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901:10-1-01 **Definitions.**

As used in Chapters 901:10-1 to 901:10-6 of the Administrative Code, the definitions contained in Chapter 903. of the Revised Code and the following definitions are applicable:

(A) Act means the Federal Water Pollution ~~Polllution~~ Control Act set forth at 33 USC sections 1251 to 1387.

(B) Administrator means the administrator of the United States environmental protection agency.

(C) Agricultural drainage well means a class five underground injection control well that receives or has the potential to receive drainage from irrigation tail-waters, animal yards, feedlots or dairy runoff and any related agricultural field runoff. An injection well is any bored, drilled, or driven shaft or dug hole whose depth is greater than the largest surface dimension.

(D) Agricultural stormwater discharge means runoff generated by precipitation that drains over terrain used for agriculture as defined in section 1.61 of the Revised Code that conveys manure to waters of the state, provided that the manure has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of nutrients in manure in compliance with the best management practices set forth in Chapter 901:10-2 of the Administrative Code.

(E) Agronomic rate means a rate of application of nutrients from any source to the land or an amount of nutrients removed by crop based on:

(1) Nutrient content of the manure to be applied;

(2) Nutrient needs of the current or planned crops; and

(3) Nutrient holding capacity of the soil.

(F) Ammonia (as N) means ammonia reported as nitrogen and is listed with approved methods of analysis in table 1B at 40 CFR 136.

(G) Applicant means a person applying for a permit, certificate, or submitting a claim of trade secrecy to the director.

(H) Appropriate design plan means a construction plan for a manure storage or treatment facility that has been accepted by the department as meeting best management

practices and recognized industry standards for construction. This includes pre-engineered design plans for the design and construction of manure storage or treatment facilities that have been shown by the engineer, manufacturer, or distributor to conform to the requirements of Chapter 903. of the Revised Code.

(I) Appropriate examination means an examination that has been approved by the department.

(J) Appropriate training program means a training program that has been approved by the department.

(K) Aquifer means an underground consolidated or unconsolidated geologic formation or series of formations that are hydraulically connected and that have the capability to receive, store, and yield useable quantities of water to wells. Aquifer does not include perched groundwater.

(L) Application means the form and supporting documents used by an applicant to apply for an Ohio permit under this chapter.

(M) Average precipitation means the precipitation over the length of a storage period.

(N) Beneficial organisms mean predators, parasites, or pathogens that, during their life cycle, are used to suppress pest organisms or are otherwise beneficial.

(O) Best management practice (BMP) means a practice or combination of practices that is determined to be the most effective and practicable including technological, economic, and institutional controls as a means of complying with the applicable standards of Chapter 903. of the Revised Code. BMPs may include structural and nonstructural practices, conservation practices, prohibition of practices, schedules of activities, operation and maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage, or leaks, sludge or waste disposal or drainage from raw material storage.

Comment: For purposes of this chapter, institutional controls such as proprietary controls are those that involve legal instruments placed in the chain of title on the site of the property. Such proprietary controls include but are not limited to: easements, covenants, well drilling prohibitions, zoning restrictions and special building requirements.

(P) Biosecurity refers to the policies and measures taken for protecting food supply and agricultural resources from contamination. Biosecurity also refers to those

measures taken to keep disease agents out of populations, herds or groups of animals where they do not already exist. Significant areas on a facility in biosecurity are sanitation, isolation of incoming or returning animals, cleaning and disinfection and traffic control to limit disease spread between all facilities in the production unit.

(Q) BOD5 means five-day biochemical oxygen demand and is listed with approved methods of analysis in table 1B at 40 CFR 136.

(R) Buffer strip means setback of an area of permanent dense vegetation, often planted along the edge or the contour of a land application site or a slope of the field usually for management practices, including practices to slow the flow of water runoff or enhance water filtration, and minimize the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters. Types of buffers include filter strips, field borders, contour grass strips, vegetated cover and riparian buffers. Types of buffers include those described in "Ohio Natural Resource Conservation Service, Conservation Practice Standards Section IV, Field Office Technical Guide" which includes the following:

(1) "Filter Strips/Areas, No. 393," June 2002;

(2) "Riparian Forest Buffer, No. 391," March 1997;

(3) "Field Border, No. 386," June 2002; and

(4) "Contour Buffer Strips, No. 332," June 2002.

(S) Certified livestock manager means a person that has been duly certified by the department and currently holds a valid livestock manager certification.

(T) Cold water means waters designated by the Ohio environmental protection agency as set forth in Chapter 3745-1 of the Administrative Code.

(U) Compliance plan means:

(1) A written plan prepared and submitted by the owner or operator by registered or certified mail; and

(2) A statement prepared by the owner or operator that describes the actions the owner or operator will take to eliminate the deficiencies that resulted in noncompliance and includes a schedule stating the time by which each of the

actions shall be accomplished to achieve compliance.

(V) Construction, for the purposes of stormwater construction permits, means the initial disturbance of soils associated with clearing, grading or excavating activities.

(W) Department means the Ohio department of agriculture.

(X) Design capacity means the ability to house or maintain the total number of animals confined or to be confined in open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, medication pens, animal walkways, and stables.

(Y) Dikes mean both dikes and embankments.

(Z) Director means the director of the Ohio department of agriculture or the director's duly authorized representative.

(AA) Discharge means to add any pollutant or combination of pollutants from a point source to waters of the state.

(BB) Distribution and utilization methods mean written methods of how manure will be distributed and utilized in a manner that may include land application by a person other than the owner or operator and conducted in accordance with rule 901:10-2-11 of the Administrative Code.

(CC) Ditch means an excavation, either dug or natural, for the purpose of drainage or irrigation.

(DD) Diversion means a channel constructed across the slope for the purpose of intercepting surface runoff.

~~(EE) Drainageway means an area of short-term low-gradient non-erosive concentrated surface water runoff which occurs during or shortly after precipitation events and is not a river, stream, ditch or grassed waterway. Drainageway areas are normally planted with crops each year.~~

~~(FF)~~(EE) Draft action means a written statement that gives the director's intention with respect to the issuance of any permit, including a NPDES permit or a general permit, concerning which persons authorized by regulation or by section 903.09 of the Revised Code may file comments or request a public meeting, but which will not be the subject of an adjudication hearing before the director.

~~(GG)~~(FF) Drinking water source protection area for a public water system means:

(1) For a ~~A~~ public water system using groundwater, ~~and~~ the surface and subsurface area surrounding the well(s) of the ~~a~~ public water system that will provide water from an aquifer to the well(s) and that is delineated or endorsed by the Ohio environmental protection agency under Ohio's wellhead protection and source water assessment and protection programs; or.

(2) For a ~~A~~ public water system using surface water, ~~and~~ the drainage area contributing surface water runoff to the water intakes of the public water system ~~and~~ that is delineated or endorsed by the Ohio environmental protection agency under Ohio's source water assessment and protection program.

~~(HHH)~~(GG) Effluent limitation means any restriction imposed by the director on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the state.

~~(II)~~(HH) Fabricated structure means a type of manure storage or treatment facility constructed of engineered, man-made materials such as cast-in-place reinforced concrete, pre-cast concrete, masonry, timber, steel, fiberglass or plastic but does not mean a manure storage pond, a manure treatment lagoon or any of the components of either a manure storage pond or manure treatment lagoon such as described in paragraph (A)(9)(c)(ii) of rule 901:10-2-06 of the Administrative Code. A fabricated structure may contain either solid or liquid manure.

~~(JJ)~~(II) Facility means concentrated animal feeding operation and has the same meaning as division (F) of section 903.01 of the Revised Code and refers to those operations that are subject to the federally enforceable provisions of a permit to operate into which NPDES permit provisions have been incorporated. Facility shall also mean concentrated animal feeding facilities and has the same meaning as division (E) of section 903.01 of the Revised Code and refers ~~refer~~ to those facilities that are subject to permits to operate.

~~(KK)~~(JJ) Fact sheet means the statement of facts provided for in paragraph (A) of rule 901:10-6-05 of the Administrative Code relative to issuance of a NPDES permit.

(KK) Field surface furrow means an area of short-term low-gradient non-erosive concentrated surface water runoff which occurs during or shortly after precipitation events and is not a river, stream, ditch or grassed waterway. Field surface furrows are areas that are normally planted with crops each year.

(LL) Fecal coliform means fecal coliform bacteria and is listed with approved methods of analysis in table 1A at 40 CFR 136.3.

(MM) Floodplain means the area designated by the federal emergency management agency adjoining any river, stream, watercourse or lake that has been or may be covered by floodwater.

(NN) Floodway means the channel of a river or watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than the allowable rise as designated by the federal emergency management agency, not exceeding one foot.

(OO) Grassed waterway means a natural or constructed channel that is shaped or graded to required dimensions and established with suitable vegetation to filter and convey runoff from fields, terraces, diversions or other concentrated water runoff without causing erosion or flooding.

(PP) Ground water means any water below the surface of the earth in a zone of saturation, but does not include perched water.

(QQ) Injection means the placement of manure beneath the surface of the soil in the crop root zone but not extending beyond the boundary of a land application site and using equipment specifically designed for this purpose.

(RR) Installation means the permanent fabrication, erection or installation of a manure storage or treatment facility or manure control equipment at the location where the manure storage or treatment facility or manure control equipment is intended to be used. The term does not include the following:

(1) The dismantling of existing equipment and control devices;

(2) The ordering of equipment and control devices;

(3) Off-site fabrication; and

(4) Site preparation.

(SS) Integrated pest management means a sustainable approach to pest management that combines the use of prevention, avoidance, monitoring and suppression strategies that minimizes and reduces the activity and presence of insects and rodents and

keeps such activity and presence below economically damaging levels, minimizing chemical use to reduce pest resistance and the harmful effects of pest control on human health and environmental resources. Integrated pest management includes management, biological controls and the judicious use of chemical controls.

(TT) Karst terrain means an area where karst topography, including the characteristic surface and subterranean features, has developed as the result of dissolution of limestone, dolomite or other soluble rock. Characteristic physiographic features present in karst terrains may include the following:

(1) Sinkholes;

(2) Sinking streams;

(3) Caves.

(UU) Land application sites or land application areas means land under the control of a concentrated animal feeding operation owner or operator, whether it is owned, rented, leased or subject to access agreement with the landowner, or otherwise under the control of the owner or operator, to which manure, or process wastewater from the production area is or may be applied.

(VV) Liquid manure means manure containing more than or equal to eighty percent liquid.

(WW) Livestock manure broker means a person who is in the business of buying, selling, or land applying manure.

(XX) Livestock manure applicator means a person who is in the business of transporting and land applying manure.

(YY) Manure application means the placement of manure within the boundaries of a land application site by:

(1) Spraying or spreading onto the land surface;

(2) Injection below the land surface in the crop root zone using equipment specifically designed for this purpose; or

(3) Incorporation into the soil by means of the mixing of manure with the surface soil using standard agricultural practices, such as tillage.

(ZZ) Manure management plan (MMP) means a written plan that adheres to the terms in paragraph (A)(1) of rule 901:10-2-07 of the Administrative Code.

[Comment: A person preparing a manure management plan is advised to refer to guidance on comprehensive nutrient management plans that have similar components for manure management plans. Comprehensive nutrient management plan standards are prepared and published by the Natural Resource Conservation Service, an agency of the United States department of agriculture. However, the scope of comprehensive nutrient management plans exceeds the requirements of Chapter 903. of the Revised Code and rules of the chapter.]

(AAA) Manure residuals means settled manure solids combined with varying amounts of water and dissolved materials that remain after some form of treatment.

(BBB) Manure spill means any unexpected, unintended, abnormal or unapproved dumping, leakage, drainage, seepage, discharge, release or other loss of manure. The term does not include releases to impermeable surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.

(CCC) Manure storage or treatment facility means any excavated, diked or walled structure or combination of structures designed for the biological stabilization, holding or storage of manure. These facilities include manure storage ponds, manure treatment lagoons, fabricated structures, lagoons, manure storage sheds, stockpiles, under house or pit storages, and composting areas.

(DDD) Manure storage pond means a type of manure storage or treatment facility consisting of an earthen impoundment made by constructing an embankment and/or excavating a pit, the purpose of which is to store or settle manure. A manure storage pond contains liquid manure.

(EEE) Manure treatment lagoon means a type of manure storage or treatment facility consisting of an earthen impoundment made by constructing an embankment and/or excavating a pit, the purpose of which is to biologically treat manure. A manure treatment lagoon contains liquid manure.

(FFF) Modification means one or more of the following:

(1) A material and substantial alteration of the facility including an increase of the number of animals that exceed the design capacity of an existing facility by ten per cent or more in excess of the design capacity set forth in the current permit, provided that in no case during a five year period shall the facility's or facility's capacity be modified to increase by more than ten per cent in the

aggregate.

(2) Any structural change to the facility that will alter compliance with siting criteria as set forth in rule 901:10-2-02 of the Administrative Code;

(3) Any changes to the insect and rodent ~~and~~ control plan approved by the director except as set forth in paragraphs (E) and (F) in rule 901:10-2-19 of the Administrative Code;

(4) Changes described in rule 901:10-1-09 of the Administrative Code for NPDES operations; or

(5) Changes to the manure storage or treatment facility that result from any of the following:

(a) An expansion of the existing facility by ten per cent or more in excess of treatment or storage capacity;

(b) A significant change in treatment technology; or

(c) Closure of part of the manure storage or treatment facility and termination of permit coverage under Chapter 903. of the Revised Code.

(GGG) Multi-year phosphorus application means phosphorus applied to a field in excess of the crop needs for that year in accordance with appendix e of rule 901:10-2-14 of the Administrative Code.

(HHH) Neighboring residence means any occupied permanent dwelling acquired by its current owner prior to the application for a permit to install a new animal feeding operation or prior to the initial construction of an animal feeding operation for which an application for a permit to install expansion or modification has been submitted. A neighboring residence does not include any dwelling owned by the owner or operator of the production area of the facility at the time the permit to install application is submitted.

(III) New discharger means any building, structure, facility, or installation:

(1) From which there is or may be a discharge of pollutants;

(2) That did not commence the discharge of pollutants at a particular site prior to August 13, 1979;

(3) Which is not a new source; and

(4) Which has never received a final effective NPDES permit for discharges at that site.

