soil Loss Equation less than Erosion Factor T, and have a median Bray P1 or Mehlich 3 soil level of phosphorus, in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in 35 Ill. Adm. Code 501.200, equal to or less than 300 pounds per acre;

BOARD NOTE: Soil loss may be calculated using the Revised Universal Soil Loss Equation 2 (RUSLE2) software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm and Erosion Factor T for Illinois soils is available from the USDA-NRCS' published soil surveys at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

5) Surface application may only occur if the setbacks equal three times the otherwise applicable setbacks required by Sections 502.615 and 502.645 if the slope of the field is between 2 percent and 5 percent. This setback requirement does not include the quarter mile distance from residences contained in Section 502.645(a); and

6) For fields with slopes of less than 2 percent, the surface application may only occur if the setbacks equal two times the otherwise applicable setbacks required by Sections 502.615 and 502.645. This setback requirement does not include the quarter mile distance from residences contained in Section 502.645(a).

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.635 Manure and Soil Sampling and Analysis

a) Soil Phosphorus Sampling. Soil samples shall be obtained and analyzed from each field of the land application area where applications are planned. Fields where livestock waste is applied shall be sampled twice for each field during the term of the permit. Soil testing must be conducted as follows:

1) Soil sampling for phosphorus shall be in accordance with the sampling protocols in Chapter 8 of the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at 35 Ill. Adm. Code 501.200. Laboratory analysis for soil phosphorus (Bray P1 or Mehlich 3) shall be in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference at 35 Ill. Adm. Code 501.200;

2) Soil samples shall be at the same time in the cropping cycle and rotation so that results are comparable year to year; and

3) The two required soil samples for each field must be taken at least one year apart.

b) Manure Sampling

1) The CAFO owner or operator shall annually obtain a laboratory analysis of the nutrient content representative of the livestock waste to be land applied as provided within the nutrient management plan. Livestock waste shall be sampled during the application process. Multiple subsamples shall be obtained and combined into one sample so that a representative sample is obtained for analysis. Results of a sample taken during waste application the previous year can be used for plan

preparation unless there has been a change in the waste management practices during the year. The analytical results of livestock waste samples shall be used for calculation of the application rate allowed by the NPDES permit.

2) The laboratory analysis of the livestock waste sample shall include total kjeldahl nitrogen, ammonia or ammonium nitrogen, total phosphorus, total potassium, and percent total solids. The nutrient results shall be reported on the laboratory analysis sheet on a mg/kg dry weight basis or mg/l wet weight basis. The results of these analyses are to be used in determining application rates for livestock waste.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.640 Inspection of Land Application Equipment for Leaks

a) For all permitted CAFOs that land apply livestock waste, the CAFO owner or operator must periodically inspect equipment used for land application of livestock waste for leaks or problems that result in improper operation.

b) The CAFO owner or operator must ensure that the land application equipment is properly calibrated for application of livestock waste on a routine basis.

c) Calibration procedures and schedules shall be described for all equipment in the CAFO's nutrient management plan.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.645 Land Application Setback Requirements

a) Distance from Residences
Livestock waste shall not be land applied within ¼ mile of any residence not part of the CAFO, unless it is injected or incorporated on the day of application.

b) Setbacks from Waters

1) Livestock waste shall not be land applied within 200 feet of surface water, unless the water is upgrade or there is adequate diking, which includes, but is not limited to, diking that prevents runoff from the land application from entering surface waters that are within 200 feet of the land application area.

2) Livestock waste shall not be land applied within 100 feet of down gradient open subsurface drainage intakes, agricultural drainage wells, sinkholes, grassed waterways or other conduits to surface waters, unless a 35 foot vegetative buffer exists between the land application area and the grassed waterways, open subsurface drainage intakes, agricultural drainage wells, sinkholes or other conduits to surface water.

3) The setback requirements in subsection (b)(2) do not apply if the CAFO is able to demonstrate to the Agency that a setback or buffer is not necessary because implementation of alternative conservation practices (including, but not limited to, injection and incorporation) or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 100-foot setback.

c) Livestock waste shall not be applied in a 10-year flood plain unless the injection or incorporation method of application is used.

d) Livestock waste shall not be land applied to waters of the United States, grassed waterways or other conduits to surface waters.

e) Livestock waste shall not be land applied within 200 feet of potable water supply wells.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART G: ADDITIONAL LIVESTOCK WASTE DISCHARGE LIMITATIONS

Section 502.710 New Source Performance Standards for Dairy Cows and Cattle Other Than Veal Calves

a) New Source Performance Standards (NSPS) Applicability
Any CAFO with the capacity to stable or confine 700 or more mature dairy cows, whether milked or dry, or 1,000 or more cattle other than mature dairy cows or veal calves that is a new source must achieve the livestock waste discharge limitations representing the application of NSPS as of the date of permit coverage or within the timelines provided in Section 502.303.

b) The livestock waste discharge limitations representing NSPS for the CAFO production area for CAFOs subject to this Section are the livestock waste discharge limitations found in Sections 502.605 and 502.610.

c) The livestock waste discharge limitations representing NSPS for the CAFO land application area are the livestock waste discharge limitations and requirements found in Sections 502.615 through 502.645.

d) CAFOs subject to this Section shall attain the limitations and requirements in Subpart F as of the date of permit coverage or within the timelines provided in Section 502.303.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.720 Horse and Sheep CAFOs: BPT, BAT and NSPS

This Section contains the effluent limitations applicable to discharges resulting from the production area at horse and sheep CAFOs. CAFOs subject to this Section shall attain the limitations and requirements of this Section as of the date of permit coverage. CAFOs with the capacity to stable or confine fewer than 10,000 sheep or fewer than 500 horses are exempt from these effluent limitations.

a) Effluent Limitations Attainable by the Application of the Best Practicable Control Technology-Currently Available (BPT) for Horse and Sheep CAFOs

1) Except as provided in subsection (a)(2), any existing point source subject to this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United States is the effluent limitation representing the application of BPT for horse and sheep CAFOs.

2) Process waste pollutants in the overflow may be discharged to waters of the United States whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated wastewaters plus the runoff from a 10-year, 24-hour rainfall event for the location of the point source.

b) Effluent Limitations Attainable by the Application of the Best Available Technology Economically Achievable (BAT) for Horse and Sheep CAFOs

1) Except when the provisions of subsection (b)(2) apply, any existing point source subject to this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United States is the effluent limitation representing the application of BAT for Horse and Sheep CAFOs.

2) Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the point source, any process wastewater pollutants in the overflow may be discharged to waters of the United States.

c) New Source Performance Standards (NSPS) for Horse and Sheep CAFOs
Except as provided in subsection (b)(2), any new source subject this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United States is the performance standard representing NSPS for horse and sheep CAFOs.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.730 Duck CAFOs: BPT and NSPS

This Section contains the effluent limitations applicable to discharges resulting from the production areas at dry lot and wet lot duck CAFOs. CAFOs subject to this Section shall attain the limitations and requirements of this Section as of the date of permit coverage. CAFOs with the capacity to stable or confine fewer than 5,000 ducks are exempt from these effluent limitations.

a) Effluent Limitations Attainable by the Application of the Best Practicable Control Technology Currently Available (BPT) for Wet Lot and Dry Lot Duck CAFOs
Any existing point source subject to this Section shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

1) BOD_5 is limited to a maximum daily limit of 3.66 pounds/1,000 ducks or 1.66 kg/1,000 ducks.

2) BOD_5 is limited to a maximum monthly average of 2.0 pounds/1,000 ducks or 0.91 kg/1,000 ducks.

3) Fecal coliform is not to exceed the most probable number (MPN) of 400/100 ml at any time.

b) New Source Performance Standards for Wet Lot and Dry Lot Duck CAFOs

1) Except as provided in subsection (b)(2), any new source subject to this Section shall have no discharge of process wastewater pollutants to waters

of the United States. Achievement of no process wastewater discharge to waters of the United States is the performance standard representing NSPS for duck CAFOs.

2) Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the point source, any process wastewater pollutants in the overflow may be discharged to waters of the United States.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART H: NEW SOURCE PERFORMANCE STANDARDS FOR NEW SWINE, POULTRY AND VEAL LARGE CAFOS

Section 502.800 Applicability

a) This Subpart applies to all new swine, poultry and veal CAFOs with the capacity to stable or confine the numbers of animals of the types provided for in the definition of large CAFOs in Section 502.103.

b) The requirements of this Subpart H are in addition to the livestock waste discharge limitations and technical standards in Subpart F, except Section 502.605.

c) The limitations and requirements of this Subpart must be attained as of the date of NPDES permit coverage or within the timelines provided in Section 502.303.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.810 Production Area Requirements

There must be no discharge of livestock waste pollutants to waters of the United States from the production area unless the CAFO complies with the alternative livestock waste discharge limitations provided in Section 502.830.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.820 Land Application Area Requirements

For CAFOs subject to this Subpart, the land application areas shall attain the same limitations and requirements as specified in Sections 502.615 through 502.645.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.830 Alternative Best Management Practice Livestock Waste Discharge Limitations

a) Any CAFO subject to this Subpart may request that the Agency establish NPDES permit best management practice (BMP) livestock waste discharge limitations designed to ensure no discharge of livestock waste based upon a site-specific evaluation of the CAFO's open surface livestock storage structure.

b) The NPDES permit BMP livestock waste discharge limitations must address the CAFO's entire production area. In the case of any CAFO using an open surface livestock waste storage structure for which the Agency establishes such livestock waste discharge limitations, "no discharge of livestock waste pollutants," as used in this Subpart H, means that the storage structure is designed, operated, and maintained in accordance with BMP established by the Agency on a site-specific basis after a technical evaluation of the storage structure.

c) The technical evaluation must address the elements listed in Section 502.840.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.840 Technical Evaluation

All technical evaluations conducted pursuant to this Subpart H must address the minimum elements contained in this Section. Waste management and storage facilities designed, constructed, operated, and maintained consistent with the analysis conducted in subsections (a) through (g) and operated in accordance with the additional measures and records required by Section 502.610 will fulfill the requirements of this Subpart.

a) Information to be used in the design of the open manure storage structure, including, but not limited to:

1) Minimum storage periods for rainy seasons;

2) Additional minimum capacity for chronic rainfalls;

3) Applicable technical standards that prohibit or otherwise limit land application on frozen, saturated or snow-covered ground found in Section 502.630;

4) Planned emptying and dewatering schedules consistent with the CAFO's nutrient management plan;

5) Additional storage capacity for livestock waste intended to be transferred to another recipient at a later time; and

6) Any other factors that would affect the sizing of the structure.

b) The design of the open livestock waste storage structure as determined in accordance with the USDA National Resource Conservation Service's Agricultural Waste Management Field Handbook, incorporated by reference at 35 Ill. Adm. Code 501.200.

BOARD NOTE: Animal waste management software is available at http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/alphabetical/mnm/?&cid=stelprdb1045812 and includes procedures and calculation based on the Agricultural Waste Management Field Handbook for design of open livestock waste storage units.

c) All inputs used in the open livestock waste storage structure design, including:

1) actual climate data for the previous 30 years, consisting of historical average monthly precipitation and evaporation values;

2) the number and types of animals;

3) anticipated animal sizes or weights;

4) any added water and bedding;

5) any other process wastewater; and

6) the size and condition of outside areas exposed to rainfall and contributing runoff to the open livestock waste storage structure.

d) The planned minimum period of storage in months, including, but not limited to, the factors for designing an open livestock waste storage structure described in subsection (a). Alternatively the CAFO may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the CAFO's nutrient management plan.

e) Site-specific predicted design specifications, including:

1) dimensions of the storage facility;

2) daily manure and wastewater additions;

3) the size and characteristics of the land application areas; and

4) the total calculated storage period in months.

f) An evaluation of the adequacy of the designed manure storage structure using simulation procedures in the USDA Natural Resources Conservation Services Agricultural Waste Management Field Handbook, incorporated by reference at 35 Ill. Adm. Code 501.200.

1) The evaluation must include all inputs used in the simulation, including but not limited to:

A) daily precipitation, temperature, and evaporation data for the previous 100 years;

B) user-specified soil profiles representative of the CAFO's land application areas;

C) planned crop rotations consistent with the CAFO's nutrient management plan; and

D) the final modeled result of no overflows from the designed open livestock waste storage structure.

2) For those CAFOs where 100 years of local weather data for the CAFO's location is not available, CAFOs may use a simulation with a confidence interval analysis conducted over a period of 100 years.

3) The adequacy of the designed manure storage structure may be evaluated using equivalent evaluation and simulation procedures approved by the Agency.

BOARD NOTE: The adequacy of the designed manure storage structure may be evaluated by using the most recent version of the Soil Plant Air Water (SPAW) Hydrology Tool found at http://hydrolab.arsusda.gov/SPAW/Index.htm.

g) The Agency may waive the requirement in subsection (f) for a site-specific evaluation of the designed livestock waste storage structure and instead authorize

a CAFO to use a technical evaluation developed for a class of specific facilities within a specified geographical area.

h) The Agency may request additional information to support a request for livestock waste discharge limitations based on a site-specific open surface livestock waste storage structure.

(Source: Added at 38 Ill. Reg. _____, effective _____)

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~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE E: AGRICULTURE RELATED POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 502
PERMITS

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Section

SUBPART B: PERMIT APPLICATIONS

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AUTHORITY: Implementing Sections 9, 10, 12, 13, 21, and 22 of the Environmental Protection

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

Act [415 ILCS 5/9, 10, 12, 13, 21, 22] ~~(Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1009, 1012, 1013, 1021 and 1022)~~ and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/27] ~~(Ill. Rev. Stat. 1981, ch. 111 ½ par. 1027).~~.

SOURCE: Filed and effective January 1, 1978; amended at 2 Ill. Reg. 44, p. 137, effective October 30, 1978; codified at 7 Ill. Reg. ~~10592~~10594; amended at 38 Ill. Reg. _____, effective _____.

SUBPART A: PERMITS REQUIRED

Section 502.101 NPDES Permit Requirement and Duty to Maintain Permit Coverage

a) A controlled animal feeding operation (CAFO) is a point source. Any discharge of pollutants into waters of the United States from a CAFO is prohibited unless authorized by an NPDES permit or unless the discharge is an agricultural stormwater discharge as described in Section 502.102(b). No person shall cause or allow a discharge from a CAFO in violation of federal or ~~state~~State law, including but not limited to the ~~CWA~~Clean Water Act (CWA) (33 USC 1251), the Act or Board regulations.

b) The owner or operator of a CAFO must seek coverage under an NPDES permit if the CAFO discharges.

c) The owner or operator of a CAFO that discharges must either apply for an individual NPDES permit or submit a notice of intent for coverage under an NPDES general permit. If the Agency has not made a general permit available to the CAFO, the CAFO owner or operator must submit an application for an individual permit to the Agency. All permit applications and applications for permit modifications must contain the information set forth in Subpart B ~~of this Part~~.

d) Any permitted CAFO shall apply for reissuance of the NPDES permit not less than 180 days prior to the expiration date of the permit unless the CAFO will not discharge after the expiration date of the NPDES permit.

e) The owner or operator of a new CAFO that will discharge must apply for NPDES permit coverage at least 180 days prior to the time that the CAFO commences operation.

f) Once an ~~Animal Feeding Operation~~animal feeding operation (AFO) is defined as a CAFO for at least one type of animal, the NPDES permit requirements for CAFOs apply with respect to the all animals in confinement at the ~~Animal Feeding Operation~~animal feeding operation and all livestock waste generated by those animals or the production of those animals.

No person specified in Sections 502.102, 502.103 or 502.104 or required to have a permit under the conditions of Section 502.106 shall cause or allow the operation of any new livestock management facility or livestock waste-handling facility, or cause or allow the modification of any livestock management facility or livestock waste-handling facility, or cause or allow the operation of any existing livestock management facility or livestock waste-handling facility without a National Pollutant Discharge Elimination System (NPDES) permit. Facility expansions, production increases, and process modifications which significantly increase the amount of livestock waste over the level authorized by the NPDES permit must be reported by submission of a new NPDES application.

(Source: Amended at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.102 Land Application Discharges and Agricultural StormwaterTwenty-five Year Storm Event

a) The discharge of livestock waste to waters of the United States from a CAFO as a result of the livestock waste application by the CAFO to land application areas is a discharge from that CAFO subject to NPDES permit requirements, except ~~where~~when it is an agricultural stormwater discharge and therefore exempt from the definition of a point source under ~~Section~~section 502 of the Clean Water Act.

b) Where livestock waste has been land applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the livestock waste and in compliance with Section 502.510 for permitted CAFOs and Section 502.510(b) for unpermitted Large CAFOs, a precipitation-related discharge of livestock waste from land application areas of an unpermitted ~~Large~~large CAFO or a permitted CAFO~~.~~ is an agricultural stormwater discharge.

c) Unpermitted ~~Large~~large CAFOs must maintain the documentation specified in ~~35 Ill. Adm. Code~~Section 502.510(b)(16), either on site or at a nearby office, or

otherwise make ~~such~~that documentation readily available to the Agency upon request.

An NPDES permit shall be required for an animal feeding operation which falls within the criteria set forth in Section 502.103 or Section 502.104 below; provided, however, that no animal feeding operation shall require a permit if it discharges only in the event of a 25-year 24-hour storm event.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.103 Very Large ~~CAFOs Operators~~CAFOsOperators

An ~~Animal Feeding Operation~~animal feeding operation is defined as a ~~Large~~large CAFO if ~~as many as or NPDES~~at leastNPDES permit is required if more than the numbers of animals specified in any of the following categories are stabled or confined:

Number of Animals	Kind of Animals
700	Mature dairy cows, whether milked or dry
1,000	Veal calves
1,000	Cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs.
2,500	Swine, each weighing 55 pounds or more
10,000	Swine, each weighing less than 55 pounds
500	Horses
10,000	Sheep or lambs
55,000	Turkeys
30,000	Laying hens or broilers, if the AFO uses a liquid manure handling system
125,000	Chickens (other than laying hens), if the AFO uses other than a liquid manure handling system
82,000	Laying hens, if the AFO uses other than a liquid manure handling system
30,000	Ducks, ~~(~~if the AFO uses other than a liquid manure handling system~~)~~
5,000	Ducks, ~~(~~if the AFO uses a liquid manure handling system~~)~~

Number of Animals	Kind of Animals

1000	Brood cows and slaughter and feeder cattle
700	Milking dairy cows
500	Horses
2500	Swine weighing over 55 pounds
10,000	Sheep, lambs or goats
~~55,000~~50,000	Turkeys
100,000	Laying hens or broilers (if the facility has continuous overflow watering)
30,000	Laying hens or broilers (if the facility has a liquid manure handling system)
5000	Ducks
1000	Animal units

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.104 Medium ~~CAFOs Large~~CAFOsLarge Operators

a) An ~~Animal Feeding Operation~~animal feeding operation is defined as a ~~Medium CAFO NPDES~~medium CAFONPDES permit is required if more than the following numbers and types of animals specified in any of the following categories are stabled or confined and the provisions of ~~either~~ subsection either condition (b), or (c) or (d) below of this Section is met:

Number of Animals	Kind of Animals
200 to 699	Mature dairy cows, whether milked or dry
300 to 999	Veal calves
300 to 999	Cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs.
750 to 2,499	Swine, each weighing 55 pounds or more
3,000 to 9,999	Swine, each weighing less than 55 pounds
150 to 499	Horses
3,000 to 9,999	Sheep or lambs
16,500 to 54,999	Turkeys
9,000 to 29,999	Laying hens or broilers, if the AFO uses a liquid manure handling system
37,500 to 124,999	Chickens (other than laying hens), if the AFO uses other than a liquid manure handling system
25,000 to 81,999	Laying hens, if the AFO uses other than a liquid

	manure handling system
10,000 to 29,999	Ducks, ~~(~~if the AFO uses other than a liquid manure handling system~~)~~
1,500 to 4,999	Ducks, ~~(~~if the AFO uses a liquid manure handling system~~)~~

Number of Animals	Kind of Animals
300	Brood cows and slaughter ~~or~~and feeder cattle
200	Milking dairy cows
750	Horses
~~750~~150	Swine weighing over 55 pounds
~~150~~	~~Horses~~
3000	Sheep, lambs or goats
16,000	Turkeys
30,000	Laying hens or broilers (if the facility has continuous overflow watering)
9000	Laying hens or broilers (if the facility has a liquid manure handling system)
1000	Ducks
300	Animal units

b) Pollutants are discharged into navigable waters of the United States through a man-made ditch, flushing system or other similar man-made device; or

c) Pollutants are discharged directly into navigable waters of the United States ~~which~~thatwhich originate outside of and pass over, across, through or otherwise come into direct contact with the animals confined in the operation; or.

d) The ~~Animal Feeding Operation~~AFO is designated as a CAFO by the Agency pursuant to Section 502.106.

(Source: Amended at 38 Ill. Reg. _____, effective _____)

Section 502.105 Small CAFOsVoluntary Applications

An ~~Animal Feeding Operation~~animal feeding operation is a ~~Small~~small CAFO if it is designated as a CAFO by the Agency pursuant to Section ~~502.106 of this Part,~~502.106, and it is not a Medium CAFO.None of the requirements listed in this subpart precludes the voluntary filing of

an NPDES application by the owner or operator of an animal feeding operation.

(Source: Amended at 38 Ill. Reg. ____, effective _____)

Section 502.106 Case-By-Case CaseCaseCase-by-case Designation Requiring NPDES Permits

a) Notwithstanding any other provision of this Part, the Agency may require any aAnimal fFeeding oOperationanimal feeding operationanimal feeding operation not falling within SectionsSectionSections 502.102, 502.103 or 502.104 to obtain ana NPDESan NPDESa permit by designating the Animal Feeding OperationAFO as a CAFO upon determining that it is a significant contributor of pollutants toso waters of the United States. In making such designation the determination of whether the Animal Feeding OperationAFO is a significant contributor of pollutants, such designation the Agency shall consider the following factors:

1) The size of the aAnimal fFeeding oOperationAFOanimal feeding operation and the amount of livestock wastes reaching navigable waters of the United States;

2) The location of the aAnimal fFeeding oOperationAFOanimal feeding operation relative to navigable waters of the United States;

3) The means of conveyance of livestock animallivestockanimal wastes and process wastewaters into navigable waters of the United States;

4) The slope, vegetation, rainfall and other factors relative to the likelihood or frequency of discharge of livestock waste animalwasteanimal wastes and process wastewaters into navigable waters of the United States; and

5) Other such factors bearing on the significance of the pollution problem sought to be regulated.

b) The Agency, however, may not require a permit under subsection (a)paragraph a) of this Section for any aAnimal fFeeding oOperationAFOanimal feeding operation with less than the number of animalsanimalsanimal units (300) set forth in Section 502.104 above, unless it meets either of the following conditions:

1) Pollutants are discharged into navigable waters of the United States

through a man-made ditch, flushing system or other similar man-made device; or

2) Pollutants are discharged directly into navigable waters of the United States ~~which~~thatwhich originate outside of and pass over, across, through or otherwise come into direct contact with the animals confined in the operation.

c) In no case may a permit application be required from an ~~a~~Animal ~~f~~Feeding ~~o~~OperationAFOanimal feeding operation designated pursuant to this ~~section~~Sectionsection until there has been an onsite inspection of the operation and a determination that the operation should and could be regulated under the permit program. In addition, no application may be required from an owner or operator of an animal feeding operation designated pursuant to this section unless the owner or operator is notified in writing of the requirement to apply for a permit.

d) Upon receipt of the Agency's notification that an NPDES permit is required pursuant to this Section, paragraph b) the operator shall make application to the Agency within 9060 days. The Agency may issue an NPDES permit with a compliance schedule detailing interim steps to be taken along with a final date, not to exceed 14 months from the date the permit is issued, by which compliance with the Act and all applicable regulations shall be achieved.

e) The Agency will notify the owner or operator in writing of the Agency~~'~~'s decision to designate the ~~Animal Feeding Operation~~AFO as a CAFO under this Section and the grounds for the designation. The owner or operator may file an appeal of the Agency~~'~~'s decision with the Board within 35 days after the date on which the Agency served the decision pursuant to Section 40(a) of the Act and 35 Ill. Adm. Code 105.No animal feeding operation may be required to have a permit if it discharges only in the event of a 25-year 24-hour storm event.

(Source: Amended at 38 Ill. Reg. ~~—~~_____, effective _____~~–~~)

SUBPART B: PERMIT APPLICATIONS

Section 502.201 Permit ApplicationsContents

a) All applications from a new or existing CAFO for any permit, including an

individual permit or a general permit, required under this Chapter shall contain, where appropriate, the following information and documents:

1) The name of the owner or operator;

2) The facility location and mailing addresses;

3) The latitude and longitude at the entrance to the production area;

4) Specific information about the average and maximum number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other); Kinds and numbers of livestock;

52) A statement as to any projected changes in the size of the livestock operation and when they may occur during the term of the permit;

63) The type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter, and process wastewater storage (in tons or gallons); Description of land areas used for the livestock management facilities and livestock waste-handling facilities and land areas used for livestock waste disposal;

74) A topographic map of the geographic area in which the CAFO is located showing the specific location of the production area and land application areas, and indicating the following:A sketch of the existing and/or proposed facility indicating the following:

A) Approximate overall dimensions of the facility;

AB) Direction and location of surface and subsurface drainage and other discharges from the facility; and

BC) ~~General Location~~location~~Location~~General location of waterways in the area~~.~~;

D) Location of area for manure disposal; and

E) A marked-up aerial photograph or U.S.- Geological Survey map of the area involved is desirable in lieu of a sketch.

8) Estimated amounts of livestock waste generated per year (in tons or gallons);

9) The total number of acres of land application area and the estimated amount of waste to be applied to those acres per year;

10) Estimated amount of livestock waste transferred to other persons per year (in tons or gallons);

11) A nutrient management plan that is consistent with the requirements of Subpart E;

12) A stormwater pollution prevention plan;

13) A spill control and prevention plan; and

145) A statement identifying and justifying any departure from current design criteria promulgated by the Agency.

b) The Agency may adopt procedures requiring such additional information as is necessary to determine whether the ~~CAFO livestock~~CAFOlivestock management facility or livestock waste-handling facility will meet the requirements of the Act and applicable Board regulationsrequlations.

c) Applicable requirements of 35 Ill. Adm. Code 309: Subpart A shall apply to applications for NPDES permits required by this ~~chapter~~Chapterchapter. The Agency may prescribe the form in which information required under this ~~section~~Sectionsection shall be submitted.

(Source: Amended at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.202 Permit Application SubmissionsRegistered or Certified Mail

All permit applications shall be mailed, or delivered or electronically submitted to the

appropriate address designated by the Agency. Any application or revised application sent by mail shall be sent by registered or certified mail, return receipt requested. Applications which are hand-delivered shall be delivered to and receipted for by any authorized person employed in the Permit Section of the Agency's Division of Water Pollution Control.