(JJJ) New source is defined at 40 CFR 122.2 and new source criteria are as defined at 40 CFR 122.29(b).

(KKK) Nitrate (as N) means nitrate reported as nitrogen and is listed with approved methods of analysis in table 1B at 40 CFR 136.

(LLL) Nonpoint source pollution means any source of pollutants other than those defined as point sources. Nonpoint sources include but are not limited to in-place contaminants, direct wet and dry deposition, groundwater inflow, and overland runoff. Nonpoint source pollution is generally carried off the land by stormwater runoff.

Comment: Common sources of nonpoint source pollution include agriculture, forestry, urban areas, mining and construction.

(MMM) Notice of deficiencies resulting in noncompliance means a notice issued in accordance with section 903.16 or section 903.17 of the Revised Code:

(1) Informing the owner or operator of the deficiencies resulting in noncompliance, including a reference to a particular statute, administrative rule(s) or order involved, the location of the violation when appropriate and the consequences of the violation or future violations;

(2) Directing the owner or operator to perform those actions necessary to comply with the permit including rules or any orders made pursuant to this chapter and to pay a penalty;

(3) Specifying a reasonable period of time by which compliance is to be achieved or is to be implemented not to exceed thirty days after the date of notice, or if the violation requires more than thirty days to correct, a period of time contained in a compliance plan acceptable to the department;

(4) Issued by the director or the director's designated representative; and

(5) In writing and shall be served personally or by registered or certified mail.

(NNN) Nutrient means, for purposes of Chapter 903. of the Revised Code, nitrogen or phosphorus.

(OOO) Operating record means the written record of a facility and other activities conducted under a permit to operate maintained by the owner or operator as found in rule 901:10-2-16 of the Administrative Code.

(PPP) Owner or operator, for the purposes of sections 903.02, 903.03, 903.04 and 903.05 of the Revised Code, means the person that owns or operates the manure storage or treatment facility or the concentrated animal feeding facility or concentrated animal feeding operation or major concentrated animal feeding facility as found in divisions (M), (N), (O), and (EE) of section 903.01 of the Revised Code.

(1) Owner means the person who has the right to control or in fact controls management of the facility or the selection of officers, directors, or managers of the facility or holds or is able to control, either directly or through a holding company or subsidiary, by means of any of the following:

(a) The person holds at least twenty-five per cent of the equity of the facility which is a business concern that is a publicly traded corporation; or

(b) The person is any other business concern not covered in paragraph (PPP)(1)(a) of this rule and holds at least fifty per cent of the equity of the facility; or

(c) The person has provided a loan to the facility with provisions for the right to control management of the facility or actual control of the facility or the selection of officers, directors, or managers of the facility.

(2) Types of ownership may include the any of the following:

(a) "Business concern" means any corporation, association, firm, partnership, trust, or other form of commercial organization.

(i) "Sole proprietorship" means a form of business concern, other than a partnership or corporation, in which one person owns all the assets and is solely liable for all the debts of the business. Sole proprietor includes any individual or entity in which an individual is an applicant or permittee or prospective owner.

(ii) "Partner" means a business concern where any person holding a

position as, or similar to, a general partner, as defined in division (E) of section 1782.01 of the Revised Code, or a limited partner, as defined in division (F) of section 1782.01 of the Revised Code, or persons who share profits and liability and have management powers of a partnership, as partnership is defined in section 1775.05 of the Revised Code.

(iii) "Publicly traded corporation" means a business concern that is a corporation:

(a) Whose shares are listed on a national securities exchange; or

(b) Whose shares are regularly quoted in an over-the-counter market by one or more members of a national or affiliated securities association; or

(c) With fifty or more shareholders.

(b) "Equity" means any ownership interest in a business concern, including sole proprietorship, the shares of a partner, and stock in a corporation.

(c) "Loans" means notes, mortgages, or financial loans of any kind, secured or unsecured, unless held by a chartered lending institution.

(3) "Operator" means the person responsible for the direct control or overall operations of a facility, and whose duties or responsibilities involve, in whole or part, the management of the facility and the exercise of independent or discretionary judgment. An operator may include the person who has the right to control or in fact controls management of the facility and or the selection of officers, directors, or managers of the facility.

(QQQ) Overflow means the discharge of manure resulting from the filling of manure storage or treatment facilities beyond the point at which no more manure or stormwater can be contained by the facilities.

(RRR) Past violations for purposes of rule 901:10-5-04 of the Administrative Code means violations of Chapter 903. of the Revised Code and rules promulgated thereunder that have occurred on more than one occasion in the past five years.

(SSS) Pests means detrimental insects and rodents.

(TTT) Phosphorus (as P) means the same as phosphate in these rules.

(UUU) Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, large concentrated animal feeding operation, medium concentrated animal feeding operation, small concentrated animal feeding operation, landfill leachate collection system, vessel or other flooding craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

(VVV) Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et. seq.), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

(1) Sewage from vessels; or

(2) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the state in which the well is located, and if the state determines that the injection or disposal will not result in the degradation of ground or surface water resources.

(WWW) Professional engineer means a person qualified to practice engineering according to the provisions of Chapter 4733. of the Revised Code and is presently registered by Ohio's board of registration for professional engineers and land surveyors.

(XXX) Precipitation event means:

(1) A ten year, twenty-four hour rainfall event with a probable recurrence interval of once in ten years, or

(2) A twenty-five year, twenty-four hour rainfall event with a probable recurrence interval of once in twenty-five years; or

(3) A one-hundred year, twenty-four hour rainfall event.

(4) The terms ten year, twenty-four hour precipitation event, twenty-five year, twenty-four hour precipitation event, and one-hundred year, twenty-four hour precipitation event shall mean a precipitation event with a probable recurrence interval of once in ten years or twenty-five years or one hundred years, respectively, as defined by the national weather service in technical paper number forty, rainfall frequency atlas of the United States, May 1961, and subsequent amendments or equivalent regional or state precipitation probability information.

(YYY) Public water system, or PWS, means a system which provides water for human consumption through pipes or other constructed conveyances for the provision to the public of piped water for human consumption, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days out of the year. Such term includes any collection, treatment, storage and distribution facilities under the control of the operator of such system and used primarily in connection with such system, any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system and any water supply system serving an agriculture labor camp, as defined in section 3733.41 of the Revised Code. A public water system is either a "community water system" or a "non-community water system".

(1) Community water system or CWS means a public water system which serves at least fifteen service connections used by year-round residents or regularly serves at least twenty-five year-round residents.

(2) Non-community water system or NCWS means a public water system that is not a community water system.

(a) Non-transient non-community water system or NTNCWS means a public water system that is not a community water system and that regularly serves at least twenty-five of the same persons over six months per year.

(b) Transient non-community water system or TNCWS means a non-community public water system that does not regularly serve at least twenty-five of the same persons over six months of the year.

(ZZZ) Reasonably available means that a livestock manager certified in accordance with rule 901:10-1-06 of the Administrative Code is physically located within the state and is available by telephone or by electronic communication.

(AAAA) Seasonal salmonid habitat means rivers, streams and embayments designated by the Ohio environmental protection agency as set forth in Chapter 3745-1 of the Administrative Code.

(BBBB) Setback means a specified distance from surface waters, wells, neighboring residences, or potential conduits to surface waters where manure, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: Open tile line intake structures, sinkholes, and agricultural well heads.

(CCCC) Significant capital expenditure means a capital expenditure that exceeds the dollar amount specified for the following per animal:

(1) Five dollars and sixty cents each for mature dairy cow, whether milked or dry;

(2) Four dollars each for cattle other than mature dairy cows or veal calves, including heifers, steers, bulls, and cow/calf pairs;

(3) One dollar and sixty cents each for swine weighing fifty-five pounds or more;

(4) Eight dollars each for horses;

(5) Seven cents each for turkeys;

(6) Four cents each for laying hens or broilers, if the animal feeding facility does or does not use a liquid manure handling system.

Comment: If private financial data is submitted to make a claim regarding significant capital expenditure, then the owner or operator may claim the data as a trade secret. The department will inform the owner or operator that the owner or operator has the option to claim private financial data as trade secret.

(DDDD) Solid manure means manure containing greater than twenty per cent total solids.

(EEEE) Sole source aquifer means an aquifer designated by the United States environmental protection agency as the sole or principal ~~principle~~ source of drinking water for a given aquifer service area.

(FFFF) Soil means unconsolidated, erodible earth material consisting of minerals or organics.

(GGGG) Soil horizon means a layer of soil, approximately parallel to the soil surface, with characteristics produced by soil-forming processes.

(HHHH) Staging or staging area means the site used for placement of manure at the time of delivery in such a manner as to facilitate land application within twenty-four hours for the duration of the land application at that site. Staging includes the transfer of liquid manure from transport vehicles to land application equipment for subsurface injection.

(IIII) Stockpile area means field placement of the amount of manure to be used at a land application site.

(JJJJ) Storage or storage period means the length of time anticipated between manure clean-out events provided that manure storage does not mean any form of manure containment for a period of fourteen days or less.

(KKKK) Substantial compliance when referring to compliance with the provisions of a permit, means following the effluent limitations and best management practices set forth in the permit.

(LLLL) Total coliform means all coliform bacteria and is listed with approved methods of analysis in table 1A at 40 CFR 136.3.

(MMMM) Total dissolved solids means nonfilterable residue and is listed with approved methods of analysis in table 1B at 40 CFR 136.

(NNNN) Trade secrets means information, including the whole or any portion or phase of any scientific or technical information, design, process, procedure, formula, pattern, compilation, program, device, method, technique, improvement, business information or plans, financial information, listing of names, addresses, or telephone numbers that satisfies both of the following:

(1) It derives independent economic value, actual or potential, from not being generally known to and not being readily ascertainable through proper means by other persons who can obtain economic value from its disclosure or use.

(2) The person claiming the secrets has taken reasonable efforts under the circumstances to maintain secrecy.

(OOOO) Uncovered means any manure storage or treatment facility that allows exposure of manure to precipitation events or to the run-on or run-off from precipitation

events.

(PPPP) Variance means a type of permit modification that applies to NPDES permits.

(QQQQ) Zoonotic diseases means illnesses that can be transmitted between humans and animals.

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901:10-1-02 **General administrative requirements for permits.**

(A) Requirements for an individual permit to install, an individual permit to operate, or an individual NPDES permit:

(1) A person who is required to obtain both a permit to install pursuant to section 903.02 of the Revised Code and a permit to operate pursuant to section 903.03 of the Revised Code shall submit both applications for these permits simultaneously.

(2) A facility that is required to obtain both an NPDES permit and a permit to operate shall be issued a single permit to operate incorporating the terms and conditions established by both permits. The permit to operate expressly shall designate the terms and conditions required under the NPDES permit as federally enforceable. For purposes of Chapters 901:10-1 to 901:10-6 of the Administrative Code, the term NPDES permit, NPDES operation, and concentrated animal feeding operation is an animal feeding facility that is subject to the NPDES permit as established in section 402 of the Act and includes the renewal of such a permit. NPDES permit includes the federally enforceable provisions of a permit to operate into which NPDES permit provisions have been incorporated.

Comment: A person who seeks coverage by a general permit must refer to rules 901:10-3-11, 901:10-4-01 to 901:10-4-06 of the Administrative Code for a general permit to operate, general NPDES permit or general NPDES stormwater permit.

(3) An application for a permit to install, a permit to operate, or a NPDES permit to be deemed complete, must include:

(a) All required information as set forth in Chapter 901:10-2 and, if applicable, Chapter 901:10-3 of the Administrative Code, and shall accompany the application; and

(b) An appropriate fee as stated in rule 901:10-1-04 of the Administrative Code.

(c) Any supplemental information which is completed to the satisfaction of the director.

(d) If the application and accompanying materials submitted to the department is deemed to be incomplete, the department will notify the owner or operator with instructions as to what is missing or what needs to be completed.

(4) An application for a permit to install, permit to operate or NPDES permit shall include information on ownership and background, including but not limited to, the following information:

(a) The name and address of the applicant, of all partners if the applicant is a partnership or all officers and directors if the applicant is a corporation, and of any other person who has a right to control or in fact controls management of the applicant or the selection of officers, directors or managers of the applicant;

(b) When required by section 903.05 of the Revised Code, each application for a permit to install or permit to operate must contain information on a record of past compliance if the applicant has not operated a concentrated animal feeding facility in Ohio for at least two of the five years immediately preceding the submission of the application. If the permit to install and the permit to operate are submitted simultaneously as provided in division (A) (9) of section 903.10 of the Revised Code, then the following information is sufficient to satisfy the requirements of the permits:

(i) A listing of all concentrated animal feeding facilities that the owner or operator of the proposed new or modified concentrated animal feeding facility has operated or is operating in Ohio;

(ii) A listing of the concentrated animal feeding facilities that the owner or operator has operated or is operating elsewhere in the United States and that are regulated under the Federal Water Pollution Control Act together with a listing of the concentrated animal feeding facilities that the owner or operator has operated or is operating outside the United States;

(iii) A listing of all administrative enforcement orders issued to the owner or operator, all civil actions in which the owner or operator was determined by the trier of fact to be liable in damages or was the subject of injunctive relief or another type of civil relief, and all criminal actions in which the owner or operator pleaded guilty or was convicted during the five years immediately preceding the submission of the application in connection with any violation of the federal Water Pollution Control Act, the Safe Drinking Water Act, as defined in section 6109.01 of the Revised Code or any other applicable state laws pertaining to environmental protection that was alleged to have occurred or to be occurring at any concentrated animal feeding facility that the owner or operator has operated or is operating in the United States or with any violation of the environmental laws of another country that was alleged to have occurred or to be occurring at any concentrated animal feeding facility that the owner or operator has

operated or is operating outside the United States. The lists of concentrated animal feeding facilities operated by the owner or operator within or outside this state or outside the United States shall include, respectively, all such facilities operated by the owner or operator during the five year period immediately preceding the submission of the application.

(5) In the case of an application for a major concentrated animal feeding facility, written proof that the person who would be responsible for the supervision of the management and handling of manure at the facility has been issued a livestock manager certification in accordance with section 903.07 of the Revised Code or will obtain a livestock manager certification prior to applying any manure to land.

(6) In the case of an application that meets the criteria established in sections 307.204 and 505.266 of the Revised Code, written statements from the board of county commissioners of the county and the board of township trustees of the township in which the facility will be located, certifying that, in accordance with those sections, the applicant has provided the boards with the required written notification and that final recommendations, if any, regarding improvements and costs of improvements have been made by the boards.

(7) An application for a permit to install a concentrated animal feeding facility shall contain documentation or correspondence that verifies that the owner or operator has consulted with local officials, including boards of county commissioners or boards of township trustees to address infrastructure needs and financing of that infrastructure.

(8) A certification statement as follows: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. "Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information the information is, to the best of my knowledge and belief, true and accurate and complete. I am aware there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

(9) A complete application is required.

(a) Any person who requires a permit shall complete, sign, and submit to the director an application for each permit required.

(b) The director shall not begin the processing of a permit until the applicant has fully complied with the application requirements for the permit.

(c) Permit applications must comply with the signature and certification requirements of this rule.

(d) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied in accordance with section 903.09(F) of the Revised Code and appropriate enforcement actions may be taken under applicable provisions of the Chapter 903 of the Revised Code and rules promulgated there under.

(B) The owner or operator shall maintain a copy of the current permit to install, permit to operate or NPDES permit issued by the department at the facility site office.

(C) Duration and renewal.

(1) Permit to install.

(a) A permit to install shall expire after twenty-four months unless the applicant has undertaken a continuing program of construction or has entered into a binding contractual obligation to undertake and complete a continuing program of construction within a reasonable time.

(b) The director may extend the expiration of a permit to install upon request of the applicant. An extension, if approved, will be valid for twelve months.

(c) Any further extensions are at the discretion of the director.

(2) Permit to operate.

(a) A permit to operate shall be valid for a period of five years.

(b) A permit to operate may be renewed. An application for renewal of a permit to operate shall be submitted to the director at least one hundred eighty days prior to the expiration date of the permit to operate and shall comply with the requirements governing application for permits to operate that are established by rules, including rules 901:10-2-07 to 901:10-2-20 of the Administrative Code.

(D) NPDES permit.

(1) Any person who discharges or proposes to discharge pollutants and who does not have an effective permit, except persons covered by a general permit under Chapter 901:10-4 of the Administrative Code, must submit a complete application to the director in accordance with this rule and Chapter 901:10-2 of the Administrative Code. All concentrated animal feeding operation owners or operators must seek coverage under an NPDES permit, unless the owner or

operator has received from the director notification of a determination that the concentrated animal feeding operation has "no potential to discharge" manure.

(2) Any person proposing a new discharge shall submit an application at least one hundred and eighty days before the date on which the discharge is to commence unless permission for a later date has been granted by the director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application one hundred and eighty days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity.

(3) When a concentrated animal feeding operation is owned by one person but is operated by another person, the operator may obtain a permit.

(4) Facilities undergoing construction activities that include clearing, grading, excavating, grubbing and/or filling activities that result in the disturbance of one or more acres shall submit applications at least ninety days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits.

(5) Applicants for concentrated animal feeding operations must submit Form 2B.

(6) A NPDES permit shall be valid for a period not to exceed five years.

(7) A NPDES permit may be renewed. An application for renewal of a NPDES permit shall be submitted to the director at least one hundred eighty days prior to the expiration date of the NPDES permit and shall comply with the requirements governing applications for permit to operate and NPDES permit applications that are established in chapters 901:10-2 and 901:10-3 of the Administrative Code.

(E) A permit to operate application that is not connected with an application for a NPDES permit or a permit to install shall be acted upon not later than ninety days after receipt of a complete application as provided by paragraph (A)(9) of this rule. The director or the director's authorized representative may provide guidance and technical assistance to the applicant, provided that the owner or operator is responsible for compliance with the permit and the director shall not be estopped from enforcement.

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901:10-1-03 **Criteria for decision-making.**

(A) Criteria for decision making by the director. The director shall deny, modify, suspend or revoke a permit to install or permit to operate if:

(1) The permit application contains misleading or false information; or

(2) The designs and plans fail to conform to best management practices and to the rules in this chapter or if the owner or operator fails to build the facility in accordance with design plans as approved in the permit to install or in accordance with amended and approved design plans; or

(3) The plans for the manure management plan, the insect and rodent control plan and any other plans governing the operation fail to conform to best management practices and to rules of this chapter; or

(4) The director determines that the designs and plans describe a proposed discharge or source for which a NPDES permit is required under this chapter and that will conflict with an areawide waste treatment plan adopted in accordance with section 208 of the Act; or

(5) The facility is not designed or constructed as a non-discharge system or operated to prevent the discharge of pollutants to waters of the state or to otherwise protect water quality; or

(6) The director determines that the applicant or owner or operator has not complied with rule 901:10-1-10 of the Administrative Code.

(B) The director may deny, modify, suspend or revoke a permit to install or permit to operate if:

(1) The applicant or owner or operator and persons associated with the applicant or owner or operator, in the operation of concentrated animal feeding facilities, have a history of substantial noncompliance with the Federal Water Pollution Control Act, the Safe Drinking Water Act, as defined in section 6109.01 of the Revised Code, any other applicable state laws pertaining to environmental protection or environmental laws of another country that indicates that the applicant or owner or operator lacks sufficient reliability, expertise and competence to operate the proposed new or modified facility in substantial compliance with Chapter 903. of the Revised Code and these rules.

(a) In evaluating a history of substantial noncompliance as required, the director may consider all of the following for a period of five years preceding the date of the application:

(i) Any information submitted on ownership and background pursuant to rule 901:10-1-02 of the Administrative Code, including the following:

(a) If the applicant or permittee is a publicly traded corporation, provide the full name, date of birth, and business address of each individual or business concern holding more than twenty-five per cent of the equity in the applicant or permittee; or

(b) If the applicant or permittee is a sole proprietor or any other business concern, provide the full name, date of birth, and business address of each individual or business concern holding more than fifty per cent of the equity in the applicant or permittee;

(c) If the applicant or permittee is a partnership, as partnership is defined in section 1775.05 of the Revised Code, provide the full name, date of birth, and business address of each individual or business concern holding more than fifty per cent of the equity in the applicant or permittee; and

(d) If the applicant or permittee is the recipient of a financial loan to the facility with provisions for the right to control management of the facility or actual control of the facility or the selection of officers, directors, or managers of the facility, identify the full name, date of birth, and business address of each individual or business concern providing the loan.

(ii) Any administrative enforcement action (including an administrative order or notice of violation), civil suit, or criminal proceeding that is:

(a) Pending against the applicant or a business concern owned or controlled by the applicant;

(b) Resolved or dismissed in a settlement agreement, in a consent order or decrees, is adjudicated or otherwise dismissed and that may or may not have resulted in the imposition of:

(i) A sanction such as a fine, penalty, payment or work or service performed in lieu of a fine or penalty; or

(ii) Cessation or suspension of operations.

(iii) Any revocation, suspension, or denial of a license or permit or equivalent authorization; or

(iv) With respect to paragraph (B)(1)(a) of this rule, any explanation that the applicant or owner or operator may choose to submit.

(C) In addition to the criteria set forth in paragraphs (A) and (B) of this rule, the director shall deny, modify, suspend, or revoke an NPDES permit if the director determines:

(1) Discharge from the facility will prevent or interfere with attainment or maintenance of applicable water quality standards adopted under section 6111.041 of the Revised Code and the most current antidegradation policy adopted under section 6111.12 of the Revised Code; or

(2) Discharge from the facility will not achieve compliance with national effluent standards; or

(3) The administrator of the United States environmental protection agency objects in writing to the issuance of the NPDES permit in accordance with section 402(d) of the Act; or

(4) The proposed discharge or source will conflict with an areawide waste treatment management plan adopted in accordance with section 208 of the Act; or

(5) Forms, notices, or reports required pursuant to the terms and conditions of the NPDES permit are false or inaccurate;

(6) The discharge is of any radiological, chemical, or biological warfare agent or high-level radioactive waste or medical waste; or

(7) The United States army corps of engineers for the district in which the discharge is located objects in writing to the issuance of the NPDES permit as substantially impairing navigation or anchorage; or

(8) Discharge from the facility will not achieve national standards of performance for new sources; or

(9) There is a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

(10) The permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(11) The applicant or owner or operator is required to obtain a state or other appropriate certification under section 401 of the Act and 40 CFR section 124.53 and that certification has not been obtained or waived;

(12) When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states; or

(13) Discharge from the facility will not achieve and maintain compliance with other requirements of the Act and the regulations promulgated thereunder.

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901:10-1-04 **Fees.**

(A) Applicants for permits and certifications shall pay non-refundable fees to the department of agriculture for each such issuance as provided by this rule and rule 901:10-1-02 of the Administrative Code.

(B) Each owner or operator who applies for a new or renewal permit, review compliance certificate, permit to operate, permit to install, NPDES permit or general permit under Chapter 903. of the Revised Code shall pay the fees specified in the following schedule:

Review Compliance certificate (existing facilities 2002-2004)	Permit to install	Stormwater permit (for construction only)	Permit to Operate	Permit to operate with NPDES
$200	$1,250	$100	$750	$1,000

General permit (permit to operate)	General permit with NPDES	Permit modification/permit transfer	Certified livestock manager
$750	$1,000	$200	$30

(C) As required in rule 901:10-1-06 of the Administrative Code, the livestock manager certificate will be assessed a fee of thirty dollars. Fees are assessed upon application for a certificate or renewal of certificate. A late charge of thirty dollars shall be assessed for a certificate expired more than thirty days.

(D) Review compliance certificates are applicable to those facilities holding a permit to install issued by the Ohio environmental protection agency. The review compliance certificate fees are paid at the time of the application. Additional permit to operate fees will be paid at the time of the permit to operate application.

(E) The permit to install shall be submitted simultaneously with the permit to operate with applicable fees for each permit.

(F) An application for the permit to install will be assessed a fee of one thousand two hundred fifty dollars.

(G) If a stormwater permit is necessary with the permit to install, an additional one hundred dollars will be assessed.

(H) An application for the permit to operate, filed independently or with a permit to install, will be assessed a fee of seven hundred fifty dollars. The renewal fee for the permit to operate will be seven hundred fifty dollars.

(I) An application for the permit to operate, filed with an application for a NPDES permit, will be assessed an additional fee of two hundred fifty dollars. The total amount will be one thousand dollars for this combined permit.

(J) An application for a general permit to operate will be assessed a fee of seven hundred fifty dollars. The renewal fee for the general permit to operate is seven hundred fifty dollars.

(K) An application for a general permit to operate, filed with an application for a NPDES permit, will be assessed an additional fee of two hundred fifty dollars. The total amount will be one thousand dollars for this combined permit.

(L) Permit transfers are subject to a fee of two hundred dollars.

(M) Modifications to permits are subject to a fee of two hundred dollars.

(N) The fees assessed under this rule shall be collected upon submission of the application for permit as required by rule 901:10-1-02 of the Administrative Code or certificates or renewals or upon application for permit transfer or permit modification.

(O) The director shall review the fees prescribed in paragraphs (B) to (N) of this rule biennially. If necessary to revise fees, the director shall compile revised fee schedules and shall make the revised schedules available to persons required to pay the fees and to the public.

(P) If fees do not accompany the application as set forth in paragraphs (B) to (N) of this rule, the application will be deemed incomplete. The applicant will be contacted with notice as to what fees are applicable and the application will not be processed until the fees are paid.

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901:10-1-05 **Trade secrets requests for confidentiality.**

(A) Applicant means a person submitting a claim of trade secrecy to the director or to the director's authorized representative.

(B) Records, reports or other information obtained under Chapter 903. of the Revised Code or rules thereunder may be entitled to protection as trade secrets. In order to be protected, the applicant shall demonstrate to the director's satisfaction that all or part of such records, reports or other information, (including attachments that are required to be submitted), or other part thereof (other than effluent data) to which the director has access under this rule, if made public would divulge methods or processes or other information entitled to protection as trade secrets. If the director determines that the claim for trade secret is satisfied, the director shall consider such records, reports, or other information or part thereof confidential and manage the records, reports or other information pursuant to this rule.

(C) The following information is considered a public record for which claims of trade secrecy will be denied:

(1) The name and address of any permit applicant or permittee;

(2) Permit forms, permit applications, permits and sampling and effluent data;

(3) Information required by NPDES application forms provided by the department including information submitted on the forms themselves and any attachments used to supply information required by the forms; and

(4) Any public comments, testimony or other documentation from the public concerning a permit application.

(D) A request for confidentiality shall be submitted to the director simultaneously with submission of the specific record, report or other information. The applicant shall clearly indicate the record, report or information as trade secret and shall label it "trade secret". Failure to make such request simultaneously shall constitute a waiver of the right to prevent public disclosure. A request for confidentiality shall be accompanied by documents that support the request which include:

(1) Describe the measures the applicant has taken to safeguard the confidentiality of the information.

(2) Indicate whether or not others are bound by a confidentiality agreement.

(E) A decision as to the confidentiality request shall be made by the director within forty-five days of receipt of a request filed in accordance with this rule. Until such decision is made, the record, report or other information or part thereof, shall be confidential and maintained by the director in a separate file labeled "confidential". The applicant shall be notified by mail of the decision.

(F) Any record, report or other information determined to be confidential may be disclosed without the applicant's consent to officers, employees or authorized representatives of the state, another state or the United States when necessary for an enforcement action brought under this chapter or when otherwise required by the Federal Water Pollution Control Act.

(G) Ten days prior to release of the trade secret to those described in paragraph (E) of this rule, the director shall give notice to the claimant of the release of the information.

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901:10-1-06 **Certified livestock manager.**

(A) Purpose and applicability.

(1) The management and handling of manure at a major concentrated animal feeding facility, including the land application of manure or the removal of manure from a manure storage or treatment facility, shall be conducted only by or under the supervision of a person holding a livestock manager certification.

(2) No person who is a livestock manure broker shall buy, sell, or land apply annually more than four thousand five hundred dry tons of manure or more than twenty-five million gallons of liquid manure unless the person is a certified livestock manager.