(Source: Amended at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.203 New Applications (Repealed)

Any person now discharging whose discharge was not covered by the Refuse Act permit program (33 U.S.C.- 407), but which is subject to the NPDES program, must apply for an NPDES permit on the effective date of this chapter. However, for purposes of this chapter, any person who has applied for an NPDES permit from the U.S.- Environmental Protection Agency and whose application has not been denied, shall be considered to have applied for an NPDES permit unless the discharge described in the Application for an NPDES Permit has substantially changed in nature, volume, or frequency; in which case another NPDES permit application shall be submitted.

(Source: Repealed at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.204 Renewal

Permittees seeking reissuance of their NPDES permit pursuant to Section 502.101(d) who wish to continue to discharge subsequent to the expiration date of their permit must apply for reissuance of the permit, using proper forms, not less than 180 days prior to the permit expiration date. The Agency will notify ~~such~~thosesuch persons of the need for renewal at least 60 days prior to the date on which the renewal application must be submitted; however, failure to do so does not excuse non-compliance with this ~~chapter~~Chapterchapter.

(Source: Amended at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.205 New Operations (Repealed)

Any person whose livestock waste-handling facility or livestock management facility is required by Sections 502.101, 502.102, 502.103 or 502.104 to obtain a permit and will begin operation on or after the effective date of these Regulations must apply for an NPDES permit no later than 180 days in advance of the date on which the facility is to commence operation minus the number of days available storage time for installed manure storage structures.

(Source: Repealed at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.207 Disclosure Required for Land Trusts

An applicant filing for an NPDES permit shall satisfy the requirements of the ~~"~~Land Trust Beneficial Interest Disclosure Act~~"~~ [735 ILCS 405~~et. seq.).~~] "An Act to Require disclosure, under certification of perjury, of all beneficial interests in real property held in a land trust, in certain cases" (Ill.- Rev.- Stat.- 1981, ch.- 148, par.- 72) before the Agency grants the applicant its permit.

(Source: Amended at 38 Ill. Reg. _____, effective _____~~–~~)

SUBPART C: PERMIT ISSUANCE AND CONDITIONS

Section 502.304 Issuance and Conditions

a) The provisions of 35 Ill. Adm. Code 309: Subpart A shall apply to the issuance, conditions and modification of NPDES permits under this ~~chapter~~Chapterchapter in the same manner as ~~such~~thosesuch provisions apply to NPDES permits issued pursuant to 35 Ill. Adm. Code 309. Specific provisions applicable to CAFOs seeking coverage under NPDES general permits are found in Section ~~502.310 of this Subpart.~~502.310.

b) In addition to specific conditions authorized under this Part, the Agency may impose such conditions in any permit issued pursuant to this Part as may be necessary to accomplish the purposes of the Act or Board regulations.

(Source: Amended at 38 Ill. Reg. ~~—~~ _____, effective _____~~–~~)

Section 502.310 CAFOs Seeking Coverage Under NPDES General Permits

a) CAFO owners or operators must submit a notice of intent that meets the requirements of Section 502.201 and Subpart E of this Part when seeking authorization to discharge under a general permit.

b) When additional information is necessary to complete the notice of intent or to clarify, modify, or supplement previously submitted material, the Agency may request ~~such~~that information from the owner or operator as provided in 35 Ill. Adm. Code 309.106.

c) The Agency must notify the public of its proposal to grant coverage under the general permit to the CAFO. This public notice must include the CAFO~~'~~s nutrient management plan.

d) The process for submitting public comments and hearing requests, and the hearing process if a request for a hearing is granted, will follow the procedures applicable to draft individual permits found in 35 Ill. Adm. Code 309.109(b) and 309.115 through 309.118.

e) The time period for the public to comment and request a hearing is 30 days following the date of the notice issued pursuant to subsection (c).

f) When a public hearing is held, the Agency must respond to significant comments received during the comment period as provided in 35 Ill. Adm. Code 309.119 and 309.120, except that notice and transmission to the ~~U.S. EPA~~USEPA Regional Administrator is not required. If no hearing is held, the Agency shall follow the procedures in 35 Ill. Adm. Code 309.112 and 309.120 for Agency action after the comment period. If necessary, the Agency will require the CAFO owner or operator to revise the nutrient management plan in order to be granted permit coverage.

g) When the Agency authorizes coverage for the CAFO owner or operator under the general permit, the terms of the nutrient management plan shall become incorporated as terms and conditions of the permit for the CAFO. This incorporation of terms and conditions does not require a modification of the general permit.

h) The Agency shall notify the CAFO owner or operator and inform the public that coverage has been authorized and of the terms of the nutrient management plan incorporated as terms and conditions of the permit applicable to the CAFO.

i) Nothing in this Section shall limit the Agency~~'~~s authority to require an individual NPDES permit pursuant to Section 39(b) of the Act.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.315 CAFO Permit Requirements

NPDES permits issued to CAFOs under this Part must include:

a) Requirements to implement a nutrient management plan that meets the provisions of Subpart E ~~of this Part~~.

b) Requirements for the permittee to create, maintain for five years from creation on site, and make available to the Agency, upon request, a complete copy of the records required in Section ~~502.320 of this Part.~~502.320.

c) Annual reporting requirements for permitted CAFOs. The permittee must submit an annual report to the Agency. The annual report must include the information specified in Section ~~502.325 of this Part.~~502.325.

d) Requirements to comply with the livestock waste discharge limitations in Subparts F, G and H ~~of this Part~~, if applicable.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.320 Recordkeeping Requirements

The permittee must create, maintain for five years, and make available to the Agency, upon request, the following records:

a) A copy of all applicable records identified pursuant to Section 502.510(b)(16);

b) A copy of the information required under Section 502.201;

c) Records documenting the visual inspections required under Section 502.610(c);

d) Weekly records of the depth of the manure and process wastewater in the liquid livestock waste storage as indicated by the depth marker ~~under~~, as described in Section 502.610(d);

e) Records documenting any actions taken to correct deficiencies as required ~~under Sections~~by Section 502.610(e) and (f). Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction;

f) Records of mortalities management and practices used by the facility to meet the requirements of Section 502.610(g);

g) Records documenting the current design of any livestock waste storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;

h) Records of the date, time, and estimated volume of any overflow;

i) A copy of the facility~~'~~'s site-specific nutrient management plan;

j) Expected crop yields for land application areas;

k) The ~~date(s)~~dates livestock waste is applied to each land application area;

l) Records documenting subsurface drainage inspections conducted according to the plan developed pursuant to Section 502.510(b)(13);

m) Results from livestock waste and soil sampling;

n) Explanation of the basis for determining livestock waste application rates;

o) Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than livestock waste;

p) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;

q) The method used to apply the livestock waste;

r) Date of livestock waste application equipment inspection;

s) Maximum number and type of animals, whether in open confinement or housed under roof by the following types: beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, turkeys, ducks, other;

t) All records necessary to prepare the annual report required by Section 502.325;

u) Total number of acres of land application area covered by the nutrient management plan;

v) The quantity of livestock waste removed when a manure storage area or waste containment area is dewatered;

w) The ~~permittee will record the~~ following information for each day during which livestock wastes are applied to land:

1) the amount applied to each field in either gallons, wet tons or dry tons per acre~~;~~;

2) soil water conditions at the time of application (such as dry, saturated, flooded, frozen, snow-covered)~~;~~;

3) an estimate of the amount of precipitation 24 hours prior to, and for 24 hours after, the application~~;~~;

4) the type of application method used (surface, surface with incorporation, or injection)~~;~~;

5) the location of the field where livestock waste was applied~~;~~;

6) the results of leak inspection of livestock waste application equipment~~;~~;

7) the name and address of off-site recipients of livestock waste, the amount of waste transferred to each off-site recipient in gallons or dry tons, off-site location on a topographic map, and acreage of each site used by the off-site recipient~~;~~;

8) Weather conditions, including precipitation, air temperature, wind speed, wind direction and dew point, at time of land application and for 24 hours prior to and for 24 hours following application~~;~~; and

9) Records of the weather forecasts required to be maintained pursuant to Sections 502.620(d) and 502.630(b)(3), (4), and (5);

x) The laboratory analysis sheets reporting the analysis of the livestock waste samples shall be kept on file at the facility for the term of ~~this~~the permit and for 5 years after expiration of the permit; and

y) Records documenting the test methods and sampling protocols for manure, litter and process wastewater and soil analyses.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.325 Annual Report

a) The NPDES permit must specify annual reporting requirements for the CAFO. The annual report must be submitted to the Agency.

b) The annual report must contain the following minimum elements:

1) Maximum number and type of animals, whether in open confinement or housed under roof by the following types: beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, turkeys, ducks, other;

2) Quantity of livestock waste generated by the facility in the previous 12 months (tons/gallons);

3) Quantity of livestock waste transferred to another person by the facility in the previous 12 months (in tons or gallons);

4) Total number of acres of land application area covered by the nutrient management plan;

5) Total number of acres the CAFO used for land application of livestock waste in the previous 12 months and were under the control of the CAFO through ownership, lease, or consent agreement;

6) A statement indicating whether the current version of the CAFO~~'~~'s nutrient management plan for land application of livestock waste was developed or approved by a certified nutrient management planner and by whom the certification was issued;

7) Summary of all livestock waste discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume;

8) A report of instances of non-compliance with the NPDES permit in the previous 12 months;

9) The actual crops planted and actual yields for each field;

10) The actual nitrogen and phosphorus content of the livestock waste;

11) The results of calculations conducted in accordance with ~~Sections~~Section 502.515(d)(3) and (e)(3);

12) The amount of livestock waste land applied to each field during the previous 12 months;~~ and~~

13) For any CAFO that implements a nutrient management plan that addresses rates of application in accordance with Section 502.515(e):

   a) the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months~~,~~;

   b) data used in calculations conducted in accordance with Section 502.515(e)(3)~~,~~; and

   c) the amount of any supplemental fertilizer applied during the previous 12 months; and

14) Annual review of the nutrient management practices to be implemented and an update of the nutrient management plan when there is a change in the nutrient management practices.

(Source: ~~Added~~ Amended at 38 Ill. Reg. _____ ~~_____~~, effective _____)

SUBPART E: REQUIREMENTS FOR DEVELOPING AND IMPLEMENTING NUTRIENT MANAGEMENT PLANS

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

Section 502.500 Purpose, Scope and Applicability

The requirements in this Subpart are intended to minimize the transport of nitrogen and phosphorus to waters of the United States in compliance with the nutrient management plan developed by the CAFO owner or operator.

a) The requirements in this Subpart apply to CAFOs required to obtain an NPDES permit. Unpermitted ~~Large~~large CAFOs claiming an agricultural stormwater exemption must comply with Sections 502.102 and 502.510(b).

b) The CAFO owner or operator shall develop, submit and implement a site specific nutrient management plan. This plan shall specifically identify and describe practices that will be implemented to assure compliance with this Subpart and the livestock waste discharge limitations and technical standards of Subparts F, G, and H.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.505 Nutrient Management Plan Information

The nutrient management plan shall contain, at a minimum, the following items:

a) Name, address, and phone number of the owners of the CAFO;

b) Name, address, and phone number of the managers or operators if different than the owners;

c) Address, phone number, and plat location of the CAFO production area;

d) Name of the person who developed the nutrient management plan and a statement indicating whether it was developed or approved by a certified nutrient management planner and by whom the certification was issued;

e) Type of waste storage for the CAFO;

f) Species, size and maximum number of animals at the CAFO;

g) Scaled aerial photos or maps depicting each field available and intended for livestock waste applications with available acreage listed and indicating

residences, non-farm businesses, common places of assembly, streams, wells, waterways, lakes, ponds, rivers, drainage ditches, subsurface drainage systems, other water sources, 10-year flood plain, buffers, slope, locations of structural Best Management Practices, setbacks and areas restricted from application by this Subpart E;

h) For land application areas not owned or rented by the owner or operator of the CAFO, copies of the statement of consent between the owner or operator of the livestock facilities and the owner of the land where livestock waste will be applied;

i) Cropping schedule for each field for the past year, anticipated crops for the current year, and anticipated crops for the five year term of the permit;

j) Realistic crop yield goal for each crop in each field;

k) An estimate of the nutrient value of the livestock waste or results of livestock waste analysis determined pursuant to Section 502.625(c);

l) Livestock waste application methods;

m) Results of the Bray P1 or Mehlich 3 test for soil phosphorus, in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in ~~Section~~35 Ill. Adm. Code 501.200, reported in pounds of elemental phosphorus per acre. If the livestock waste is to be land applied based on a single year or multi-year phosphorus application on the land application area, the following items must be provided~~:~~:

1) An estimate of the volume of livestock waste to be disposed of annually~~;~~:

2) The phosphorus content of the livestock waste~~;~~:

3) The phosphorus amount needed for each crop in the planned crop rotation, expressed as pounds of P_2O_5 per acre, obtained from the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at ~~Section 501.200.~~35 Ill. Adm. Code 501.200; and

4) The maximum livestock waste application rate based on phosphorus for each field, determined pursuant to Section 502.625(g).

n) Calculations showing the following~~:~~:

1) An estimate of the volume of livestock waste to be disposed of annually~~;~~;

2) Nitrogen loss due to the method of storage, if applicable~~;~~;

3) Amount of nitrogen available for application~~;~~;

4) Nitrogen loss due to the method of application~~;~~;

5) Amount of plant-available nitrogen including first-year mineralization of organic nitrogen~~;~~;

6) Amount of nitrogen required by each crop in each field based on realistic crop yield goal~~;~~;

7) Nitrogen credits from previous crops, from other sources of fertilizer applied for the growing season, and from any livestock waste applications during the previous three years for each field~~;~~;

8) Livestock waste application rate based on nitrogen for each field~~;~~; and

9) Land area required for application~~;~~;

o) A listing of fields and the planned livestock waste application amounts for each field.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.510 Nutrient Management Plan Requirements

a) Any permit issued to a CAFO must include a requirement to implement a nutrient management plan by the date of permit coverage that, at a minimum, contains best management practices necessary to meet the requirements of this Section and the applicable livestock discharge limitations and technical standards in 35 Ill. Adm. Code ~~Parts~~ 501 and 502.

b) The nutrient management plan must specify and demonstrate:

1) The livestock waste application rate of nitrogen in a single year and phosphorus in a single year or multiple years, not to exceed the single year crop nitrogen and single year or multi-year phosphorus requirements for realistic crop yield goals in the rotation;

2) Adequate land application area for livestock waste application, which may include ~~(~~i;

   A) land owned by the CAFO owner or operator~~; (ii;~~

   B) land leased by the CAFO~~; (iii;~~

   C) land covered by a consent agreement between the CAFO owner or operator and the property owner~~;~~; or ~~(iv~~

   D) any combination of the ~~above~~land described in subsection (b)(2)(A) through (C);

3) Adequate storage of livestock waste, including procedures to ensure proper operation and maintenance of the storage facilities;

4) Proper management of mortalities to ensure that they are not disposed of in a liquid livestock waste or stormwater storage or treatment system that is not specifically designed to treat animal mortalities;

5) That clean water is diverted, as appropriate, from the production area;

6) Prevention of direct contact of confined animals with waters of the United States;

7) That chemicals and other contaminants handled on-site are not disposed of in any livestock waste or stormwater storage or treatment system unless specifically designed to treat ~~such~~those chemicals and other contaminants;

8) Appropriate site specific conservation practices to be implemented, including, as appropriate, buffers or equivalent practices, to control runoff of pollutants to waters of the United States;

9) Protocols for appropriate testing of livestock waste and soil. Livestock waste must be analyzed a minimum of once annually for nitrogen and phosphorus content, and soil analyzed a minimum of twice every five years for phosphorus content. The results of these analyses are to be used in determining application rates for livestock wastes;

10) Protocols to land apply livestock waste in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the livestock waste;

11) Livestock waste shall not be applied within the distance from residences provided in Section 502.645(a) and within the areas prohibited from land application by this Part;

12) A winter time land application plan that meets the requirements of Section 502.630~~ of this Part~~;

13) The plan for the inspection, monitoring, management and repair of subsurface drainage systems at the livestock waste application site. Inspection of subsurface drainage systems shall include visual inspection prior to land application to determine failures that may cause discharges and visual inspection during and after land application to identify discharges;

14) A spill prevention and control plan;

15) Annual review of the nutrient management practices to be implemented and an update of the nutrient management plan when there is a change in the nutrient management practices;

16) Specific records that will be maintained to document the implementation and management of the minimum elements described in subsections (b)(2) through (15)~~ of this Section~~; and

17) A description of the storage provisions and schedules provided for livestock waste when cropping practices, soil conditions, weather conditions or other conditions prevent the application of livestock waste to land or prevent other methods of livestock waste disposal.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.515 Terms of Nutrient Management Plan

Any permit issued to a CAFO must require compliance with the terms of the CAFO's site-specific nutrient management plan. These terms include:

a) The terms of the nutrient management plan are the information, protocols, best management practices, and other conditions in the nutrient management plan determined by the Agency to be necessary to meet the requirements of Sections 502.505 and 502.510.

b) The terms of the nutrient management plan, with respect to protocols for land application of livestock waste as required by Subpart F, must include:

1) the fields available for land application;

2) field-specific rates of application properly developed pursuant to ~~subsections~~subsection (d) or (e)~~ of this Section,~~ to ensure appropriate agricultural utilization of the nutrients in the livestock waste; and

3) any timing limitations identified in the nutrient management plan concerning land application on the fields available for land application.

c) The terms of the nutrient management plan must address rates of application using either the ~~Linear Approach~~linear approach as described in subsection (d)~~ of this Section~~ or the narrative rate approach as described in subsection (e)~~ of this Section~~, unless the Agency specifies that only one of these approaches may be used.

d) The linear approach is an approach that expresses rates of application as pounds of nitrogen and phosphorus, according to the following specifications:

1) The terms include maximum application rates from livestock waste for each year of permit coverage, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Agency, in pounds per acre, per year, for each field to be used for land application, and certain factors necessary to determine ~~such~~those rates.

2) At a minimum, the factors that are terms must include:

A) the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field;

B) the crops to be planted in each field or any other uses of a field, such as pasture or fallow fields;

C) the realistic yield goal for each crop or use identified for each field;

D) the nitrogen and phosphorus recommendations, according to Section ~~502.625~~502.625, for each crop or use identified for each field;

E) credits for all nitrogen in the field that will be plant available;

F) consideration of multi-year phosphorus application;

G) accounting for all other additions of plant available nitrogen and phosphorus to the field;

H) the form and source of livestock waste to be land- applied;

I) the timing and method of land application; and

J) the methodology by which the nutrient management plan accounts for the amount of nitrogen and phosphorus in the livestock waste to be applied.

3) CAFOs that use this linear approach must calculate the maximum amount of livestock waste to be land applied at least once each year using the results of the most recent representative livestock waste tests for nitrogen and phosphorus taken within 12 months ~~of~~after the date of land application required by Section 502.635.

e) The narrative rate approach is an approach that expresses rates of application as a narrative rate of application that results in the amount, in tons or gallons, of livestock waste to be land applied, according to the provisions of this subsection (e).

1) The terms include:

A) maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Agency, in pounds per acre, for each field, and certain factors necessary to determine ~~such~~those amounts;

B) the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field;

C) the crops to be planted in each field or any other uses, such as pasture or fallow fields, including alternative crops identified in accordance with subsection (e)(1)(G) ~~of this Section~~;

D) the realistic yield goal for each crop or use identified for each field;

E) the nitrogen and phosphorus recommendations according to Section 502.625 for each crop or use identified for each field;

F) the methodology by which the nutrient management plan accounts for the following factors when calculating the amounts of livestock waste to be land applied:

i) results of soil tests conducted in accordance with protocols identified in the nutrient management plan, as required by Section 502.510(b)(9);

ii) credits for all nitrogen in the field that will be plant available;

iii) the amount of nitrogen and phosphorus in the livestock waste to be applied;

iv) consideration of multi-year phosphorus application;

v) accounting for all other additions of plant nitrogen and phosphorus to the field;

vi) the form and source of livestock waste;

vii) the timing and method of land application; and

viii) volatilization of nitrogen and mineralization of organic nitrogen~~.~~;

G) alternative crops identified in the CAFO~~'~~'s nutrient management plan that are not in the planned crop rotation.

i) ~~Where~~When a CAFO includes alternative crops in its nutrient management plan, the crops must be listed by field, in addition to the crops identified in the planned crop rotation for that field, and the nutrient management plan must include realistic crop yield goals and the nitrogen and phosphorus recommendations according to Section 502.625 for each crop.

ii) Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of livestock waste to be applied must be determined in accordance with the methodology described in subsections (e)(1)(A) through (F)~~ of this Section~~.

2) For CAFOs using this narrative approach, the following projections must be included in the nutrient management plan submitted to the Agency, but are not terms of the nutrient management plan:

A) the CAFO~~'~~'s planned crop rotations for each field for the period of permit coverage;

B) the projected amount of livestock waste to be applied;

C) projected credits for all nitrogen in the field that will be plant available;

D~~)~~ consideration of multi-year phosphorus application;

E) accounting for all other additions of plant available nitrogen and phosphorus to the field;

F) the predicted form, source, and method of application of livestock waste for each crop; and

G) timing of application for each field, insofar as it concerns the calculation of rates of application~~, is not a term of the nutrient management plan~~.

3) CAFOs that use this narrative rate approach must calculate maximum amounts of livestock waste to be land applied at least once each year using the methodology required in subsections (e)(1)(A) through (F) ~~of this Section~~ before land applying livestock waste and must rely on the following data:

A) a field-specific determination of nitrogen that will be plant available consistent with the methodology required by subsections (e)(1)(A) through (F)~~ of this Section~~, and for phosphorus, the results of the most recent soil test conducted in accordance with soil testing requirements approved by the Agency; and

B) the results of most recent representative livestock waste tests for nitrogen and phosphorus taken within 12 months ~~of~~after the date of land application, in order to determine the amount of nitrogen and phosphorus in the livestock waste to be applied.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.520 Changes to the ~~Nutrient~~Nurient Management Plan

When a CAFO owner or operator makes changes to the CAFO~~'~~'s nutrient management plan ~~previously~~previsouly submitted to the Agency, the procedures in this Section are applicable.

a) The CAFO owner or operator must identify changes to the nutrient management plan, except that the results of calculations made in accordance with the requirements of ~~Sections~~Section 502.515(d)(3) and ~~502.515~~(e)(3) ~~of this Part~~ are not subject to the requirements of this Section. These ~~calculations~~calculation may

be revised without submittal to the Agency provided the calculation revisions do not change the terms of the nutrient management plan.

b) The Agency must determine whether the changes to the nutrient management plan necessitate revision to the terms of the nutrient management plan incorporated into the permit issued to the CAFO.

1) If revision to the terms of the nutrient management plan is not necessary, the Agency must notify the CAFO owner or operator and, upon ~~such~~that notification, the CAFO may implement the revised nutrient management plan.

2) If revision to the terms of the nutrient management plan is necessary, the Agency must determine whether ~~such~~the changes are substantial changes as described in subsection (d)~~ of this Section~~.

3) If the Agency determines that the changes to the terms of the nutrient management plan are not substantial, the Agency must notify the owner or operator and inform the public of any changes to the terms of the nutrient management plan that are incorporated into the permit.

c) If the Agency determines that the changes to the terms of the nutrient management plan are substantial, the Agency must notify the public and make the proposed changes and the information submitted by the CAFO owner or operator available for public review and comment.

1) The process and time limits for submitting public comments and hearing requests, the hearing process if a request for a hearing is granted, and the process for responding to significant comments received during the comment period, will follow the procedures applicable to draft general permits found in ~~35 Ill. Adm. Code~~Section 502.310(d) through (f).

2) The Agency will require the CAFO owner or operator to further revise the nutrient management plan, if necessary, in order to approve the revision to the terms of the nutrient management plan incorporated into the CAFO's permit.

3) Once the Agency incorporates the revised terms of the nutrient management plan into the permit, the Agency must notify the owner or

operator and inform the public of the final decision concerning the revisions to the terms and conditions of the permit.

d) Substantial changes to the terms of the nutrient management plan incorporated as terms and conditions of a permit include, but are not limited to:

1) Addition of new land application areas not previously included in the CAFO's nutrient management plan~~. Except~~; except that, if the land application area that is being added to the nutrient management plan is covered by the terms of a nutrient management plan incorporated into an existing NPDES permit in accordance with the requirements of Section 502.515, and the CAFO owner or operator applies livestock waste on the newly added land application area in accordance with the existing field-specific permit terms applicable to the newly added land application area, ~~such~~ addition of new land would be a change to the new CAFO owner's or operator's nutrient management plan but not a substantial change for purposes of this Section;

2) For nutrient management plans using the ~~Linear Approach~~linear approach as set forth in Section 502.515(d), changes to the field-specific maximum annual rates of land application (pounds of nitrogen and phosphorus from livestock waste). For nutrient management plans using the narrative rate approach, changes to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop;

3) Addition of any crop or other uses not included in the terms of the CAFO's nutrient management plan and corresponding field-specific rates of application expressed in accordance with Section 502.515~~ of this Part~~; and

4) Changes to site-specific components of the CAFO's nutrient management plan, ~~where such~~when the changes are likely to increase the risk of nitrogen and phosphorus transport to waters of the United States.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART F: LIVESTOCK WASTE DISCHARGE LIMITATIONS AND TECHNICAL STANDARDS

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

Section 502.600 Applicability

This Subpart provides livestock waste discharge limitations and technical standards for permitted CAFOs. Permitted CAFOs must achieve the livestock waste discharge limitations and technical standards in this Subpart as of the date of permit coverage. Unpermitted ~~Large~~large CAFOs claiming an agricultural stormwater exemption must comply with Sections 502.102 and 502.510(b) and are subject to portions of this Subpart to the extent required by Section 502.510(b). This Subpart does not apply to CAFOs that stable or confine ~~Horses, Sheep~~horses, sheep or ~~Ducks~~ducks. CAFOs that stable or confine ~~Horses~~horses or ~~Sheep~~sheep are subject to applicable production area livestock waste discharge limitations and technical standards found in Section 502.720. CAFOs that confine ~~Ducks~~ducks in either a ~~Dry Lot~~dry lot or ~~Wet Lot~~wet lot are subject to applicable production area livestock waste discharge limitations and technical standards found in Section 502.730.

(Source: Added at 38 Ill. Reg. ___, effective _____)

Section 502.605 Livestock Waste Discharge Limitations for the Production Area for Permitted CAFOs

a) Except as provided in subsections (a)(1), (a)(2) and (c) ~~of this Section~~, there must be no discharge of livestock wastes into waters of the United States from the CAFO production area. Whenever precipitation causes an overflow of livestock wastes from the containment or storage structure, ~~such~~livestock wastes in the overflow may be discharged into waters of the United States provided:

1) The production area is designed, constructed, operated and maintained to contain all livestock wastes, including the runoff and the direct precipitation from a 25-year, 24-hour precipitation event, except that, for swine, poultry or veal ~~Large~~, large CAFOs that are new sources ~~which~~ must comply with Subpart H ~~of this Part~~, and

2) The production area is operated in accordance with the additional measures and records required by Section 502.610.

b) Any point source subject to this Subpart must achieve the livestock waste discharge limitations in this Section as of the date of the permit coverage.

c) Voluntary ~~alternative performance standards~~Alternative Performance Standards. Any CAFO subject to this Subpart may request the Agency to establish NPDES permit livestock waste discharge limitations based upon site-specific alternative technologies that achieve a quantity of pollutants discharged from the production area equal to or less than the quantity of pollutants that would be discharged under the baseline performance standards as provided by ~~Section 502.605~~subsection (a).