(3) No person who is a livestock manure applicator shall land apply and transport annually more than four thousand five hundred dry tons of manure or more than twenty-five million gallons of liquid manure unless the person is a certified livestock manager.

(4) Any person subject to this rule who is either a livestock manure broker or a livestock manure applicator shall maintain an operating record on forms provided by the department and other forms selected by the livestock manure broker or livestock manure applicator and approved by the director. The operating record shall be retained for a minimum period of five years, shall be made available to the director upon request, and shall record and document the following information for land application:

(a) Paragraph (A)(1)(c)(ii) to (A)(1)(c)(iv) of rule 901:10-2-16 of the Administrative Code; and

(b) Paragraph (A)(1)(c)(xiv) to (A)(1)(c)(xvii) of rule 901:10-2-16 of the Administrative Code.

(5) In order for a person to manage or handle manure at a major concentrated animal feeding facility or for a person to either transport and land apply manure or to, buy, sell or land apply annually more than four thousand five hundred dry tons of solid manure or more than twenty-five million gallons of liquid manure in this state, they shall obtain a livestock manager certification from the department. In the alternative, the person may present a certified copy of an equivalent and valid manure manager certification from another state, which has been verified by the director or his designated representative, together with the appropriate fee as listed in the fee rule.

(6) This rule does not apply to a person who is an owner or operator of a concentrated animal feeding facility permitted by the director in accordance with section 903.02 of the Revised Code or section 903.03 of the Revised Code, unless that person applies other manure from another animal feeding facility, concentrated animal feeding facility, or major concentrated animal feeding facility in excess of four thousand five hundred tons per year of solid manure or more than twenty-five million gallons of liquid manure per year.

(7) A person is considered to be under supervision of a certified livestock manager if the holder of the certification is reasonably available, but not necessarily physically present, during the management and handling of manure. The certified livestock manager cannot claim the lack of presence as a defense under Chapter 903. of the Revised Code.

(B) Application and certification procedures.

(1) In order to be a certified livestock manager, the applicant must meet the requirements in paragraphs (D)(1) to (D)(5) of this rule.

(2) The applicant for a livestock manager certification shall file an application on a form provided by the director. The application shall include but not be limited to: address and telephone number of the applicant; the results of the applicant's test results for any examination completed by the applicant as described in paragraphs (D)(1) to (D)(5) of this rule; and if applicable, the quantity of manure managed or handled by the applicant.

(3) All certifications issued shall expire on December thirty-first of the third year after the year in which the certificate was issued and each December thirty-first triennially thereafter, unless renewed in accordance with this rule. Any certification issued shall be valid for three years and thereafter be subject to renewal. A renewal shall be valid for three years.

(4) The department shall charge an appropriate fee as listed in the fee rule 901:10-1-04 of the Administrative Code for the issuance and renewal of a livestock manager certification.

(5) In order for a certification to be renewed, the holder must accumulate ten hours of continuing education credit over a three year period immediately preceding the date of application..

(C) Enforcement.

(1) The director may suspend, revoke or deny a livestock manager certification if the certified livestock manager:

(a) Engages in fraud or deceit in obtaining a certification; or

(b) Fails to exercise reasonable care, judgment or use of the manager's knowledge and ability in the performance of the duties of a certified livestock manager; or

(c) Is incompetent or otherwise unable to properly perform the duties of a certified livestock manager; or

(d) Has violated or caused to be violated any provision or rules of Chapter 903. of the Revised Code.

(2) If a livestock manager certification is suspended, the suspension shall be in effect for a period of not less than two hundred seventy days. After the required two hundred seventy days has passed and if there is substantial evidence that the conditions leading to the suspension have been corrected, the director may issue a certificate to reinstate the suspended livestock manager certification. A person may apply in writing for reinstatement. The petition must include any relevant facts concerning changes to conditions under which suspension or revocation occurred.

(3) If a livestock manager certification is revoked, the livestock manager has a right to a hearing in accordance with Chapter 119. of the Revised Code.

(4) If a livestock manager certificate is denied, the livestock manager is entitled to a hearing in accordance with Chapter 119. of the Revised Code.

(5) If a certified livestock manager fails to renew his certification within thirty days of its expiration, he or she must make application for certification and meet the requirements of paragraph (B) of this rule.

(6) Violations of section 903.07 of the Revised Code and division (E) of section 903.10 of the Revised Code and this rule will be considered to be category II and low gravity as set forth in rule 901:10-5-04 of the Administrative Code.

(D) Training and examination procedures.

(1) The department may offer a training program and an examination for a livestock manager certification. The applicant shall have knowledge of information on topics that include calculating nutrient values in manure, devising and implementing a plan for the land application of manure, removing manure held in a manure storage or treatment facility and following best management practices for disposal of dead animals and manure management, including practices that control odor and protect the environment. The applicant shall be expected to have knowledge of how to devise and implement a manure

management plan and an insect and rodent control plan. In addition, the applicant shall understand the laws and rules related to animal feeding facilities.

(2) An applicant for a livestock manager certification shall pay a fee as required by rule 901:10-1-04 of the Administrative Code.

(3) The director may specify other types of recognized training programs that, if completed, are considered to satisfy the training and examination requirement.

(4) The director has determined that the following training and certification programs satisfy this rule:

(a) If an applicant for a livestock manager certification demonstrates that he or she has the knowledge of information of the topics set forth in paragraph (D)(1) of this rule and that he or she has completed the training provided in accordance with the "certified crop advisor" program conducted by the "American Society of Agronomy" and demonstrates that he or she has successfully passed the examination, then the applicant will be eligible for a certificate issued in accordance with this rule; or

(b) If the applicant for a livestock manager certificate demonstrates that he or she has the knowledge of the information of the topics set forth in paragraph (D)(1) of this rule and that he or she has completed the training and certification of the United States department of agriculture natural resource conservation service relating to being a certified planner to prepare comprehensive nutrient management plans, then the applicant will be eligible for a certificate issued in accordance with this rule.

(5) The department may cooperate with or enter into cooperative agreements with any official agency of the federal government, of this state or its subdivisions, or other academic or private institutions for the purpose of administration of the training and examination portions of Chapter 903. of the Revised Code.

(6) In accordance with section 903.20 of the Revised Code, the director may call upon the concentrated animal feeding facility advisory committee to assist in establishing the standards of training and examination.

(7) Training and examination opportunities will be provided at such times and places as determined by the department in consideration of the number and location of requests.

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901:10-1-07 **Review compliance certification applications.**

(A) The owner or operator of an existing concentrated animal feeding facility shall furnish all of the following to the director on a form prescribed by the director:

(1) The name and address of the owner, of all partners if the owner is a partnership or of all officers and directors if the owner is a corporation, and of any other person who has a right to control or in fact controls management of the facility or the selection of officers, directors, or managers of the facility;

(2) Specific information about the number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine, mature dairy cows, dairy heifers, sheep and lambs, horses, turkeys);

(3) A manure management plan for the facility that conforms to best management practices regarding the handling, storage, transportation and land application of manure generated at the facility and that contains any other information required by rules 901:10-2-08 to 901:10-2-11, 901:10-2-13 to 901:10-2-16 and 901:10-2-18 of the Administrative Code;

(4) A plan for the disposal of dead livestock in accordance with rule 901:10-2-15 of the Administrative Code;

(5) An insect and rodent control plan for the facility that conforms to best management practices and is prepared in accordance with rule 901:10-2-19 of the Administrative Code;

(6) In the case of a major concentrated animal feeding facility, written proof that the person who would be responsible for the supervision of the management and handling of manure at the facility has been issued a livestock manager certification in accordance with rule 901:10-1-06 of the Administrative Code.

(7) The names and addresses for all persons owning property contiguous to the production area of the concentrated animal feeding facility.

(B) The owner or operator need not furnish any information otherwise required under paragraph (A) of this rule if that information is included in the permit to install that was issued for the existing facility. The owner or operator shall revise or amend information to reflect current operating conditions or otherwise verify that the information is accurate.

(C) Within one year of the date on which the director has finalized the program as that term is defined in division (I) of section 903.01 of the Revised Code, the director shall:

(1) Review the installation permits and inspect at least fifty per cent of all existing concentrated animal feeding facilities that hold a previously issued installation permit.

(2) Require the owners or operators of existing concentrated animal feeding facilities selected for review under this paragraph to provide the information required in paragraph (A) or paragraph (B) of this rule.

(D) Within two years of the date on which the director has finalized the program as that term is defined in division (I) of section 903.01 of the Revised Code, the director shall:

(1) Review the installation permits and inspect for the remaining fifty per cent of existing concentrated animal feeding facilities that hold a previously issued installation permit.

(2) Require the owners or operators of existing concentrated animal feeding facilities selected for review under this paragraph to provide the information required in paragraph (A) or paragraph (B) of this rule.

(E) The director may consider the following factors in developing a schedule for facilities in the first year and the second year of the finalized program:

(1) Age of the facility;

(2) Date of the facility's most recent inspection;

(3) Size of the facility;

(4) The facility's record of compliance or noncompliance;

(5) Coordination of fieldwork and surveillance with the local soil and water conservation district and with staff of the Ohio environmental protection agency;

(6) Geographic proximity of facilities.

(F) The director shall review the existing installation permit, the facility, the information furnished under paragraph (A) or paragraph (B) of this rule and determine if the existing facility is being operated in a manner that protects the waters of the state and minimizes the presence and negative effects of insects and rodents at the facility and in surrounding areas. If the director finds that the existing facility is in compliance, the director shall issue an order granting a review compliance certificate to the

facility. In issuing the certificate, the director shall consider technical feasibility and economic costs, provided the director shall not require a significant capital expenditure, as that term is defined in rule 901:10-1-01 of the Administrative Code, to be made.

(G) If the director finds that the existing facility is not being operated in a manner that protects the waters of the state and that the insect and rodent control plan and the manure management plan do not conform to the best management practices of these rules, the director may issue an order denying a review compliance certificate. The director shall notify the owner or operator that the orders may be appealed in an adjudication hearing in accordance with Chapter 119. of the Revised Code, except that section 119.12 of the Revised Code does not apply.

(H) The denial of a review compliance certificate terminates the existing installation permit previously issued to the facility. The owner or operator shall apply for a permit to install and/or a permit to operate pursuant to this chapter if the owner or operator plans to continue operations at the existing facility.

(I) Upon issuance of a review compliance certificate, the certificate automatically shall merge and become a part of the previously issued installation permit. An existing facility that is issued a review compliance certificate shall comply with the previously issued installation permit. If any of the terms and conditions of the installation permit and the review compliance certificate is in conflict, the terms and conditions of the review compliance certificate are controlling.

(J) A review compliance certificate is valid for period of five years. Not later than one hundred eighty days prior to the expiration date of the review compliance certificate, the owner or operator shall apply for a permit to operate.

(K) The director may revoke a review compliance certificate issued to an existing facility after the director has issued an order as a result of a hearing held under Chapter 119. of the Revised Code in which the facility has been found to be in violation of the terms and conditions of the review compliance certificate. An existing facility whose review compliance certificate is revoked shall apply for a permit to operate and, if applicable, a NPDES permit in order to resume operating.

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901:10-1-08 **Permit transfer.**

(A) Transfers of permits for concentrated animal feeding facilities and concentrated animal feeding operations are permissible.

(B) In this rule, transferor means the current holder of a permit to install and/or permit to operate and/or NPDES permit. Transferee means the person making application to acquire the existing permit.

(1) The director shall be notified in writing by the transferor at least thirty days prior to any proposed transfer of a permit. The transferee shall inform the director that it will assume the responsibilities of the transferor.

(2) The notice shall include a written agreement between the transferor and transferee containing a specific date for transfer of permit responsibility, coverage and liability between the parties.

(C) In order to satisfy the requirements of paragraph (B) of this rule, the following information shall be submitted by the transferee:

(1) The name and address of the transferor and the transferee. The transferee shall identify all partners if the transferee is a partnership or all officers and directors if the transferee is a corporation, and of any other person who has a right to control or in fact controls management of the transferee or the selection of officers, directors, or managers of the transferee. If the transferee is an owner or operator as these terms are defined in paragraph (MMM) of rule 901:10-1-01 of the Administrative Code the transferee must satisfy the requirements of this rule.

(2) In the case of an application for a transfer of a permit for a major concentrated animal feeding facility, written proof that includes copies of certificates or authenticating documentation that they will employ a certified livestock manager.

(D) Each application to transfer a permit that is submitted by a new owner or operator who has not operated a concentrated animal feeding facility in this state for at least two of the five years immediately preceding the submission of the application for transfer shall be accompanied by all of the following:

(1) A listing of all concentrated animal feeding facilities that the transferee has operated or is operating in this state;

(2) A listing of the concentrated animal feeding facilities that the transferee has operated or is operating elsewhere in the United States and that are regulated under the Act together with a listing of the concentrated animal feeding facilities that the transferee has operated or is operating outside the United States;

(3) A listing of all administrative enforcement orders issued in connection with the transferee; all civil actions in which the transferee was determined by the trier of fact to be liable in damages or was the subject of injunctive relief or another type of civil relief; all criminal actions in which the transferee pleaded guilty or was convicted during the five years immediately preceding the submission of the application for transfer in connection with any violation of the "Federal Water Pollution Control Act," the "Safe Drinking Water Act," as defined in section 6109.01 of the Revised Code, or any other applicable state laws pertaining to environmental protection that was alleged to have occurred or to be occurring at any concentrated animal feeding facility that the transferee has operated or is operating in the United States or with any violation of the environmental laws of another country that was alleged to have occurred or to be occurring at any concentrated animal feeding facility that the transferee has operated or is operating outside the United States. The lists of concentrated animal feeding facilities operated by the transferee within or outside this state or outside the United States shall include, respectively, all such facilities operated by the transferee during the five-year period immediately preceding the submission of the application.