1) In requesting site-specific livestock waste discharge limitations to be included in the NPDES permit, the CAFO owner or operator must submit a supporting technical analysis and any other relevant information and data that would support ~~such~~those site-specific livestock waste discharge limitations within the time frame provided by the Agency.

2) The supporting technical analysis must include calculation of the quantity of pollutants discharged, on a mass basis ~~where~~when appropriate, based on a site-specific analysis of a system designed, constructed, operated, and maintained to contain all livestock waste, including the runoff from a 25-year, 24-hour rainfall event.

3) The technical analysis of the discharge of pollutants must include:

A) all daily inputs to the storage system, including livestock waste, direct precipitation, and runoff;

B) all daily outputs from the storage system, including losses due to evaporation, sludge removal, and ~~the~~ removal of wastewater for use on cropland at the CAFO or transport off site;

C) a calculation determining the predicted median annual overflow volume based on a 25-year period of actual rainfall data applicable to the site;

D) site-specific pollutant data, including nitrogen, phosphorus, BOD_5 and total suspended solids, for the CAFO from representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data; and

E) predicted annual average discharge of pollutants, expressed ~~where,~~ when appropriate, as a mass discharge on a daily basis (lbs/day),

and calculated considering subsections (c)(3)(A) through (D)~~ of this subsection~~.

4) The Agency has the discretion to request additional information to supplement the supporting technical analysis, including inspection of the CAFO.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.610 Additional Measures for CAFO Production Areas

Each CAFO subject to this Subpart must implement the following:

a) The CAFO owner or operator must at all times properly operate and maintain all structural and operational aspects of the facilities, including all systems for livestock waste treatment, storage, management, monitoring and testing.

b) Livestock within a CAFO production area shall not come into contact with waters of the United States.

c) Visual ~~inspections~~Inspections. There must be routine visual inspections of the CAFO production area. At a minimum, the following must ~~be visually inspected~~occur:

1) Weekly inspections of all stormwater diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to the wastewater and manure storage and containment structure;

2) Daily inspection of water lines in the production areas, including drinking water or cooling water lines; and

3) Weekly inspections of the livestock waste storage facilities. The inspection will note the level in the liquid livestock waste storage facility using the depth marker required in subsection (d)~~ of this Section~~.

d) Depth ~~marker~~Marker. All open surface liquid livestock waste storage facilities must have a depth marker ~~which~~that clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. In the case of new sources subject to livestock waste discharge

limitations established pursuant to Section ~~502.830 of this Part,~~502.830, all open surface livestock waste storage structures associated with ~~such~~the sources must include a depth marker ~~which~~that clearly indicates the minimum capacity necessary to contain the maximum runoff and direct precipitation associated with the design storm used in sizing the storage facility for no discharge.

e) Corrective ~~actions~~Actions. Any deficiencies found as a result of these inspections must be corrected as soon as possible.

f) In addition to the requirement in subsection (e) ~~of this Section~~, deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction.

g) Discharge to waters of the United States of pollutants from dead livestock or dead animal disposal facilities ~~are~~is prohibited. Dead livestock and water contaminated by dead livestock shall not be disposed of in the liquid manure storage structures, egg wash wastewater facilities, egg processing wastewater facilities, or areas used to hold products, by-products or raw materials that are set aside for disposal, or contaminated stormwater facilities, other than facilities used solely for disposal of dead livestock.

h) Chemicals and other contaminants shall not be disposed of in any livestock waste or stormwater storage or treatment system unless specifically designed to treat ~~such~~those chemicals and other contaminants.

i) A CAFO owner or operator utilizing an earthen lagoon or other earthen manure storage area or waste containment area shall inspect all berm tops, exterior berm sides, and non-submerged interior berm sides for evidence of erosion, burrowing animal activity, and other indications of berm degradation on a frequency of not less than once every week.

j) The CAFO owner or operator shall perform periodic removal of livestock waste solids from liquid manure storage areas and the waste containment area to maintain proper operation of the storage structures. Soils that are contaminated with livestock waste removed from earthen manure storage structures shall be considered livestock waste.

k) Requirements ~~relating~~Relating to ~~transfer of livestock waste to other persons~~Transfer of Livestock Waste to Other Persons.

1) Prior to transferring livestock waste to other persons, CAFOs must provide the recipient of the livestock waste with the most current nutrient analysis.

2) The analysis provided must be consistent with applicable requirements to sample livestock wastes in Section 502.635(b).

3) CAFOs must retain for five years records of the date, recipient name and address, and approximate amount of livestock waste transferred to another person.

l) Livestock Waste Storage ~~requirements~~Requirements

1) Livestock waste storage structures at the CAFO production area shall be designed to contain a volume equal to or greater than the sum of the volumes of the following:

A) the amount of waste generated during a 180-day period of operation at design capacity;

B) the runoff volumes generated during a 180-day period, including all runoff and precipitation from lots, roofs and other surfaces where precipitation is directed into the storage structure;

C) the volume of all wash down liquid generated during the 180-day period that is directed into the manure storage structure;

D) the volume of runoff and precipitation directed to the storage structure during a 25-year, 24-hour storm event;

E) the design volatile solids loading volume, if applicable;

F) the sludge accumulation volume, if applicable; and

G) a freeboard of 2 feet, except for structures with a cover or otherwise protected from precipitation.

2) The storage volume requirements in this subsection (l) do not apply to pump stations, settling tanks, pumps, piping or other components of the

CAFO production area that temporarily hold or transport waste to a storage facility meeting the requirements of this subsection (l).

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.615 Nutrient Transport Potential

a) Field ~~assessment~~Assessment. An individual field assessment of the potential for nitrogen and phosphorus transport from the field to surface waters must be conducted and the results contained in the nutrient management plan. The following factors must be identified for each field to determine nitrogen and phosphorus transport potential to waters of the United States:

1) Soil type;

2) Slope;

3) Conservation practices;

4) Soil erodibility or potential for soil erosion;

5) Soil test phosphorus;

6) Tile inlet locations;

7) Distance to surface waters;

8) Proximity to wells;

9) Location of conduits to surface water, including preferential flow paths; and

10) Subsurface drainage tiles.

b) The applicant shall utilize the field assessment information obtained in subsection (a) ~~of this Section~~ to determine the appropriate phosphorus-based or nitrogen-based application rate for each assessed field. The determination of

phosphorus-based or nitrogen-based application of livestock waste on an assessed field must be consistent with subsection (c) or (d) ~~or this Section~~ and Sections 502.620, 502.625, 502.630, and ~~502.635 of this Part.~~502.635.

c) Nitrogen-based application of livestock waste must be conducted consistent with the following requirements:

1) livestock waste is applied consistent with the setback requirements in Section 502.645;

2) available soil phosphorus (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in ~~Section~~35 Ill. Adm. Code 501.200) is equal to or less than 300 pounds per acre;

3) the soil loss calculated using the Revised Universal Soil Loss Equation 2 (RUSLE2) is less than the erosion factor T;

BOARD NOTE: Soil loss may be calculated using ~~Revised Universal Soil Loss Equation 2 (the~~ RUSLE 2~~)~~ software program available at ~~http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm~~http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm and Erosion Factor T for Illinois soils is available from the United States Department of Agriculture Natural Resources Conservation Service~~'~~s (USDA-NRCS) published soil surveys at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

4) if conduits on the field are less than 400 feet from surface waters, the setback requirements in Section 502.645(b)(2) do not apply. Instead, the following setbacks apply:

A) Livestock waste application shall be conducted no closer than:

i) 150 feet from a tile inlet, agricultural well head, sinkhole, or edge of a ditch that has no vegetative buffer; or

~~B)~~ ~~Livestock waste application shall be conducted no closer than~~ ii) 50 feet from a tile inlet, agricultural well head,

sinkhole, or edge of a ditch that has a 50 foot vegetative buffer or 50 feet from the center of a grass waterway.;

CB) These setbacks do not apply if the CAFO is able to demonstrate to the Agency that a setback or buffer is not necessary because implementation of alternative conservation practices (including, but not limited to, injection and incorporation) or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 150-foot setback under Section 502.615subsection (c)(4)(A)(i) or the 50-foot setback under Section 502.615subsection (c)(4)(BA).(ii);

5) if conduits on the field are greatermore than 400 feet from surface waters, the setback requirements in Sectionsubsection (c)(4) do not apply;

6) where surface waters are on the assessed field or within 200 feet of the field, the livestock waste applied to the field shall be injected or incorporated within 24 hours ofafter the application or equivalent conservation practices must be installed and maintained on the field pursuant to the United States Department of Agriculture Natural Resources Conservation ServiceUSDA-NRCS practice standards; and

7) if nitrogen-based application cannot be conducted in accordance with this Sectionsubsection (c), then phosphorus-based application must be conducted as specified in Section 502.615subsection (d).

d) Phosphorus-based application of livestock waste must be conducted consistent with the following requirements:

1) livestock waste must be applied consistent with the setback requirements in Section 502.645;

2) the livestock waste application rate must not exceed the annual agronomic nitrogen demand of the next crop grown as provided in Section 502.625(a);

3) if the soil contains greater than 50 pounds of available soil phosphorus per acre (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated

by reference in ~~Section~~35 Ill. Adm. Code 501.200)~~)~~, phosphorus-based application rates must be neutral during the nutrient management plan period;

4) if the soil contains greater than 300 pounds of available soil phosphorus per acre (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in ~~Section~~35 Ill. Adm. Code 501.200~~)~~), the amount of phosphorus applied in the livestock waste must not exceed the amount of phosphorus removed by the next year~~'~~s crop grown and harvested; and

5) livestock waste shall not be applied to fields with available soil phosphorus (median Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in ~~Section~~35 Ill. Adm. Code 501.200~~)~~) greater than 400 pounds per acre.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.620 Protocols to Land Apply Livestock Waste

a) Livestock wastes shall not be applied to waters of the United States. Livestock waste application shall not cause runoff to waters of the United States during non-precipitation events. Livestock waste application shall not occur on land that is saturated at the time of application. Livestock waste shall not be applied onto land with ponded water.

b) Discharge of livestock waste to waters of the United States or off-site during dry weather through subsurface drains is prohibited.

c) Livestock waste shall not be applied during precipitation when runoff of livestock waste will be produced.

d) Surface land application of livestock waste shall not occur within 24 hours preceding a forecast of 0.5 inches or more of precipitation in a 24 -hour period as measured in liquid form. The CAFO owner or operator shall use one of the following two methods ~~provided below~~ for determining whether ~~or not~~ these conditions exist and shall maintain a record of the forecast from the source used~~.~~:

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1) A prediction of a 60 percent or greater chance of 0.5 inches or more of precipitation in a 24 -hour period as measured in liquid form, obtained from the National Weather Service~~'~~'s Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring~~,~~ MD 20910 for the location nearest to the land application area; or

BOARD NOTE: The prediction ~~is Section 502.610~~in subsection (d)(1) may be obtained from the National Weather Service~~'s Web site~~ at ~~http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/~~http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/.

2) A prediction of 0.5 inches or more of precipitation in a 24 -hour period as measured in liquid form and identified as higher than Quantitative Precipitation Forecast(QPF) category 3, obtained from the National Weather Service~~'~~'s Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring, MD 20910 for the land application area location.

BOARD NOTE: The prediction in ~~Section 502.620~~subsection (d)(2) may be obtained from the National Weather Service~~'s Web site~~ at ~~http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm~~http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

e) Determination of soil loss must be made for each field using Revised Universal Soil Loss Equation ~~2.~~2 (RUSLE2).

BOARD NOTE: Soil loss may be determined using ~~Revised Universal Soil Loss Equation 2 (~~the RUSLE2~~)~~ software program available at ~~http://fargo.nserl.purdue.edu/rusle2_dataweb/~~http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm.

f) Surface land application may be used when the land slope is no greater than 5% or when the yearly average soil loss calculated using ~~Revised Universal Soil Loss Equation~~ RUSLE2 is equal to or less than 5 tons per acre per year or Erosion Factor T, whichever is less, regardless of slope. Injection or incorporation within 24 hours shall be used when the land slope is greater than 5% and the yearly

average soil loss calculated using ~~Revised Universal Soil Loss Equation~~ RUSLE2 is greater than 5 tons per acre per year or Erosion Factor T, whichever is less.