(E) Denial of transfer of permits to install, permits to operate, or NPDES permits. The director may deny the application for transfer if the director finds from the application, the information submitted and pertinent information obtained by the director at the director's discretion that the transferee and persons associated with the transferee in the operation of concentrated animal feeding facilities have a history of substantial noncompliance with the "Federal Water Pollution Control Act," the "Safe Drinking Water Act," as defined in section 6109.01 of the Revised Code, any other applicable state laws pertaining to environmental protection or the environmental laws of another country that indicates that the transferee lacks sufficient reliability, expertise and competence to operate the proposed new or modified concentrated animal feeding facility in substantial compliance with this chapter and rules adopted under it. In evaluating a history of substantial noncompliance the director shall consider the information required to be pursuant to rule 901:10-1-03 of the Administrative Code. A denial by the director may be appealed by the owner or operator in accordance with Chapter 119. of the Revised Code.

(F) If the director does not notify the transferor or the transferee of an intention to object to the transfer, then the permit will be transferred. The director may also notify both the transferor and the transferee of the director's decision.

(G) The director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

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901:10-1-09 **Permit modifications.**

(A) No facility or activities regulated by a permit to install or a permit to operate or a NPDES permit under this chapter shall be modified as that term is defined in rule 901:10-1-01 of the Administrative Code unless the permit is modified in compliance with this rule. When a permit is modified, only the conditions subject to modification are reopened. A draft permit modification must be prepared and is subject to public notice and public participation procedures in rules 901:10-6-01 to 901:10-6-06 of the Administrative Code.

(B) The director may propose to modify a permit for the following reasons which include, but are not limited to:

(1) If the director receives information submitted by the owner or operator requesting to modify the permit; or

(2) If the director receives information through inspections; or

(3) If the director reviews a permit.

The director may seek the consent of the owner or operator before the director modifies the permit. The director shall issue a notice of the proposed permit modification with an opportunity for an adjudication hearing in accordance with Chapter 119. of the Revised Code.

(C) Either the director or any interested person may propose to modify a NPDES permit or revoke and reissue a NPDES permit or both for the following reasons:

(1) Alterations. There are material and substantial alterations, additions or expansions to the operation which occurred after a permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(2) Information. The director has received new information. NPDES permits may be modified during their term for this cause only if the information was not available at the time of permit issuance (other than revised rules or test methods) and would have justified the application of different permit conditions at the time of issuance. For NPDES general permits this cause includes any information indicating that cumulative effects on the environment are unacceptable. For a new source of an NPDES discharge this cause shall include any significant information derived from effluent testing required after issuance of the permit.

(3) New regulations. The standards or rules on which the NPDES permit was based have been changed by promulgation of amended standards or rules or by judicial decision after the permit was issued. NPDES permits may be modified during their terms for this cause only as follows:

(a) For promulgation of amended standards or rules, when:

(i) The permit condition requested to be modified was based on a promulgated effluent limitation guideline or on promulgated water quality standards or water quality standards approved by the United States environmental protection agency; and

(ii) U.S.EPA has revised, withdrawn or modified that portion of the rule or effluent limitation guideline on which the permit condition was based, or has approved a state action with regard to a water quality standard on which the permit condition was based; and

(iii) An owner or operator requests modification within ninety days after Federal Register notice of the action on which the request is based.

(b) For judicial decisions, when: a court of competent jurisdiction has remanded and stayed rules; if the remand and stay concern that portion of the rules or guidelines on which the permit condition was based; and a request for a permit modification is filed by the owner or operator within ninety days of judicial remand.

(4) Compliance schedules. The director determines good cause exists for modification of a compliance schedule of a NPDES permit, such as acts of nature or acts of third parties, strike, flood, materials shortage or other events over which the owner or operator has little or no control and for which there is no reasonably available remedy. However, in no case may a NPDES permit compliance schedule be modified to extend beyond any applicable statutory deadline in the Act.

(5) When the owner or operator has filed a request for a variance under rule 901:10-3-08 of the Administrative Code or for a "fundamentally different factors" variance within the time specified in 40 CFR section 122.21. or 40 CFR section 125.27(a) for an NPDES permit.

(6) To correct technical mistakes (other than the operational changes defined in paragraph (F) of this rule and listed in the appendix to this rule), such as errors in calculation or mistaken interpretations of law made in determining permit conditions.

(D) The owner or operator may submit a written request to the director for approval by the director if the following apply:

(1) The owner or operator desires to accomplish material or substantial alterations or expansions or additions to the facility or other changes defined as a modification; or

(2) New information or data obtained by the owner or operator justify permit conditions in addition to or different from those in the existing permit.

(E) An application for permit modification or a major operational change submitted by the owner or operator shall contain the following information:

(1) The name of the owner or operator and the name and address and telephone number of the facility or operation;

(2) A description of the exact nature of the changes to be made;

(3) An explanation of why the modification or major operational change is needed or desired; and

(4) Applicable technical information in support of the request for modification or major operational change, including but not limited to, data, records, reports, trend analysis, site plans and engineering plans that show the location and extent of work to be performed or the plan to be modified.

(5) If the director decides that the request for modification is not justified, the owner or operator shall be notified in writing and provided the reasons for the director's determination.

(F) Operational changes. Changes to the facility that are not modifications as that term is defined in rule 901:10-1-01 of the Administrative Code may be either operational changes or major operational changes. Appended to this rule is a list of types of changes or activities that are operational changes and major operational changes. The owner or operator shall notify the director of any planned major operational change in accordance with paragraph (E) of this rule. The owner or operator shall provide the director or the director's authorized representative with an opportunity for a site inspection and with a thirty-day review of technical information. If the type of change or activity is not a modification and is not listed in the appendix, then the director shall exercise discretion to decide if the change proposed by the owner or operator or by the director is a modification or an operational change or a major operational change. Upon the request of the director or as initiated by the owner or operator, operational and major operational changes may be made by the owner or operator and shall be recorded in the operational record required by rule 901:10-2-16 of the Administrative Code.

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Appendix to rule 901:10-1-09 Operational Changes.

Operational change	Comment
To correct technical mistakes, such as errors in calculation made in determining land application rates; record changes and calculations in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.	See rule 901:10-2-14 of the Administrative Code.
Administrative changes in Emergency Response Plan or Closure Plan, e.g., changes in personnel or telephone numbers; record in the emergency response plan or the operating record as applicable, in accordance with either rule 901:10-2-17 or 901:10-2-16 of the Administrative Code.	See rules 901:10-2-17 [emergency response] and 901:10-2-18 [closure plans] of the Administrative Code.
Changes in methods of handling and disposing of dead livestock; record in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.	See rule 901:10-2-15 of the Administrative Code
Changes in rates of land application of nitrogen or phosphorus made for each land application site that do not impact the total nutrient budget by more than ten per cent; compare to total nutrient requirements for the farm and record in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.	See rule 901:10-2-14 of the Administrative Code.
Changes in frequency of sampling or monitoring or reporting of soil at the land application sites or of manure at the manure storage or treatment facility that do not exceed the minimum requirements in rules 901:10-2-10 and 901:10-2-13 of the Administrative Code; record changes in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.	See rules 901:10-2-13 [soil sampling and results] and 901:10-2-10 [manure characterization] of the Administrative Code.
Changes due to use of a Distribution and Utilization Plan that will either add or decrease the amount of manure to be managed by land application; record in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.	See rule 901:10-2-11 of the Administrative Code.
Equipment replacement or upgrading with new or functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls) or to use technological advancements; record in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.	See rule 901:10-2-08 of the Administrative Code.

Major operational changes.	Comment
Changes or addition of any manure storage or treatment facility that is less than a 10 per cent increase in design capacity.	See rule 901:10-2-02 of the Administrative Code.

Changes to any settling ponds, run-on or run-off systems, or to any berms, diversions, or buffers or any changes to stormwater management.	See rules 901:10-2-04 and 901:10-2-08 of the Administrative Code.
Changes to raw material storage areas, including, but not limited to, feed silos, silage bunkers, commodity buildings, and bedding materials.	See rule 901:10-2-01(C)(5) of the Ohio Administrative Code.
Changes to waste containment areas, including, but not limited to, any of the following: egg washing or egg processing facilities; areas used in the storage, handling, treatment, or disposal of mortalities.	See rule 901:10-2-01(C)(5) of the Ohio Administrative Code.
Changes to the Insect and Rodent Control Plan.	See rule 901:10-2-19 (F) of the Ohio Administrative Code.

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901:10-1-10 **Prohibitions.**

(A) No person shall modify an existing or construct a new concentrated animal feeding facility without first obtaining a permit to install issued by the director under section 903.02 of the Revised Code.

(B) Except for a concentrated animal feeding facility that is operating under an installation permit issued by the director of environmental protection or a review compliance certificate issued by the director, on and after the date on which the program has been finalized under section 903.01 of the Revised Code, no person shall operate a concentrated animal feeding facility without a permit issued by the director under section 903.03 of the Revised Code.

(C) No person to whom a NPDES permit has been issued shall discharge or cause to be discharged, in any waters of the state any manure, pollutants, or stormwater resulting from an animal feeding facility in excess of the permissive discharges specified under an existing permit.

(D) On and after the date on which the United States environmental protection agency approves the NPDES program submitted by the director of agriculture under section 903.08 of the Revised Code, no person shall discharge pollutants from a point source into waters of the state unless authorized by a valid and unexpired NPDES permit issued by the director or unless an application for renewal of such NPDES permit has been submitted by the person and is pending.

(E) All concentrated animal feeding operations have a duty to seek coverage under a NPDES permit. In the alternative, a concentrated animal feeding operation may seek a "no potential to discharge" determination from the director in accordance with rules 901:10-3-01 and 901:10-6-01 to 901:10-6-06 of the Administrative Code.

(F) On and after the date on which the United States environmental protection agency approves the NPDES program submitted by the director, no person shall discharge stormwater resulting from an animal feeding facility unless authorized by a NPDES permit when such a permit is required by the Act and subsequently issued by the director of agriculture pursuant to section 903.08 of the Revised Code.

(G) No person shall violate the terms and conditions of a permit to install, permit to operate, review compliance certificate, or NPDES permit.

(H) No person shall violate any effluent limits established by rule.

(I) No person shall violate any other provision of a NPDES permit issued by the director.

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901:10-1-11 **Exclusions.**

The following discharges do not require NPDES permits:

(A) Discharges of dredged or fill material into waters of the state which are regulated under section 404 of the Act and by the director of environmental protection in accordance with Chapter 6111 of the Revised Code.

(B) The introduction of sewage, industrial wastes, or other pollutants into publicly owned treatment works by indirect dischargers. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with NPDES permits until all discharges of pollutants to waters of the state are eliminated. This exclusion does not apply to the introduction of pollutants to privately owned treatment works or to other discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other party not leading to treatment works.

(C) Any discharge in compliance with the instruction of a federal on-scene coordinator, as that term is defined in section 2305.39 of the Revised Code, who is the federal official designated in the national contingency plan pursuant to 40 CFR part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances).

(D) Any introduction of pollutants from nonpoint source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures range lands and forest lands, but not discharges from concentrated animal feeding operations, discharges to aquaculture projects, and discharges from silvicultural point sources.

(E) Return flows from irrigated agriculture.

(F) Discharges into a privately owned treatment works, except as the director of environmental protection may otherwise require.

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901:10-2-01 **Permit to install: purpose and applicability.**

(A) Purpose and applicability of a permit to install.

(1) No person shall construct a new concentrated animal feeding facility without first obtaining a permit to install issued by the director.

(2) Any person who plans to construct a large concentrated animal feeding operation or a concentrated animal feeding facility or major concentrated animal feeding facility shall comply with applicable rules 901:10-2-01 to 901:10-2-06 of this chapter.

(3) Any animal feeding facility that is a small or medium concentrated animal feeding operation may be required by the director to comply with applicable rules 901:10-2-01 and 901:10-2-03 to 901:10-2-06 of the Administrative Code.

(a) If the director has made a determination that the medium or small animal feeding facility shall be required to be permitted as a medium or small concentrated animal feeding operation; and

(b) If the director determines that the existing animal feeding facility requires modifications in order to comply with best management practices.

(4) A person that is required to obtain both a permit to install pursuant to section 903.02 of the Revised Code and a permit to operate pursuant to section 903.03 of the Revised Code shall submit both applications for those permits simultaneously.

(B) Administrative procedures for a permit to install.

(1) In order to obtain a permit to install, the owner or operator shall submit:

(a) A properly completed application in accordance with paragraph (C) of this rule; and

(b) An appropriate fee as stated in rule 901:10-1-04 of the Administrative Code.

(2) The owner or operator may amend the application for a permit to install prior to the conduct of any public meeting that may be held for the draft permit to install and/or while the permit to install application is pending before the director. Upon completion of construction of the manure storage or treatment facility, the

owner or operator shall submit a notarized statement certifying that the facility was constructed in accordance with the design plans to the department. A copy of the completed and approved as-built plans shall be submitted to demonstrate compliance with paragraph (A) of rule 901:10-2-05 or paragraph (A) of rule 901:10-2-06 of the Administrative Code and shall be submitted for the permanent record. Facilities are required to be inspected by the director or an authorized representative in a timely manner prior to stocking with animals.

(3) The owner or operator shall maintain a copy of the current permit to install issued by the department at the concentrated animal feeding facility's site office. A copy of the completed and approved plans will be kept at the office of the facility.

(4) A permit to install may be modified in accordance with rule 901:10-1-09 of the Administrative Code. The owner or operator shall not modify the concentrated animal feeding facility without obtaining a permit modification.

(C) Contents of an application for a permit to install.

Unless otherwise indicated, an application for a permit to install shall contain the information and criteria as required in rules 901:10-1-02 and 901:10-1-03 of the Administrative Code and shall attach and/or include all of the following information:

(1) The name and address of the applicant, of all partners if the applicant is a partnership or of all officers and directors if the applicant is a corporation and of any other person who has a right to control or in fact controls management of the applicant or the selection of officers, directors or managers of the applicant.

(2) The type of livestock and the number of animals that the concentrated animal feeding facility would have the design capacity to raise or maintain and the anticipated beginning and ending dates for work performed.

(3) A statement of the quantity of water that the concentrated animal feeding facility will utilize on an average daily and annual basis, a detailed description of the basis for the calculation utilized in determining the quantity of the water utilized and a statement identifying the source of the water.

(4) Copies of recorded water well logs on file with the Ohio department of natural resources division of water and their locations within a one thousand foot radius of the manure storage or treatment facility, as located on a map that includes the well locations.

(5) A scaled map adequate to show detail that includes, but is not limited to:

(a) Approximate overall dimensions of the manure storage or treatment facility;

(b) Boundaries of the concentrated animal feeding facility;

(c) Location and siting distances from the manure storage or treatment facility. For purposes of identifying and illustrating the siting criteria, the owner or operator of a large concentrated animal feeding operation or a concentrated animal feeding facility or a major concentrated animal feeding facility is to submit a document that demonstrates compliance with the siting criteria in rule 901:10-2-02 of the Administrative Code; and

(d) Identify the approximate location of all known subsurface drains within one hundred feet of the proposed manure storage or treatment facility.

(6) The report required by paragraph (C) of rule 901:10-2-03 of the Administrative Code, including the information on the soils, ground water sampling and analysis, hydrology, subsurface geology and topography of the land area used for the manure storage or treatment facility based on the subsurface geological exploration conducted in accordance with rule 901:10-2-03 of the Administrative Code. The report may also include site-specific information and conclusions derived from the site's subsurface geological exploration. If required as a result of the subsurface geological exploration conducted pursuant to rule 901:10-2-03 of the Administrative Code, additional groundwater monitoring shall be included.

(7) Designs, plans and detailed engineering drawings for the proposed construction of the concentrated animal feeding facility that comply with rules 901:10-2-04, 901:10-2-05 and/or 901:10-2-06 of the Administrative Code and include the proposed location of the construction site, and design and construction plans and specifications, including anticipated beginning and ending dates for the work performed.

[Comment: Include detailed engineering drawings, for example; cross sections, pipe requirements, concrete or earthwork specifications, illustrations and profiles for construction of the manure storage or treatment facility.]

(8) The precipitation runoff and stormwater grading plans required by rule 901:10-2-04 of the Administrative Code.

(9) Manure characterized in accordance with rules 901:10-2-04 and 901:10-2-10 of the Administrative Code.

901:10-2-01

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901:10-2-02 **Permit to install: siting criteria.**

Manure storage or treatment facilities shall be designed and constructed in accordance with the criteria in paragraphs of (A) to (N) of this rule. In this rule siting means a measure of horizontal or vertical distance for purposes of installing the manure storage or treatment facility.

(A) Water wells, class five agricultural wells together referred to hereinafter as "well".

(1) A fabricated structures shall be at least fifty horizontal feet from a well.

(2) A manure storage pond or manure treatment lagoon shall be at least three hundred horizontal feet from a well.

(B) Source water protection for public water systems.

(1) Public water wells.

(a) A fabricated structure, manure storage pond, and manure treatment lagoon shall not be located within three hundred feet of a well serving a public water system that is owned or operated by the owner or operator of the facility and is a public water system located on the property of the owner or operator of the facility.

(b) A fabricated structure, manure storage pond, and manure treatment lagoon shall not be located within the one-year time-of-travel contour from a well for which the Ohio environmental protection agency has delineated or endorsed a ground water source protection area and that serves a non-community water system not listed in paragraph (B)(1)(a) of this rule. If no ground water source protection area has been delineated or endorsed, then the fabricated structure, manure storage pond, or manure treatment lagoon shall not be located closer than three hundred feet from the well.

(c) A fabricated structure, manure storage pond, and manure treatment lagoon shall not be located within the one-year time-of-travel contour from a well for which the Ohio environmental protection agency has delineated or endorsed a ground water source protection area and that serves a community water system not listed in paragraph (B)(1)(a) of this rule or one thousand feet from a public water well whichever is greater.

(d) A fabricated structure, manure storage pond, and manure treatment lagoon shall not be located between the one-year and five-year time-of-travel contours from a well identified as highly susceptible unless additional

ground water monitoring, or additional engineered controls or both are added, installed, and implemented as approved by the director.

(2) Surface water intake.

(a) A fabricated structure shall be located no closer than one thousand five hundred feet from a surface water intake.

(b) A manure storage pond or manure treatment lagoon shall be installed no closer than one thousand five hundred feet from a surface water intake.

(C) Streams.

(1) A fabricated structure on a concentrated animal feeding facility shall be located a minimum of one hundred twenty horizontal feet from a stream or three hundred horizontal feet from a stream if the fabricated structure is on a major concentrated animal feeding facility.

(2) A manure storage pond or manure treatment lagoon on a concentrated animal feeding facility shall be located a minimum of three hundred horizontal feet from a stream or six hundred horizontal feet if the manure storage pond or manure treatment lagoon is located on a major concentrated animal feeding facility, unless additional design criteria are added, installed, and implemented as approved by the director.

(D) Cold water habitat and seasonal salmonid streams.

(1) A fabricated structure shall be located a minimum of three hundred horizontal feet from a cold water habitat or seasonal salmonid stream, unless additional design criteria are added, installed, and implemented as approved by the director.

(2) A manure storage pond or manure treatment lagoon shall be located a minimum of six hundred horizontal feet from a cold water habitat and seasonal salmonid stream, unless additional design criteria are added, installed, and implemented as approved by the director.

(E) Aquifer.

A fabricated structure, manure storage pond or manure treatment lagoon shall have fifteen vertical feet of low permeability material, between the waste placement location and the uppermost aquifer, unless additional design criteria or groundwater monitoring are added, installed, and implemented as approved by the director. As used in this rule and in Chapter 901:10-2 of the Administrative Code, low permeability material means low permeability among the soil types of geologic material presented in figure 7-11, Chapter 7, "Geologic and Ground Water

Considerations," part 651, "Agricultural Waste Management Field Handbook," June 1999.

(F) Sole source aquifer.

A manure storage pond or manure treatment lagoon shall not be located above a sole source aquifer without design of ground water monitoring or engineered controls or both that are installed and implemented as approved by the director.

(G) Floodplains and floodways.

(1) A manure storage pond or manure treatment lagoon shall not be located in a one hundred year floodplain without design of additional monitoring or engineered controls or both that are installed and implemented as approved by the director and by other appropriate permits.

(2) A manure storage pond or manure treatment lagoon shall not be located in established regulatory floodways as designated by the federal emergency management agency.

(H) Karst areas.

A fabricated structure, manure storage pond or manure treatment lagoon shall not be located in a karst area without design of groundwater monitoring or engineered controls or both that are installed and implemented as approved by the director.

(I) Bedrock.

A fabricated structure, manure storage pond or manure treatment lagoon shall be located a minimum of three feet, between the bottom of the waste placement location and bedrock where no aquifer is present.

(J) Mines.

A manure storage or treatment facility shall not be located in an area of potential subsidence, due to an underground mine known to be in existence prior to the date the application for a permit to install is submitted, without design of groundwater monitoring or engineered controls or both that are installed and implemented as approved by the director.

(K) Property lines, which are defined in this paragraph as property lines not under common ownership of the owner or operator of a facility covered by this rule and public roads.

A fabricated structure, manure storage pond or manure treatment lagoon shall be located no closer than one hundred horizontal feet from a property line or public road.

(L) Neighboring residences.

(1) A manure storage or treatment facility for solid manure at a concentrated animal feeding facility shall be no closer than five hundred horizontal feet from a neighboring residence. The manure storage or treatment facility for solid manure at a major concentrated animal feeding facility shall be no closer than one thousand horizontal feet from a neighboring residence.

(2) A manure storage or treatment facility for liquid manure at a concentrated animal feeding facility shall be no closer than one thousand horizontal feet from a neighboring residence. A manure storage or treatment facility for liquid manure at a major concentrated animal feeding facility shall be no closer than two thousand horizontal feet from a neighboring residence.

(3) When utilizing proven technology, the siting criteria may be reduced by the director by using the list of technologies appended to this rule. The technologies listed in this appendix are not inclusive of all available technologies. Selected technologies are required to be fully described in detail plans and specifications, engineering drawings, and maps that shall be reviewed and approved by the director in deciding whether or not to reduce any applicable siting criteria as a reasonable exercise of the director's discretion.

(M) The siting criteria requirements applicable to a manure storage or treatment facility shall not apply to the criteria set forth in paragraphs (K) and (L) of this rule if the applicant for a permit to install obtains a written agreement from all of the owners of neighboring residences or property owners located closer than the siting criteria. The agreement shall state such owners are aware of the proposed construction and have no objections to such construction. A copy of the written agreement shall be included with the permit to install application.

[Comment: The written agreement may be filed in the register of deeds office of the county in which the neighboring residence is located.]

(N) As used in this rule, additional design for engineered controls includes but is not limited to additional freeboard, secondary containment, additional treatment, increased liner thickness, synthetic liner materials, groundwater monitoring, or design and construction alternatives set forth in paragraph (A)(9)(c) of rule 901:10-2-06 of the Administrative Code.

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Appendix to rule 901:10-2-02 Siting Criteria: How to Determine a Reduction in the Required Criteria

In considering reductions in siting criteria under this rule, the director will consider the use of technologies for manure storage or treatment facilities as characterized and listed in this appendix. The technologies listed are not inclusive of all available technologies. The technologies listed in this appendix are required to be fully described in detailed plans and specifications, engineering drawings, and maps that shall be reviewed and approved by the director in deciding whether or not to reduce any applicable siting criteria as a reasonable exercise of the director's discretion.

Physical Manure Characteristics and Type of Manure Storage or Treatment Facility
1. *Solid Manure
a. Fabricated Structure with odor control (e.g. aeration through the manure pile – High Rise Hog House)
b. Fabricated Structure with composting
c. Fabricated Structure with a cover
2. *Solid or **Liquid Manure
a. Fabricated Structure with temporary (14 days or less) storage
b. Fabricated Structure or Manure Storage Pond with a cover
c. Fabricated Structure, Manure Storage Pond or Manure Treatment Lagoon with energy recovery
3. **Liquid Manure
a. Manure Treatment Lagoon
b. Fabricated Structure with a biofilter – Deep Pit System for Swine
c. Manure Storage Pond with a crust
d. Manure Storage Pond, Manure Treatment Lagoon or Fabricated Structure with a cover
e. Fabricated Structure, Manure Storage Pond or Manure Treatment Lagoon with odor control (e.g. aeration in the Manure Storage Pond or Manure Treatment Lagoon)

Physical Manure Characteristics:
*Solid Manure has greater than 20 % solids
**Liquid Manure has equal to or less than 20 % solids

901:10-2-03 **Geological explorations.**

(A) A subsurface geological exploration shall be conducted prior to installing a fabricated structure. A subsurface geological exploration for a liquid manure fabricated structure shall be conducted under the supervision of an engineering geologist or a professional engineer. A subsurface geological exploration shall determine the following:

(1) For solid manure.

(a) Evaluate the suitability of the soil to provide the appropriate load bearing strength for the proposed fabricated structure by use of a soil survey or by a geological exploration conducted in accordance with this rule. The director may require on-site subsurface geological explorations depending on the soil survey, depth of the structure to be installed below existing grade and type of structural loading of the fabricated structure.

(2) For liquid manure.

(a) Place a minimum of two test pits or borings at regular intervals within a reasonable distance of the boundaries of the fabricated structure, unless more test pits or borings are required by the professional engineer or engineering geologist . The test pits or borings shall extend a minimum of five feet below the planned bottom of the fabricated structure.

(b) Evaluate the suitability of the soil to provide the appropriate load bearing strength for the proposed fabricated structure as set forth in the appendix to rule 901:10-2-05 of the Administrative Code.

(c) Determine soil strength values so that lateral earth pressures can be calculated as set forth in the appendix to rule 901:10-2-05 of the Administrative Code.

(d) Whether the proposed fabricated structure is to be located within a karst area; and

(e) Ground water quality characteristics. Ground water shall be sampled from a well existing at the facility or, if no well exists at the facility, from a well that is constructed in accordance with rule 3701-28-12 of the Administrative Code. A well installed or otherwise approved for use to satisfy the requirements of this rule, shall also be used to satisfy the annual

ground water sampling and analysis required by rule 901:10-2-08 of the Administrative Code.

(f) In the event that the director determines that ground water monitoring shall be required to satisfy the requirements of this rule or rule 901:10-2-02 of the Administrative Code, then a ground water monitoring program shall be designed, installed, and implemented as approved by the director in a permit to install.

(B) Prior to installing a manure storage pond or manure treatment lagoon, a subsurface geological exploration shall be conducted under the supervision of an engineering geologist or a professional engineer for the storage pond or treatment lagoon.

(1) A subsurface geological exploration shall be conducted on each new or expanding manure storage pond or manure treatment lagoon.

(2) The subsurface geological exploration shall be performed within a reasonable distance of the manure storage pond or manure treatment lagoon boundaries, shall include a minimum of four test pits or borings placed at regular intervals and shall determine the following:

(a) The type and hydraulic conductivity of the soil material present from the ground surface to a depth of five feet below the planned bottom of the manure storage pond or manure treatment lagoon;

(b) Suitability of soil material to provide adequate sealing of the bottom of the manure storage pond or manure treatment lagoon and construction of planned embankments;

(c) Whether the proposed manure storage pond or manure treatment lagoon is to be located within a karst area;

(d) Ground water quality characteristics. Ground water shall be sampled from a well existing at the facility or, if no well exists at the facility, from a well that is constructed in accordance with rule 3701-28-12 of the Administrative Code. A well installed or otherwise approved for use to satisfy the requirements of this rule, shall also be used to satisfy the annual ground water sampling and analysis required by rule 901:10-2-08 of the Administrative Code.

(e) In the event that the director determines that ground water monitoring shall be required to satisfy the requirements of this rule or rule 901:10-2-02 of the Administrative Code, then a ground water monitoring program shall be designed, installed, and implemented as approved by the director in a permit to install.

(f) The exploration pits or borings shall extend a minimum of five feet below the planned bottom of the manure storage pond or manure treatment lagoon. Upon completion, any boring or pit used for sampling shall be properly plugged and sealed. Any pit used for sampling that is within the construction boundaries of the concentrated animal feeding facility, the manure storage pond or the manure treatment lagoon shall be restored by the addition of soil compacted in lifts no greater than six inches;

(g) Based on the results of the subsurface geological exploration and determinations by the engineering geologist, professional engineer or the director, additional tests may be required to determine the potential need for a liner and, if necessary, the type of liner to be installed;

(h) The department may require additional subsurface geological explorations depending on the soils and geological formations on site to ensure the protection of the ground water, surface water or the structural integrity of the manure storage pond or manure treatment lagoon. The subsurface geological exploration shall refer to the Ohio department of natural resources, division of water ground water pollution protection (DRASTIC) maps to determine the pollution potential for each site, the pathways of contamination, if any, and whether additional liners are needed to protect water and ground water.