BOARD NOTE: Soil loss may be determined using ~~Revised Universal Soil Loss Equation 2 (~~the RUSLE2~~)~~ software program available at ~~http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm~~http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm and Erosion Factor T for Illinois soils is available from the USDA United States Department of Agriculture Natural Resources Conservation Service~~'~~s published soil surveys at ~~http://soils.usda.gov/survey/printed_surveys/~~http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

g) Land application of livestock waste is prohibited on slopes greater than 15%.

h) Liquid livestock waste shall not be applied to land with less than 36 inches of soil covering fractured bedrock, sand or gravel.

i) Livestock waste shall not be applied to bedrock outcrops.

j) Livestock waste shall be applied at no greater than 50 percent of the agronomic nitrogen rate determined pursuant to Section 502.625 when there is less than 60 inches of unconsolidated material over bedrock.

k) Livestock waste shall be applied at no greater than 50 percent of the agronomic nitrogen rate determined pursuant to Section 502.625 when the minimum soil depth to seasonal high water table is less than or equal to 2 feet.

l) Livestock waste shall not be applied at rates that exceed the infiltration rates of the soil.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.625 Determination of Livestock Waste Application Rates

a) Livestock waste application shall not exceed the agronomic nitrogen rate, which is defined as the annual application rate of nitrogen that can be expected to be required for a realistic crop yield goal. Multi-year phosphorus application is

allowed when ~~such~~the application is specified in a nutrient management plan and meets the requirements in Section 502.615. Any such application must be consistent with nutrient management plan requirements. The agronomic rate must be determined in a manner consistent with this Section and Section 502.615.

b) Livestock Waste Volumes. The estimate of the annual volume of available livestock waste for application shall be obtained by multiplying the number of animals constituting the maximum design capacity of the facility by the appropriate amount of waste generated by the animals. For purposes of this ~~section~~Section, ~~"~~"maximum design capacity~~"~~" means the maximum number of animals that can be housed at any time for a minimum of 45 days at a CAFO. The following sources may be used to obtain the amount of waste generated:

~~1)~~ 1) Livestock Waste Facilities Handbook, Third Edition, Table 2-1, incorporated by reference at 35 Ill. Adm. Code 501.200(a)~~;~~;

~~2)~~ 2) 35 Ill. Adm. Code ~~560,~~ 560,Table 1;

~~3)~~ 3) Manure Characteristics, 2nd ed., 2004 (MWPS-18 Section 1), MidWest Plan Service, incorporated by reference at 35 Ill. Adm. Code 501.200(a);

~~4)~~ 4) NRCS Agricultural Waste Management Field Handbook Chapter 4; and

~~5)~~ 5) ASABE Standard Data ASAE D384.2 MAR 2005 (R2010).

c) Nutrient Value of Livestock Waste. For new livestock facilities that have not generated livestock waste, the owner or operator must prepare a plan based on an average of the minimum and maximum numbers in the table values derived from Livestock Waste Facilities Handbook, Third Edition, ~~(~~Table 2-1, 10-6, or 10-~~7)~~,7, or Manure Characteristics, incorporated by reference at 35 Ill. Adm. Code 501.200, or ~~the~~ 35 Ill. Adm. Code ~~560,~~ 560,Table 1 or Table 2. If ~~"~~"as produced~~"~~" or ~~"~~"as excreted~~"~~" nutrient values are used, the nitrogen value shall be adjusted to account for losses due to the type of storage system utilized using an average of the ranges in Livestock Waste Facilities Handbook, Third Edition, Table 10-1. Other sources of nutrient values may be used if approved by the Agency. Owners or operators of existing livestock facilities~~,~~ must prepare the plan based on representative sampling and analysis of the livestock waste generated by the CAFOs in accordance with Section 502.635(b).

d) Adjustments to Nitrogen Availability. Adjustments shall be made to nitrogen availability to account for the following:

1) Nitrogen loss from livestock waste due to method of application, based on an average of the ranges in Livestock Waste Facilities Handbook, Third Edition, Table 10-2; and

2) The first-year mineralization of organic nitrogen into a plant available form, as obtained from Livestock Waste Facilities Handbook, Third Edition, Table 10-5.

e) Realistic Crop Yield Goal

1) The realistic crop yield goal shall be determined for each field where the livestock waste is to be land applied. The realistic crop yield goal shall be determined using an average yield over a five-year period from the field where livestock waste is to be land applied. The source of data to be utilized to determine the realistic crop yield goal is provided in subsection (e)(2) ~~of this Section.~~

2) Whenever five years of data is available for the field where livestock waste is to be land applied, proven yields shall be used in calculating the realistic crop yield, unless there is an agronomic basis for predicting a different realistic crop yield goal. The owner or operator shall indicate the method used to determine the proven yield. Data from years with crop disasters may be discarded.

A) If five years of proven yield data is not available for the field where the livestock waste is to be land applied, or if an agronomic basis exists for predicting a different realistic crop yield goal, the owner or operator may calculate the realistic crop yield goal using crop insurance yields or Farm Service Agency ~~United States Department of Agriculture~~USDA yields. If either of these sources is used, a copy of the insurance or assigned crop yields shall be included with the nutrient management plan.

B) If data is not available on proven yields, crop insurance yields or Farm Service Agency yields, or if an agronomic basis exists for predicting a different realistic crop yield goal, soils based yield

data from the University of Illinois "Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils; Bulletin No. 810" (Bulletin 810) or "Optimum Crop Productivity Ratings for Illinois Soils ; Bulletin 811" (Bulletin 811), incorporated by reference at 35 Ill. Adm. Code 501.200, shall be used by the owner or operator to calculate the realistic crop yield goal pursuant to subsection (e)(1).

i) If Bulletin 810 or 811 is used to calculate the realistic crop yield goal, a soil map of the land application areas shall be included in the nutrient management plan.

ii) If Bulletin 810 or 811 is used, the realistic crop yield goal shall be determined by a weighted average of the soil interpretation yield estimates for the fields where livestock waste is to be land applied.

iii) If Bulletin 811 is used, the owner or operator shall demonstrate in the nutrient management plan that the operational management and field conditions of the facility and land application areas meet the requirements for optimum conditions as provided in Bulletin 811.

f) Nitrogen Credits

1) Nitrogen credits shall be calculated by the CAFO owner or operator, pursuant to Section 502.505(n)(7) ~~of this Part~~, for nitrogen-producing crops grown the previous year, for other sources of nitrogen applied for the growing season, and for mineralized organic nitrogen in livestock waste applied during the previous three years.

2) Nitrogen credits shall be calculated by the CAFO owner or operator for the mineralized organic nitrogen in livestock waste applied during the previous three years at the rate of 50%, 25%, and 12.5%, respectively, of that mineralized during the first year.

g) Phosphorus. The plan shall be developed or amended by the CAFO owner or operator to determine the maximum livestock waste application rate for each field. The plan for that field shall contain the following:

1) The phosphorus content of the livestock waste shall be determined in accordance with subsection (c) ~~of this Section~~;

2) The realistic crop yield goal of each crop in the field, obtained pursuant to subsection (e)(1) ~~of this Section~~;

3) The phosphorus amount needed for each crop in the planned crop rotation, expressed as P_2O_5, obtained from the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at ~~Section~~35 Ill. Adm. Code 501.200. The determination of this phosphorus amount shall be based on the realistic crop yield goal for each planned crop and the soil test for available phosphorus (Bray P1 or Mehlich 3 in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in ~~Section~~35 Ill. Adm. Code 501.200)~~)~~;

4) The phosphorus carryover from previous years' application of phosphorus or livestock waste;

5) Soil test phosphorus results for that field; and

6) The maximum livestock waste application rate ~~shall be~~, consistent with nitrogen-based or phosphorus-based applications allowed under Section 502.615.

h) Nitrogen and phosphorus fertilization rates for the realistic crop yield goal may be obtained from the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at ~~Section~~35 Ill. Adm. Code 501.200, or 35 Ill. Adm. Code ~~560,~~ 560.Appendix A.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.630 Protocols to Land Apply Livestock Waste During Winter

a) Winter Application Prohibition

1) Surface land application of livestock waste on frozen, ice covered or snow covered ground is prohibited, unless:

A) No practical alternative measures are available to handle the livestock waste within storage facilities or to dispose of the livestock waste at other sites. Examples of practical alternative measures include, but are not limited to, the transfer of waste to another waste handling facility or sewage treatment plant, rental or acquisition of a storage tank, reduction of herd size or depopulation, and protection of the facility from direct precipitation and clean stormwater runoff;

B) Liquid livestock waste cannot be injected or incorporated within 24 hours due to soil conditions;

C) Prior to December 1, the owner or operator has taken steps to provide 120 days of available storage capacity of manure storage areas. Examples of steps that could be taken include, but are not limited to, land application of livestock waste, transfer of waste to another party, protection of waste storage structures from direct precipitation and stormwater runoff, and depopulating facilities to reduce the amount of waste generated;

D) The owner or operator has complied with subsection (a)(1)(C) and yet the storage volume available on December 1 of that winter season is less than 120 days of storage;

E) The owner or operator has notified the Agency in writing on December 1 of that winter season that the CAFO has less than 120 days storage available; and

F) The discharge of livestock waste from the structure to the surface waters is expected to occur due to shortage in storage capacity.

2) The storage volume calculation in subsection (a)(1)(C) must include runoff and direct precipitation plus the volume of livestock excreta, wash water and other process wastewater generated and expected to enter the storage structure during the period of December 1 to April 1. Runoff volume calculations must meet the following requirements:

A) Runoff calculations must be based on the runoff transferred into the storage structure under frozen ground conditions;

B) Direct precipitation that will reduce the available storage volume must be based on normal precipitation for the December 1 to April 1 period for the nearest weather station and, for facilities exposed to precipitation, the 25-year, 24-hour storm event volume or the design storm event volume determined under Subpart H for swine, poultry and veal ~~Large~~large CAFOs that are new sources. The determination of normal precipitation shall be based on National Weather Service or State Water Survey Records;

BOARD NOTE: The following sources may be used to determine normal precipitation:
~~http://www.isws.illinois.edu/atmos/statecli/newnormals/newnormals.htm~~
~~or~~
http://www.isws.illinois.edu/atmos/statecli/newnormals/newnormals.htm or
http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl.

C) The owner or operator shall keep a record of the precipitation value used and the source from which the value was obtained; and

D) Calculations must allow for a freeboard of two feet.

3) In the event winter land application is necessary, it must be conducted pursuant to a winter application plan described in subsection (b) ~~of this Section~~ and according to the conditions of subsection (c) ~~of this Section~~.

b) Winter Application Plan
In order to conduct surface land application on frozen, ice covered, or snow covered ground, the requirements of this subsection (b) ~~conditions~~ must be met.

1) No land application may occur within ¼ mile of a non-farm residence.

2) No discharge may occur during land application of livestock waste.

3) Surface land application on frozen ground shall not occur within 24 hours preceding a forecast of 0.25 inches or more of precipitation in a 24 hour

period as measured in liquid form. The CAFO owner or operator shall use one of the following two methods ~~provided below~~ for determining whether ~~or not~~ these conditions exist and shall maintain a record of the forecast from the source used~~:~~.

A) A prediction of a 60 percent or greater chance of 0.25 inches or more of precipitation in a 24 ~~-~~hour period as measured in liquid form, obtained from the National Weather Service~~'~~s Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring~~,~~ MD 20910, for the location nearest to the land application area; or

BOARD NOTE: The prediction in ~~Section 502.630~~subsection (b)(3)(A) may be obtained from the National Weather Service~~'s Web site~~ at http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/.

B) A prediction of 0.25 inches or more of precipitation in a 24 ~~-~~hour period as measured in liquid form and identified as higher than QPF category 2 obtained from the National Weather Service~~'s~~ Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring~~,~~ MD 20910, for the land application area location.

BOARD NOTE: The prediction in ~~Section 502.630~~subsection (b)(3)(B) may be obtained from the National Weather Service~~'s Web site~~ at http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

4) Surface land application of livestock waste on ice covered or snow covered land shall not occur within 24 hours preceding a forecast of 0.1 inches or more of precipitation in a 24 hour period as measured in liquid form. The CAFO owner or operator shall use one of the two methods provided below for determining whether or not these conditions exist and shall maintain a record of the forecast from the source used.

A) A prediction of a 60 percent or greater chance of 0.1 inches or more of precipitation in a 24-hour period as measured in liquid form obtained from the National Weather Service~~'~~s

Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring~~,~~ MD 20910 for the location nearest to the land application area; or

BOARD NOTE: The prediction in ~~Section 502.630~~subsection (b)(4)(A) may be obtained from the National Weather Service~~'s Web site~~ at http://www.nws.noaa.gov/mdl/forecast/graphics/MAV/.

B) A prediction of 0.1 inches or more of precipitation in a 24-hour period as measured in liquid form and identified as higher than QPF category 1 obtained from the National Weather Service~~'~~s Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring~~,~~ MD 20910 for the land application area location.

BOARD NOTE: The prediction in ~~Section 502.630~~subsection (b)(4)(B) may be obtained from the National Weather Service~~'s Web site~~ at http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

5) If the land application of livestock waste is on ice covered or snow covered land, surface land application shall not occur when the predicted high temperature exceeds 32 degrees F on the day of land application or on any of the 7 days following land application as predicted by the National Weather Service~~'~~s Meteorological Development Laboratory, Statistical Modeling Branch, 1325 East West Highway, Silver Spring~~,~~ MD 20910 for the location nearest to the land application area. The owner or operator shall maintain a record of the forecast from the source used.

BOARD NOTE: The predicted high temperature in ~~Section 502.630~~subsection (b)(5) may be obtained from the National Weather Service~~'s Web site~~ at http://www.nws.noaa.gov/mdl/forecast/graphics/MEX/index.html or http://www.nws.noaa.gov/mdl/synop/products/bullform.mex.htm.

6) If the surface land application of livestock waste is on ice covered or snow covered land, the CAFO owner or operator shall visually monitor for runoff from the site. The CAFO owner or operator must monitor each ice

covered or snow covered field where land application has been conducted daily when the ambient temperature is 32 degrees F or greater following winter land application until all the ice or snow melts from the land application area.