(C) The results of subsurface geological explorations performed in accordance with paragraphs (A) and (B) of this rule shall be included in a report submitted with the facility design plans.

(1) The report shall include but not be limited to:

(a) Location of a facility well, exploration pits and borings plus locations and depths of soil samples;

(b) Available Ohio department of natural resources division of water, water well logs of wells located within a minimum of one thousand feet of the planned manure storage or treatment facility;

(c) Geologic information using either the group classification system by the American association of state highway and transportation officials or the unified soil classification system appended to this rule;

(d) Evidence of seepage or ground water conditions and depths in pits;

(e) Determination of the suitability of in-situ soils for the planned facility, or lining recommendations when the in-situ soils are not suitable;

(f) Recommendation from the laboratory analysis of the compactive effort or soil density, and soil moisture requirements needed during construction to achieve design hydraulic conductivity;

(g) The results of the soil tests; and

(h) An analysis or evaluation that demonstrates that the information provided meets the requirements of rules 901:10-2-01 to 901:10-2-06 of the Administrative Code, and as follows for applicable type of manure storage and treatment facility:

(i) For a solid manure fabricated structure, an analysis or evaluation shall provide the information required by paragraphs (C)(1)(a), (C)(1)(b), (C)(1)(c), and (C)(1)(h) of this rule.

(ii) For a liquid manure fabricated structure, an analysis or evaluation shall provide the information required by paragraphs (C)(1)(a), (C)(1)(b), (C)(1)(c), (C)(1)(d), (C)(1)(g) and (C)(1)(h) of this rule.

(iii) For a manure storage pond or manure treatment lagoon, an analysis or evaluation shall provide the information required by paragraphs (C)(1)(a) to (C)(1)(g) of this rule.

(2) Based on the results of the tests of this rule the professional engineer, engineering geologist, or director may require additional explorations that may include laboratory testing of soils and additional ground water monitoring wells.

(D) Laboratory testing and analysis:

(1) Soil samples taken during the subsurface geological exploration shall be tested in accordance with approved or certified soil testing procedures..

(2) Tests and results reported shall include, but not be limited to, hydraulic conductivity, dry unit weight, Atterberg Limits, and standard compaction with recompaction to achieve design hydraulic conductivity.

(E) Upon request by the owner or operator and subsequent written approval from the department field changes may be made in order to meet site-specific conditions during construction. The owner or operator shall demonstrate that such changes shall be at least as protective of the ground water, surface water and the structural integrity of the manure storage or treatment facility as requirements of this chapter.

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Appendix to rule 901:10-2-03

Soils - Engineering Classification (National Soil Survey Handbook 618.20 - 2001)

The National Soil Survey Handbook and other technical and procedural references provide the standards, guidelines, definitions, policy, responsibilities, and procedures for conducting the National Cooperative Soil Survey in the United States. The following are accepted guidelines for classifying soils.

(a) AASHTO (American Association of State Highway and Transportation Officials) Group Classification

(1) Definition

AASHTO group classification is a system that classifies soils specifically for geotechnical engineering purposes. It is based on particle-size distribution and Atterberg limits, such as liquid limit and plasticity index. This classification system is covered in AASHTO Standard No. M 145-91 (1995) and consists of a symbol and a group index. The classification is based on that portion of the soil that is smaller than 3 inches in diameter.

(2) Classes

The AASHTO classification system identifies two general classifications: (i) granular materials having 35 percent or less, by weight, particles smaller than 0.074 mm in diameter and (ii) silt-clay materials having more than 35 percent, by weight, particles smaller than 0.074 mm in diameter. These two divisions are further subdivided into seven main group classifications. The group and subgroup classifications are based on estimated or measured grain-size distribution and on liquid limit and plasticity index values.

(3) Significance

The group and subgroup classifications of this system are aids in the evaluation of soils. The classifications can help to make general interpretations relating to performance of the soil for engineering uses.

(4) Measurements

Measurements involve sieve analyses for the determination of grain-size distribution of that portion of the soil between a 3 inch and 0.074 mm particle size. ASTM methods D 422, C 136, and C 117 have applicable procedures for the determination of grain-size distribution. The liquid limit and plasticity index values (ASTM method D 4318) are determined for that portion of the soil having particles smaller than 0.425 mm in diameter (No. 40 sieve). Measurements, such as laboratory tests, are made on most benchmark soils and on other representative soils in survey areas.

(5) Estimates

During soil survey investigations and field mapping activities, the soil is classified by field methods. This classification involves making estimates of particle-size fractions and particle-size distribution by a percentage of the total soil, minus the greater than 3-inch fraction. Estimates of liquid limit and plasticity index are based on clay content and mineralogy relationships. Estimates are expressed in ranges that include the estimating accuracy as well as the range of values for the taxon.

(6) Entries

Enter classes and separate them by commas for each horizon, for example, A-7, A-6. Acceptable entries are A-1, A-1-A, A-1-B, A-2, A-2-4, A-2-5, A-2-6, A-2-7, A-3, A-4, A-5, A-6, A-7, A-7-5, A-7-6, and A-8.

AASHTO Group Index

(1) Definition

The AASHTO group and subgroup classifications may be further modified by the addition of a group index value. The empirical group index formula was devised for approximate within-group evaluation of the "clayey granular materials" and the "silty-clay" materials.

(2) Significance

The group index is an aid in the evaluation of the soils. The index can help to make general interpretations relating to performance of the soil for engineering uses.

Under average conditions of good drainage and thorough compaction and recompaction, the supporting value of a material as subgrade may be assumed as an inverse ratio to its group index, that is, a group index of 0 indicates a "good" subgrade material and group index of 20 or greater indicates a "very poor" subgrade material.

(3) Measurement

The group index is calculated from an empirical formula:

$$GI = (F-35)\,[0.2 + 0.005\,(LL-40)] + 0.01\,(F-15)\,(PI-10)$$

where:

F = Percentage passing sieve No. 200

(75 micrometer), expressed as a whole number

LL = Liquid limit

PI = Plasticity index

In calculating the group index of A-2-6 and A-2-7 subgroups, only the PI portion of the formula is used.
Negative group index is reported as zero (0).
For soils that are non-plastic and when the liquid limit cannot be determined, the group index shall be considered zero (0).

(4) Entries

The group index is reported to the nearest integer. If the calculated group index is negative, the group index is zero (0). The minimum index value is 0 and the maximum is 120.

(b) Unified Soil Classification

(1) Definition

The unified soil classification system is a system for classifying mineral and organic mineral soils for engineering purposes based on particle-size characteristics, liquid limit, and plasticity index.

(2) Classes

The Unified Soil Classification System identifies three major soil divisions: (i) coarse-grained soils having less than 50 percent, by weight, particles smaller than 0.074 mm in diameter; (ii) fine-grained soils having 50 percent or more, by weight, particles smaller than 0.074 mm in diameter, and (iii) highly organic soils that demonstrate certain organic characteristics. These divisions are further subdivided into a total of 15 basic soil groups. The major soil divisions and basic soil groups are determined on the basis of estimated or measured values for grain-size distribution and Atterberg limits. ASTM D 2487 shows the criteria chart used for classifying soil in the Unified system and the 15 basic soil groups of the system and the plasticity chart for the Unified Soil Classification System.

(3) Significance

The various groupings of this classification have been devised to correlate in a general way with the engineering behavior of soils. This correlation provides a useful first step in any field or laboratory investigation for engineering purposes. It can serve to make some general interpretations relating to probable performance of the soil for engineering uses.

(4) Measurem

The methods f[illegible]easurement are provided in ASTM Designation D 2487. Measurements involve sieve analysis for the [illegible]rmination of grain-size distribution of that portion of the soil between 3 inches and 0.074 mm in diameter (No. 200 sieve). ASTM methods D 422, C 136, and C 117 have applicable procedures that are used where appropriate for the determination of grain-size distribution. Values for the Atterberg limits (liquid limit and plasticity index) are also used. Specific tests are made for that portion of the soil having particles smaller than 0.425 mm in diameter (No. 40 sieve) according to ASTM methods D 423 and D 424. Measurements, such as laboratory tests, are made on most benchmark soils and on other representative soils in survey areas.

(5) Entries for measured data

For **measured** Unified data, enter up to four classes for each horizon. ASTM D 2487 provides flow charts for classifying the soils. Separate the classes by commas, for example, CL-ML, ML. Acceptable entries are GW, GP, GM, GC, SW, SP, SM, SC, CL, ML, OL, CH, MH, OH, PT, CL-ML, GW-GM, GW-GC, GP-GM, GP-GC, GC-GM, SW-SM, SW-SC, SP-SM, SP-SC, and SC-SM.

(6) Estimates

The methods for estimating are provided in ASTM Designation D 2488. During all soil survey investigations and field mapping activities, the soil is classified by field methods. The methods include making estimates of particle-size fractions by a percentage of the total soil. The Atterberg limits are also estimated based on the wet consistency, ribbon or thread toughness, and other simple field tests. These tests and procedures are explained in ASTM D 2488. If samples are later tested in the laboratory, adjustments are made to field procedures as needed. Estimates are expressed in ranges that include the estimating accuracy as well as the range of values from one location to another within the map unit. If an identification is based on visual-manual procedures it must be clearly stated so in reporting.

(7) Entries for estimated soils

For estimated visual-manual Unified data, enter up to four classes for each horizon. ASTM D 2488 provides flow charts for classifying the soils. Separate the classes by commas, for example, CL, ML, SC. Acceptable entries are GW, GP, GM, GC, SW, SP, SM, SC, CL, ML, CH, MH, OL/OH, PT, GW-GM, GW-GC, GP-GM, GP-GC, SW-SM, SW-SC, SP-SM, and SP-SC.

Source: National Soil Survey Handbook (2001). USDA-Natural Resources Conservation Service, Washington, DC.

901:10-2-04 **Manure storage and treatment facilities.**

(A) Manure shall be sampled and analyzed in accordance with paragraphs (A) to (D) of rule 901:10-2-10 of the Administrative Code.

(B) As an alternative to presenting site-specific information as required by paragraphs (A)(1) and (A)(2) of rule 901:10-2-10 of the Administrative Code, the owner or operator may characterize manure by using manure data from a facility that is similar to that of the owner or operator or by relying upon existing published or documented data. The owner or operator shall submit this alternative manure data along with the identification of the source of the data.

(C) The owner or operator shall comply with paragraph (B) of rule 901:10-2-10 of the Administrative Code.

(D) General design and construction criteria for a manure storage or treatment facility.

(1) An appropriate design plan shall be required for a new or expanding manure storage or treatment facility.

(2) A manure storage or treatment facility shall be designed and constructed to handle manure volume, precipitation and surface water runoff in a manner that prevents the discharge of manure to waters of the state, except as provided in applicable standards set forth in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code.

(E) Calculating storage volume for manure storage or treatment facilities.

(1) The total storage volume of a manure storage or treatment facility shall not be less than the volume calculated as the summation of the following, unless the owner or operator or the director determines that additional storage capacity is required to meet permit conditions.

(a) Manure generated during the storage period required by rule 901:10-2-05 or rule 901:10-2-06 of the Administrative Code;

(b) Average precipitation less evaporation on the surface area of the manure storage or treatment facility during the storage period;

(c) Normal runoff that drains from the concentrated animal feeding facility's drainage area into the manure storage or treatment facility during the

storage period. Impermeable surfaces shall utilize a minimum factor of fifty per cent of the average precipitation;

(d) A precipitation event based on the surface of the manure storage or treatment facility and applicable standards in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code;

(e) The runoff from a precipitation event that drains from the concentrated animal feeding facility's drainage area into the manure storage or treatment facility based on applicable standards in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code; and

(f) Residual manure after liquids have been removed.

(2) In addition to the requirements in paragraph (E)(1) of this rule, the total storage volume of a manure treatment lagoon shall not be less than the volume calculated using one of the following methods set forth in the appendix to this rule.

(F) Stormwater pollution prevention plans. Each owner or operator of a concentrated animal feeding operation shall prevent pollution of stormwater resulting from an animal feeding facility by submitting plans to satisfy this rule and rule 901:10-3-11 of the Administrative Code to do the following:

(1) Maintain separation of uncontaminated stormwater runoff from contaminated water with designs and installations that include, but are not limited to, settling basins, runoff ponds, liquid impoundments, and areas within berms and diversions;

(a) Grade the area around the livestock buildings and the manure storage or treatment facility;

(b) Divert stormwater runoff and roof water away from the manure storage or treatment facility or other structures in the production area.

(c) Use spill prevention and good housekeeping techniques to ensure that stormwater discharges from the following areas comply with Ohio Water Quality Standards: immediate access roads and rail lines used or traveled by carriers; or raw materials, products, waste materials, or by-products used or created; refuse sites; sites used for storage and maintenance of material handling equipment; sites used for handling material other than manure and shipping and receiving areas.

(d) Install systems that are designed to capture and treat contaminated runoff and prohibit discharge of contaminated discharge. The owner or operator may use the following criteria, provided that in no case shall grassed filter

strips satisfy effluent limitations for large facilities in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code.

(i) The "Ohio Natural Resource Conservation Service, Conservation Practice Standards Section IV, Field Office Technical Guide" which includes the following:

(a) "Pond, No 378," January 2003;

(b) "Constructed Wetland Conservation Practice Standard, No. 656," August 2000, but provided there shall be no discharge;

(c) "Livestock Use Area Protection Practice, No. 757," September 3, 2002;

(d) "Composting Operation, No. 317," May 1, 2000;

(e) "Critical Area Planting, No. 342," June 1, 2002;

(f) "Dike, No. 113," June 1, 2002;

(g) "Diversion, No. 362," June 1, 2002;

(h) "Grade Stabilization Structure, No. 410," May 1, 1988;

(i) "Pipeline, No. 516," June 1, 2002;

(j) "Roof Runoff Structure, No. 558," June 1, 2002;

(k) "Sediment Basin, No. 350," June 1, 2002;

(ii) The "Ohio Livestock Manure And Wastewater Management Guide, Bulletin 604, The Ohio State University Extension, January 1992;" and

(iii) USDA Natural Resource Conservation Service - NHCP.