7) If the surface land application of livestock waste is on ice covered or snow covered land and a runoff from the land application area occurs, the CAFO owner or operator shall report any discharge of livestock waste within 24 hours ~~of~~after the discovery of the discharge as follows:

A) The report shall be made to the Agency through the Illinois Emergency Management Agency by calling 1-800-782-7860 or 1-217-782-7860;

B) Within 5 days ~~of~~after this telephone report, the CAFO owner or operator shall file a written report with the Agency that includes the name and telephone number of the person filing the report, location of the discharge, an estimate of the quantity of the discharge, time and duration of the discharge, actions taken in response to the discharge, and observations of the condition of the discharge with regards to turbidity, color, foaming, floatable solids and other deleterious conditions of the runoff for each day of each runoff event until the ice or snow melts off the site.

c) Availability of Individual Fields for Winter Application
If livestock waste is to be surface applied on frozen ground, ice covered land or snow covered land, the land application may only be conducted on land that meets the following requirements:

1) Adequate erosion and runoff control practices exist, including, but not limited to, vegetative fence rows around the site, contour farming, terracing, catchment basins and buffer areas that intercept surface runoff from the site;

2) A crop stubble, crop residue or vegetative buffer of 200 feet exists between the land application area and surface waters, waterways, open tile line intake structures, sinkholes, agricultural wellheads, or other conduits to surface water and the vegetative buffer zone is down gradient of the livestock waste application area;

3) Application on land with slopes greater than 5% is prohibited;

4) Application may only occur on sites that have field specific soil erosion loss, calculated using Revised Universal Soil Loss Equation less than Erosion Factor T, and have a median Bray P1 or Mehlich 3 soil level of phosphorus, in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference in ~~Section~~35 Ill. Adm. Code 501.200, equal to or less than 300 pounds per acre;

BOARD NOTE: Soil loss may be calculated using the Revised Universal Soil Loss Equation 2 (RUSLE2) software program available at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm and Erosion Factor T for Illinois soils is available from the ~~United States Department of Agriculture Natural Resources Conservation Service's~~USDA-NRCS' published soil surveys at ~~http://soils.usda.gov/survey/printed_surveys/~~http://soils.usda.gov/survey/printed_surveys/state.asp?state=Illinois&abbr=IL.

5) Surface ~~Application~~application may only occur ~~after application of~~if the setbacks equal three times the otherwise applicable setbacks ~~from~~required by Sections 502.615 and 502.645 if the slope of the field is between 2 percent and 5 percent. This setback requirement does not include the ~~¼~~quarter mile distance from residences contained in Section 502.645(a); and

6) For fields with slopes of less than 2 percent, the surface application may only occur ~~after application of~~if the setbacks equal two times the otherwise applicable setbacks ~~from~~required by Sections 502.615 and 502.645. This setback requirement does not include the quarter mile distance from residences contained in Section 502.645(a).

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.635 Manure and Soil Sampling and Analysis

a) Soil Phosphorus Sampling. Soil samples shall be obtained and analyzed from each field of the land application area where applications are planned. Fields where livestock waste is applied shall be sampled twice for each field during the term of the permit. Soil testing must be conducted as follows:

1) Soil sampling for phosphorus shall be in accordance with the sampling protocols in Chapter 8 of the Illinois Agronomy Handbook, 24th Edition, incorporated by reference at ~~Section~~35 Ill. Adm. Code 501.200. Laboratory analysis for soil phosphorus (Bray P1 or Mehlich 3) shall be in accordance with Recommended Chemical Soil Test Procedures for the North Central Region, incorporated by reference at ~~Section~~35 Ill. Adm. Code 501.200;

2) Soil samples shall be at the same time in the cropping cycle and rotation so that results are comparable year to year; and

3) The two required soil samples for each field must be taken at least one year apart.

b) Manure Sampling~~:~~

1) The CAFO owner or operator shall annually obtain a laboratory analysis of the nutrient content representative of the livestock waste to be land applied as provided within the nutrient management plan. Livestock waste shall be sampled during the application process. Multiple subsamples shall be obtained and combined into one sample so that a representative sample is obtained for analysis. Results of a sample taken during waste application the previous year can be used for plan preparation unless there has been a change in the waste management practices during the year. The analytical results of livestock waste samples shall be used for calculation of the application rate allowed by the NPDES permit.

2) The laboratory analysis of the livestock waste sample shall include total kjeldahl nitrogen, ammonia or ammonium nitrogen, total phosphorus, total potassium, and percent total solids. The nutrient results shall be reported ~~in~~on the laboratory analysis sheet on a mg/kg dry weight basis or mg/l wet weight basis ~~on the laboratory analysis sheet~~. The results of these analyses are to be used in determining application rates for livestock waste.

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.640 Inspection of Land Application Equipment for Leaks

a) For all permitted CAFOs that land apply livestock waste, the CAFO owner or operator must periodically inspect equipment used for land application of livestock waste for leaks or problems that result in improper operation.

b) The CAFO owner or operator must ensure that the land application equipment is properly calibrated for application of livestock waste on a routine basis.

c) Calibration procedures and schedules shall be described for all equipment in the CAFO~~'~~'s nutrient management plan.

(Source: Added at 38 Ill. Reg. _____, effective _____)

Section 502.645 Land Application Setback Requirements

a) Distance from Residences
Livestock waste shall not be land applied within ~~1/4~~¼ mile of any residence not part of the CAFO, unless it is injected or incorporated on the day of application.

b) Setbacks from Waters

1) Livestock waste shall not be land applied within 200 feet of surface water, unless the water is upgrade or there is adequate diking, which includes, but is not limited to, diking that prevents runoff from the land application from entering surface waters that are within 200 feet of the land application area.

2) Livestock waste shall not be land applied within 100 feet of down gradient open subsurface drainage intakes, agricultural drainage wells, sinkholes, grassed waterways or other conduits to surface waters, unless a 35 foot vegetative buffer exists between the land application area and the grassed waterways, open subsurface drainage intakes, agricultural drainage wells, sinkholes or other conduits to surface water.

3) The setback requirements in subsection (b)(2) do not apply if the CAFO is able to demonstrate to the Agency that a setback or buffer is not necessary

because implementation of alternative conservation practices (including, but not limited to, injection and incorporation) or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by the 100-foot setback.

c) Livestock waste shall not be applied in a 10-year flood plain unless the injection or incorporation method of application is used.

d) Livestock waste shall not be land applied to waters of the United States, grassed waterways or other conduits to surface waters.

e) Livestock waste shall not be land applied within 200 feet of potable water supply wells.

(Source: Added at 38 Ill. Reg. _____, effective _____)

SUBPART G: ADDITIONAL LIVESTOCK WASTE DISCHARGE LIMITATIONS

Section 502.710 New Source Performance Standards ~~For~~for Dairy Cows and Cattle Other Than Veal Calves

~~a)~~ a) New Source Performance Standards (NSPS) ~~applicability~~Applicability

Any CAFO with the capacity to stable or confine 700 or more mature dairy cows, whether milked or dry, or 1,000 or more cattle other than mature dairy cows or veal calves that is a new source must achieve the livestock waste discharge limitations representing the application of NSPS as of the date of permit coverage or within the timelines provided in Section 502.303.

b) The livestock waste discharge limitations representing NSPS for the CAFO production area for CAFOs subject to this Section are the livestock waste discharge limitations found in Sections 502.605 and 502.610.

c) The livestock waste discharge limitations representing NSPS for the CAFO land application area are the livestock waste discharge limitations and requirements found in Sections 502.615 through 502.645.

d) CAFOs subject to this Section shall attain the limitations and requirements in Subpart F as of the date of permit coverage or within the timelines provided in Section 502.303.

~~ILLINOIS REGISTER~~ JCAR350502-1319005r01

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

(Source: Added at 38 Ill. Reg. _____ ~~_____~~, effective _____)

Section 502.720 Horse and Sheep CAFOs: BPT, BAT and NSPS

This Section contains the effluent limitations applicable to discharges resulting from the production area at horse and sheep CAFOs. CAFOs subject to this Section shall attain the limitations and requirements of this Section as of the date of permit coverage. CAFOs with the capacity to stable or confine fewer than 10,000 sheep or fewer than 500 horses are exempt from these effluent limitations.

a) Effluent ~~limitations attainable by the application of the best practicable control technology currently available~~Limitations Attainable by the Application of the Best Practicable Control Technology Currently Available (BPT) for Horse and Sheep CAFOs

1) Except as provided in subsection (a)(2) ~~of this Section~~, any existing point source subject to this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United States is the effluent limitation representing the application of BPT for ~~Horse~~horse and ~~Sheep~~sheep CAFOs.

2) Process waste pollutants in the overflow may be discharged to waters of the United States whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated wastewaters plus the runoff from a 10-year, 24-hour rainfall event for the location of the point source.

b) Effluent ~~limitations attainable by the application of the best available technology economically achievable~~Limitations Attainable by the Application of the Best Available Technology Economically Achievable (BAT) for Horse and Sheep CAFOs

1) Except when the provisions of subsection (b)(2) ~~of this Section~~ apply, any existing point source subject to this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United

States is the effluent limitation representing the application of BAT for Horse and Sheep CAFOs.

2) Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the point source, any process wastewater pollutants in the overflow may be discharged to waters of the United States.

c) New Source Performance Standards (NSPS) for Horse and Sheep CAFOs
Except as provided in subsection (b)(2) ~~of this Section~~, any new source subject this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United States is the performance standard representing ~~New Source Performance Standards~~NSPS for ~~Horse~~horse and ~~Sheep~~sheep CAFOs.

(Source: Added at 38 Ill. Reg. _____ ~~_____~~, effective _____)

Section 502.730 Duck CAFOs: BPT and NSPS

This Section contains the effluent limitations applicable to discharges resulting from the production areas at dry lot and wet lot duck CAFOs. CAFOs subject to this Section shall attain the limitations and requirements of this Section as of the date of permit coverage. CAFOs with the capacity to stable or confine fewer than 5,000 ducks are exempt from these effluent limitations.

a) Effluent ~~limitations attainable by the application of the best practicable control technology currently available~~Limitations Attainable by the Application of the Best Practicable Control Technology Currently Available (BPT) for Wet Lot and Dry Lot Duck CAFOs
Any existing point source subject to this Section shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

1) BOD_5 is limited to a maximum daily limit of 3.66 pounds/1,000 ducks or 1.66 ~~kilograms~~kg/1,000 ducks.

2) BOD_5 is limited to a maximum monthly average of 2.0 pounds/1,000 ducks or 0.91 ~~kilograms~~kg/1,000 ducks.

3) Fecal coliform is not to exceed the most probable number (MPN) of 400/100 ml at any time.

b) New Source Performance Standards for Wet Lot and Dry Lot Duck CAFOs

1) Except as provided in subsection (b)(2) ~~of this Section~~, any new source subject to this Section shall have no discharge of process wastewater pollutants to waters of the United States. Achievement of no process wastewater discharge to waters of the United States is the performance standard representing NSPS for ~~Duck~~duck CAFOs.

2) Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the point source, any process wastewater pollutants in the overflow may be discharged to waters of the United States.

(Source: Added at 38 Ill. Reg. _____ ~~_____~~, effective _____)

SUBPART H: NEW SOURCE PERFORMANCE STANDARDS FOR NEW~~, LARGE~~ SWINE, POULTRY AND VEAL LARGE CAFOS

Section 502.800 Applicability

a) This Subpart applies to all ~~New Swine, Poultry~~new swine, poultry and ~~Veal~~veal CAFOs with the capacity to stable or confine the numbers of animals of the types provided for in the definition of ~~Large~~large CAFOs in Section 502.103.

b) The requirements of this Subpart H are in addition to the livestock waste discharge limitations and technical standards in Subpart F ~~of this Part~~, except Section 502.605.

c) The limitations and requirements of this Subpart must be attained as of the date of NPDES permit coverage or within the timelines provided in Section 502.303.

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

(Source: Added at 38 Ill. Reg. _____ ~~———~~, effective _____)

Section 502.810 Production Area Requirements

There must be no discharge of livestock waste pollutants to waters of the United States from the production area unless the CAFO complies with the alternative livestock waste discharge limitations provided in Section ~~502.830 of this Part.~~502.830.

(Source: Added at 38 Ill. Reg. _____ ~~———~~, effective _____)

Section 502.820 Land Application Area Requirements

For CAFOs subject to this Subpart, the land application areas shall attain the same limitations and requirements as specified in Sections 502.615 through 502.645.

(Source: Added at 38 Ill. Reg. _____ ~~———~~, effective _____)

Section 502.830 Alternative Best Management Practice Livestock Waste Discharge Limitations

a) Any CAFO subject to this Subpart may request that the Agency establish NPDES permit best management practice (BMP) livestock waste discharge limitations designed to ensure no discharge of livestock waste based upon a site-specific evaluation of the CAFO~~'~~'s open surface livestock storage structure.

b) The NPDES permit ~~best management practice~~BMP livestock waste discharge limitations must address the CAFO~~'~~'s entire production area. In the case of any CAFO using an open surface livestock waste storage structure for which the Agency establishes such livestock waste discharge limitations, ~~"~~"no discharge of livestock waste pollutants,~~"~~" as used in this ~~subpart~~Subpart H, means that the storage structure is designed, operated, and maintained in accordance with ~~best management practices~~BMP established by the Agency on a site-specific basis after a technical evaluation of the storage structure.

c) The technical evaluation must address the elements listed in Section 502.840.

(Source: Added at 38 Ill. Reg. _____ ~~———~~, effective _____)

Section 502.840 Technical Evaluation

All technical evaluations conducted pursuant to this Subpart H must address the minimum elements contained in this Section. Waste management and storage facilities designed, constructed, operated, and maintained consistent with the analysis conducted in subsections (a) through (g) ~~of this Section~~ and operated in accordance with the additional measures and records required by Section 502.610 will fulfill the requirements of this Subpart.

a) Information to be used in the design of the open manure storage structure, including, but not limited to:

1) Minimum storage periods for rainy seasons;

2) Additional minimum capacity for chronic rainfalls;

3) Applicable technical standards that prohibit or otherwise limit land application on frozen, saturated or snow-covered ground found in Section 502.630 ~~of this Part~~;

4) Planned emptying and dewatering schedules consistent with the CAFO~~'~~'s nutrient management plan;

5) Additional storage capacity for livestock waste intended to be transferred to another recipient at a later time; and

6) Any other factors that would affect the sizing of the structure.

b) The design of the open livestock waste storage structure as determined in accordance with the ~~United States Department of Agriculture~~USDA National Resource Conservation Service~~'s Animal~~'s Agricultural Waste Management Field Handbook, incorporated by reference at 35 Ill. Adm. Code 501.200.

BOARD NOTE: Animal ~~Waste Management~~waste management software is available at http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/alphabetical/mnm/?&cid=stelprdb1045812 and includes procedures and calculation based on the ~~Animal~~Agricultural Waste Management Field Handbook for design of open livestock waste storage units.

c) All inputs used in the open livestock waste storage structure design, including:

1) actual climate data for the previous 30 years, consisting of historical average monthly precipitation and evaporation values;

2) the number and types of animals;

3) anticipated animal sizes or weights;

4) any added water and bedding;

5) any other process wastewater; and

6) the size and condition of outside areas exposed to rainfall and contributing runoff to the open livestock waste storage structure.

d) The planned minimum period of storage in months, including, but not limited to, the factors for designing an open livestock waste storage structure ~~listed~~described in subsection (a) ~~of this Section~~. Alternatively the CAFO may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the CAFO~~'~~'s nutrient management plan.

e) Site-specific predicted design specifications, including:

1) dimensions of the storage facility;

2) daily manure and wastewater additions;

3) the size and characteristics of the land application areas; and

4) the total calculated storage period in months.

f) An evaluation of the adequacy of the designed manure storage structure using simulation procedures in the ~~United States Department of Agriculture~~USDA Natural Resources Conservation Services Agricultural Waste Management Field Handbook, incorporated by reference at 35 Ill. Adm. Code 501.200.

1) The evaluation must include all inputs used in the simulation, including but not limited to:

A) daily precipitation, temperature, and evaporation data for the previous 100 years;

B) user-specified soil profiles representative of the CAFO's land application areas;

C) planned crop rotations consistent with the CAFO's nutrient management plan; and

D) the final modeled result of no overflows from the designed open livestock waste storage structure.

2) For those CAFOs where 100 years of local weather data for the CAFO's location is not available, CAFOs may use a simulation with a confidence interval analysis conducted over a period of 100 years.

3) The adequacy of the designed manure storage structure may be evaluated using equivalent evaluation and simulation procedures approved by the Agency.

BOARD NOTE: The adequacy of the designed manure storage structure may be evaluated by using the most recent version of the Soil Plant Air Water (SPAW) Hydrology Tool found at http://hydrolab.arsusda.gov/SPAW/Index.htm.

g) The Agency may waive the requirement in subsection (f) ~~of this Section~~ for a site-specific evaluation of the designed livestock waste storage structure and instead authorize a CAFO to use a technical evaluation developed for a class of specific facilities within a specified geographical area.

h) The Agency may request additional information to support a request for livestock waste discharge limitations based on a site-specific open surface livestock waste storage structure.

(Source: Added at 38 Ill. Reg. _____ ____, effective _____)

Document comparison by Workshare Compare on Tuesday, December 10, 2013 3:59:15 PM

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Style change	0
Format changed	0
Total changes	1028

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED REPEALER

1) Heading of the Part: Implementation Program

2) Code Citation: 35 Ill. Adm. Code 504

3)

Section Numbers:	Proposed Action:
504.101	Repeal
504.102	Repeal
504.APPENDIX A	Repeal

4) Statutory Authority: Implementing Sections 9, 12, 13, 21 and 22 of the Environmental Protection Act (Act) and authorized by Section 27of the Act [415 ILCS 5/9, 12, 13, 21, 22, and 27]

5) A Complete Description of the Subjects and Issues Involved: A description of this proposal may be found in the Board's first-notice opinion and order of November 7, 2013, in docket R12-23.

The Illinois Environmental Protection Agency (Agency) initiated this proceeding by filing a rulemaking proposal to amend the Board's agriculture related pollution regulations. The Agency seeks to repeal the entire Part 504.

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The Agency reported that it had not performed any new study or contracted with any other entity to perform one as a basis to develop its rulemaking proposal, so it had no "underlying data" to report.

The Agency stated that the following "provides a complete list of all documents and studies used in developing the proposal."

American Society of Agricultural and Biological Engineers
Management of Manure Odors, ASAE EP379.4 (Jan. 2007)
Design of Anaerobic Lagoons for Animal Waste Management, ASABE EP403.4 (R2011)

Illinois Agronomy Handbook, 24th Edition; University of Illinois College of Agriculture, Consumer and Environmental Sciences

MidWest Plan Service
Livestock Waste Facilities Handbook, Third Edition, Third Printing (MWPS-18) April

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1998
Manure Characteristics, Section 1, Second Edition (MWPS-18) (2004)

Recommended Chemical Soil Test Procedures for the North Central Region, North Central Regional Publication No. 221 Missouri Agricultural Experiment Station Bulletin SB 1001 (Jan. 1998)

Average Crop, Pasture, and Forestry Productivity Ratings for Illinois Soils, Bulletin No. 810 (2000), revised 1/15/01 to amend Table B810, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Optimum Crop Productivity Ratings for Illinois Soils, Bulletin No. 811 (2000), revised 1/15/01 to amend Table S2 B811, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Livestock Management Facilities Act (510 ILCS 77)

Livestock Management Facilities Act Regulations (8 Ill. Adm. Code 900)

68 Fed. Reg. 7176 (Feb. 12, 2003)

Waterkeeper v. USEPA, 399 F.3d 486 (2nd Cir. 2005)

73 Fed. Reg. 70418 (Nov. 20, 2008)

November 2008 Compiled CFO NPDES Regulations and Effluent Limitations Guidelines and Standards

National Pork Producers Council, et al. v. USEPA, 635 F.3d 738 (5th Cir. 2011)

76 Fed. Reg. 65431 (Oct. 21, 2011)

Allen, B.L. and A.P. Mallarino, Effects of Liquid Swine Manure Rate, Incorporation, and Timing of Rainfall on Phosphorus Loss with Surface Runoff, Journal of Environmental Quality 37: 125-37 (2008)

Standard Methods for the Examination of Water and Wastewater, 19th edition (1995), American Public Health Association

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Good Environmental Livestock Production Practices: Concentrated Livestock Operations – Manure Utilization ANSI-GELPP 0004-2002
Curve Number Hydrology – State of the Practice, ASCE/EWRI Curve Number Hydrology Task Committee, American Society of Civil Engineers (2009)

Barker, J.C., Lagoon Design and Management for Livestock Waste Treatment and Storage North Carolina Cooperative Extension Service EBAE 103-83 (1996)

Brady, N.C., Nature and Properties of Soils, 8th Edition (1974)

Daverede, I.C., et al., Phosphorus Runoff: Effect of Tillage and Soil Phosphorus Levels, Journal of Environmental Quality 32: 1436-44 (2003)

Daverede, I.C., et al. Phosphorus Runoff from Incorporated and Surface-Applied Liquid Swine Manure and Phosphorus Fertilizer, Journal of Environmental Quality 33: 1535-44 (2004)

Dillaha, T.A., et al., Vegetative Filter Strips for Agricultural Non-Point Source Pollution Control, Trans. ASAE 32: 513-19 (1989)

Funk, T., et al., Developing and Managing Livestock Waste Lagoons in Illinois, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research Circular 1326

Garen, D.C. and D.S. Moore, Curve Number Hydrology in Water Quality Modeling, Uses, Abuses, and Future Directions, Journal of the American Water Resources Association, Paper No. 03127, 377-88 (2005)

Hawkins, R.H., *et al.*, Continuing Evolution of Rainfall-Runoff and the Curve Number Precedent, Second Joint Federal Interagency Conference (2010)

Jones, D.J. and A.L. Sutton, Design and Operation of Livestock Waste Lagoons, Purdue University Cooperative Extension Service ID-120 (Sept, 1999)

Lewis, R.J., Hawley's Condensed Chemical Dictionary, 12th Edition (1993)

Mayer, P.M., et al., Meta-Analysis of Nitrogen Removal in Riparian Buffers, Journal of Environmental Quality 36: 1172-80 (2007)

Peters, J., et al. Recommended Methods of Manure Analysis (2003), available at http://uwlab.soils.wisc.edu/pubs/A3769.pdf (posted Mar. 4, 2003, verified Aug. 20, 2011)

Ponce, V.M. and R.H. Hawkins, Runoff Curve Number: Has It Reached Maturity, Journal of Hydrologic Engineering, ASCE 1(1) (Jan. 1996)

Pote, D.H. et al., Water Quality Effects of Incorporating Poultry Litter into Perennial Grassland Soils," Journal of Environmental Quality 32(6): 2392-98 (2003)

Sharpley, A.N., et al., Phosphorus Movement in the Landscape, J. Prod. Agric. 6: 492-500 (1993)

Sharpley, A.N., et al., Determining Environmentally Sound Soil Phosphorus Levels, J. Soil and Water Cons. 51(2): 160-66 (1996)

United States Department of Agriculture – Natural Resource Conservation Service, Nutrient Management Code 590, Illinois (Jan. 2002)

United States Department of Agriculture – Natural Resource Conservation Service, Waste Utilization Code 633, Illinois (Jan. 2002)

United States Department of Agriculture – Natural Resource Conservation Service, Nutrient Management Code 590, Illinois (Oct. 2003)

United States Department of Agriculture – Natural Resource Conservation Service, National Engineering Handbook, Part 630 Hydrology, Chapter 10 Estimation of Direct Runoff from Storm Rainfall (2004)

United States Environmental Protection Agency, Cost Methodology for the Final Revisions to the National Pollutant Discharge Elimination System Regulations and the Effluent Guidelines for Concentrated Animal Feeding Operations (Dec. 2002)

United States Environmental Protection Agency, Managing Manure Nutrients at Concentrated Animal Feeding Operations (2004)

United States Department of Agriculture – Natural Resource Conservation Service, Illinois Engineering Field Handbook, Illinois Hydrologic Soil Groups, Notice 29 (Oct. 2007), available at ftp://ftp-fc.sc.egov.usda.gov/IL/engineer/supplements/2-42.9to2-42.16.pdf (last modified Nov. 16, 2009, viewed Aug. 30, 2011)

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United States Department of Agriculture – Natural Resource Conservation Service, Illinois NRCS Standard Grassed Waterway – Conservation Practice Standard – Code 412 (Mar. 2008)

United States Department of Agriculture – Natural Resource Conservation Service, Soil Survey of Piatt County (2010)

United States Department of Agriculture, Agricultural Research Service, Oxford Sedimentation Lab at http://www.ars.usda.gov/Research/docs.htm?docid=6010 (viewed Aug. 29, 2011)

United States Environmental Protection Agency, Method 350.1 Determination of Ammonia Nitrogen by Semi-Automated Colorimetry, Revision 2.0 (Aug. 1993)

United States Environmental Protection Agency, NPDES Permit Writer's Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations, (Dec. 2003)

Van Mullem, J.A., et al., Runoff Curve Number Method: Beyond the Handbook at ftp://ftp-fc.sc.egov.usda.gov/NWMC/CN_info/Van_Mullem_paper.doc (viewed Aug. 31, 2011)

Wisconsin Administrative Code NR 243 Animal Feeding Operations at http://legis.wiconsin.gov/rsb/code/nr/nr243.pdf

Zhang, X.Y., et al., A Review of Vegetated Buffers and a Meta-Analysis of Their Mitigation Efficiency in Reducing Nonpoint Source Pollution, Journal of Environmental Quality 39(1): 76-84

7) Will this proposed rulemaking replace an emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this proposed rulemaking contain incorporations by reference? No

10) Are there any other proposed rulemakings pending on this Part? No

11) Statement of Statewide Policy Objective: This proposed rulemaking does not create or

enlarge a State mandate as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3]

12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of publication. Comments should refer to docket R12-23 and be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may request copies of the Board's opinion and order in R12-23 by calling the Clerk's office at 312-814-3620, or may download copies from the Board's website at www.ipcb.state.il.us. For more information, contact the Clerk's Office at 312/814-3629.

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not-for-profit corporations affected: Because the proposed rulemaking repeals the entire Part 504, the Board does not expect the rulemaking to affect any types of small businesses, small municipalities or not-for-profit corporations.

B) Reporting, bookkeeping or other procedures required for compliance: Because the proposed rulemaking repeals the entire Part 504, the Board does not expect the rulemaking to require any reporting, bookkeeping, or other procedures for compliance.

C) Types of professional skills necessary for compliance: Because the proposed rulemaking repeals the entire Part 504, the Board does not expect the rulemaking to require any type of professional skills for compliance.

14) Regulatory Agenda in which this rulemaking was summarized: 7/13 (37 Ill. Reg. 9060)

The full text of the proposed repealer begins on the next page:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE E: AGRICULTURE RELATED POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 504
IMPLEMENTATION PROGRAM (REPEALED)

SOURCE: Repealed at 38 Ill. Reg. _____, effective _____.