(2) Construct coverings over any structures in the production area; or

(3) Install vegetative cover and protect stream channels and areas adjacent to such channels from a concentrated animal feeding operation.

(4) The owner or operator may submit plans that implement alternative practices to the director for approval provided that any alternative practices must be demonstrated to be equivalent to the practices listed in subparagraph (F)(1) of this rule unless the owner or operator or the director determine that additional total storage capacity is required to meet permit conditions. All of the practices

listed are subject to the design standards for precipitation events in paragraphs (D) and (E) of this rule.

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Appendix to rules 901:10-2-04 and 901:10-2-10

Manure Production Characteristics

Values are as produced estimations and so not reflect any treatment. Values do not include bedding. The actual characteristics of manure can vary +30% from table values. Increase solids and nutrients by 4% for each 1% feed wasted above 5%.

		Total Measure of Manure Quantity					Total	Volatile		Nutrient Content		
	Size[1]	*Volume and/or Weight of Manure*			Water	Density	Solids	Solids	BOD_2	(lb/day)		
Animal	(lbs)	(lb/day)	(ft/day)	(gal/day)	(%)	(lb/day)	(lb/day)	(lb/day)	(lb/day)	(N)	(P_2O_2)	(K_2O)
Dairy Cattle	150	13	0.20	1.5	88	65	1.4	1.2	0.20	0.05	0.01	0.04
	250	21	0.32	2.4	88	65	2.3	1.9	0.33	0.08	0.02	0.07
Heifer	750	65 1.0		7.8	88	65	6.8	5.8	1.0	0.23	0.07	0.22
Lactating cow 1,000		108	1.7	12.7	88	62	10.0	8.5	1.60	0.58	0.30	0.31
	1,400	148	2.4	17.7	88	62	14.0	11.9	2.24	0.82	0.42	0.48
Dry cow	1,000	82	1.30	9.7	88	62	9.5	8.1	1.20	0.36	0.11	0.28
	1,400	115	1.82	13.6	88	62	13.3	11.3	1.70	0.50	0.20	0.40
Veal	250	9	0.14	1.1	96	62	0.32	0.14	0.22	0.04	0.03	0.06
Beef cattle												
Calf	450	26	0.42	3.1	92	63	3.40	2.88	0.58	0.14	0.10	0.11
High forage	750	62	1.0	7.5	92	62	5.8	5.2	1.05	0.41	0.14	0.25
High forage	1,100	92	1.4	11.0	92	62	8.5	7.6	1.50	0.61	0.21	0.36
High energy	750	54 0.87		6.5	92	62	4.2	3.9	1.0	0.38	0.14	0.22
High energy	1,100	80	1.26	9.5	92	62	6.2	5.7	1.50	0.54	0.21	0.32
Cow	1,000	63	1.00	7.5	88	63	7.70	6.00	1.40	0.31	0.19	0.26
Swine												
Nursery	25	2.7	0.04	0.3	89	62	0.27	0.22	0.09	0.02	0.01	0.01
Grow-Finish	150	9.5	0.15	1.2	89	62	1.0	0.90	0.30	0.08	0.05	0.04
Gestating	275	7.5	0.12	0.9	91	62	0.69	0.59	0.23	0.05	0.04	0.04
Lactating	375	22.5	0.36	2.7	90	63	2.25	2.03	0.75	0.18	0.13	0.14
Boar	350	7.2	0.12	0.9	91	62	0.66	0.59	0.23	0.05	0.04	0.04
Sheep	100	4.0	0.06	0.4	75	63	1.10	0.91	0.10	0.04	0.02	0.04
Poultry												
Layer	4	0.26	0.004	0.031	75	65	0.065	0.049	0.015	0.0035	0.0027	0.0016
Broiler	2	0.18	0.003	0.021	74	63	0.047	0.034	0.010	0.0023	0.0014	0.0011
Turkey	20	0.90	0.014	0.108	75	63	0.225	0.171	0.066	0.0126	0.0108	0.0054
Duck	6	0.33	0.005	0.040	73	62	0.089	0.053	0.012	0.0046	0.0038	0.0028
Horse	1,000	50	0.80	5.98	78	63	11.00	9.35	1.40	0.28	0.11	0.23

[1] Weights represent the average size of the animal during the stage of production.

Source: MWPS-18 (1) *Manure Characteristics* (2000). MidWest Plan Service. Iowa State University: Ames, IA.

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901:10-2-05 **Fabricated structures.**

(A) Fabricated structures shall be designed and maintained to prevent discharge to ground waters or surface waters.

(1) Fabricated structures for liquid manure shall be designed by or under the supervision of a professional engineer or shall be an appropriate design plan, as defined in paragraph (G) of rule 901:10-1-01 of the Administrative Code.

(2) A fabricated structure shall be designed and constructed to meet the requirements in paragraph (A) of rule 901:10-2-03, paragraphs (A)(10) and (A)(11) of rule 901:10-2-06 of the Administrative Code and the appendix to this rule.

(3) Storage period. The minimum storage period for a fabricated structure shall be one hundred twenty days, unless otherwise approved by the department. Additional storage may be required by the department in order to ensure protection of groundwater, surface water or the structural integrity of the fabricated structure.

(4) Freeboard. A fabricated structure shall be designed and maintained to have an operating level that does not exceed the level that provides adequate storage to contain a precipitation event plus an additional six inches of freeboard, except for fabricated structures that contain solid manure and are not subject to precipitation or runoff.

(5) Fabricated structures for liquid manure shall have a liquid level board, staff gauge, depth marker, or other appropriate device approved by the director, installed within the interior to monitor manure levels.

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Appendix to rule 901:10-2-05 Fabricated Structure.

Foundation.

Proportion the foundation of a fabricated structure to safely support all superimposed loads without excessive movement or settlement.

If a non-uniform foundation cannot be avoided or applied loads may create highly variable foundation loads, calculate the settlement from site specific soil test data as defined in rule 901:10-2-03 of the Administrative Code. The owner or operator may also utilize an appropriate design plan as defined in paragraph (E) of rule 901:10-1-01 of the Administrative Code.

To eliminate potential uplift pressures, install a drainage system entirely around the foundation, discharged by gravity or a sump pump. Large structures may require additional drains at intermediate depths.

Structural Loading.

Design structures to withstand all anticipated internal and external loads including: hydrostatic and uplift pressure, concentrated surface and impact loads, any loading associated with water, and combination loads. Design the structure in compliance with this standard and applicable local building codes.

The lateral earth pressure should be calculated from soil strength values determined from the results of soil tests conducted in accordance with rule 901:10-2-03 of the Administrative Code. Lateral earth pressures can be calculated using the procedures in Technical Release 74. If soil strength tests are not available, use the presumptive lateral earth pressure values in Table 2.

Assign lateral earth pressures based upon equivalent fluid assumptions according to the structural stiffness or wall yielding as follows:

- *Rigid frame or restrained wall:* Use the values shown in Table 2 under the column "Frame Tanks", which gives pressures comparable to the at-rest condition.
- *Flexible or yielding wall:* Use the values shown in Table 2 under the column "Freestanding Wall", which gives pressures comparable to the active condition. Walls in this category are designed on the basis of gravity for stability or as a cantilever having a base wall thickness to height of backfill ratio not more than 0.085.

When manure is not protected from precipitation, design for an internal lateral pressure of 65psf. When manure is protected from precipitation and will not become saturated, design for 60psf internal lateral pressure. Use lesser values if supported by actual pressure measurements of the manure to be stored. If heavy equipment will be operated near the wall (within 5 ft), design for a 100psf horizontal surcharge.

Design tank covers to withstand both dead and live loads. Use the minimum live load values for covers contained in ASAE EP378.3, Floor and Suspended Loads on Agricultural Structures Due to Use, and in ASAE EP393.2, Manure Storage. Use the actual axle load for tank wagons having more than 2,000 gallon capacity.

If the facility is to have a roof, snow and wind loads shall be as specified in ASAE EP288.5, Agricultural Building Snow and Wind Loads. If the facility is to serve as part of a foundation or support for a building, consider the total load in the structural design. The minimum wind and snow loading for Ohio is: wind load, basic velocity pressure = 20 psf and snow load = 20 psf.

Structural Design.

For structural design, consider all items that will influence the performance of the structure, including loading assumptions, material properties, and construction quality. Indicate the design assumptions and construction requirements on the plans.

anks may be designed with or without covers. Covers, beams, or braces that are integral to structure erformance must be indicated on the construction drawings. Design openings in covered tanks to accommodate equipment for loading, agitating, and emptying. Equip these openings with grills or secure covers for safety. Consider solid covers if odor and vector control is necessary.

Underlay all structures with free draining material or locate the footing below the anticipated frost depth.

Table 2 - Lateral Earth Pressure Values[1]

Soil		Equivalent Fluid Pressure (lbs./sq.ft./ft. of depth)			
Description[4]	Unified Classification[4]	Above Seasonal High Water Table[2]		Below Seasonal High Water Table[3]	
		Free Standing	Wall Frame	Tanks	Free Standing Wall
- Clean gravel, sand or sand-gravel mixtures (maximum 5% fines)[5]	GP, GW, SP, SW	30	50	80	90
- Gravel, sand, silt and clay mixtures (< 50% fines) - Course sands with silt and/or clay (< 50% fines)	All gravel/sand dual symbol classifications and GM, GC, SC, SM, SC-SM	35	60	80	100
- Low-plasticity silts and clays with some sand and/or gravel (> 50% fines) - Fine sands with silt and/or clay (< 50% fines)	CL, ML, CL-ML, SC, SM, SC-SM	45	75	90	105
- Low to medium plastic silts and clays with little sand and/or gravel (> 50% fines)	CL, ML, CL-ML	65	85	95	110
- High plasticity silts and clays (liquid limit > 50)[6]	CH, MH		-	-	-

[1] For lightly compacted soils (85% to 95% maximum standard density). Includes compaction by use of typical farm equipment.
[2] Also below seasonal high water table if adequate drainage is provided. [3] Includes hydrostatic pressure.
[4] All definitions and procedures are in accordance with ASTM D-2488 and D-653.
[5] Generally, only washed materials are in this category.
[6] Not recommended. Requires special design criteria.

Other minimum requirements. Structures must be designed and constructed to be watertight or leakproof and in accordance with an appropriate design plan as that term is defined in paragraph (E) of rule 901:10-1-01.

Slabs on Grade.

Design slabs considering the required performance and the critical applied loads. The subgrade material must be evaluated as to the suitability and denseness. A 4-inch thick layer of crushed gravel or limestone shall be provided as a uniform subbase. Where the subgrade is uniform and dense, a Type S-1 concrete slab is acceptable. Type S-2 concrete slabs shall be used where the subgrade material is non-uniform or has variable density, and it is not economical or feasible to improve the subgrade. The subgrade thickness in question is generally 12 inches, but could be more, depending on the soil profile. Type S-3 concrete slabs shall be used when the contraction joint spacing is to be more than 15 feet, when no contraction joints are wanted, when reduced seepage is required, or when a water-tight slab is required. Type S-3 concrete slabs without contraction joints, shall be used under the following conditions:

- Slabs installed as a component of a liquid or slurry manure storage facility
- Slabs installed as a component of a solid or semi-solid manure storage facility, where seepage that could occur with a Type S-1 or Type S-2 slab has potential of polluting groundwater, and cannot be captured for treatment.

Design criteria for Type S-1, S-2 and S-3 concrete slabs is found in the NRCS Concrete Construction specification (210-VI-EFLH, Amend OH-18. March 6, 2000).

901:10-2-06 **Manure storage pond and manure treatment lagoon.**

(A) A manure storage pond or manure treatment lagoon subject to this rule shall be designed and the plans stamped by a professional engineer. The following design and construction criteria shall be followed:

(1) No known subsurface drainage line shall be allowed to remain within fifty feet of the outside toe of any manure storage pond or manure treatment lagoon unless necessary to comply with paragraph (A)(9)(a) of this rule. Subsurface drainage lines in the immediate area of the manure storage pond or manure treatment lagoon shall be removed or relocated to provide for a minimum separation distance of not less than fifty feet between the top inner perimeter of the manure storage pond or manure treatment lagoon and the subsurface drainage line.

(2) If not already installed at the facility, a liquid level board, staff gauge, depth marker, or other appropriate device, approved by the director, shall be installed within the interior of the liquid manure storage pond or manure treatment lagoon to monitor manure levels. The liquid level board, staff gauge, depth marker, or other appropriate device in a manure treatment lagoon shall include the elevation at the liquid level corresponding to the summation of the residual manure volume and minimum storage or treatment design volume and shall be designated as the stop pumping elevation. The liquid level board or staff gauge or depth marker in a manure treatment lagoon shall have readily visible permanent markings indicating the summation of the residual manure volume and minimum storage or treatment design volume, and shall be designated as the start pumping elevation.

(3) Agitation and pump-out points shall be shown on plans for a manure storage pond and a manure treatment lagoon with scour protection required.

(4) An emergency spillway may be included at the one foot freeboard level and shall be directed to a specifically designed filter strip or infiltration areas if the facility is constructed with an earthen embankment.

(5) Embankments.

(a) The minimum embankment top width shall be eight feet for embankments less than fifteen feet, ten feet for embankments ranging in height from fifteen to less than twenty feet, and twelve feet for embankments ranging from twenty to twenty-five feet high, as measured from the low point on the downstream toe to the top of the dam.

(b) If the embankment is to be traversed by farm equipment, the minimum top width shall be twelve feet. The height of the embankment shall be no greater than twenty-five feet, as measured from the low point on the downstream toe to the top of the dam.

(c) Embankments shall have side slopes not steeper than two horizontal to one vertical.

(d) The combined side slopes of settled embankments shall not be less than five horizontal to one vertical.

(e) Vegetative cover shall be established on any exposed embankment and mowed or otherwise maintained to control erosion or other embankment deterioration. In the alternative, the Director may approve other means or materials to control erosion.

(6) Inlets and outlets.

(a) Inlets shall be designed to resist corrosion, plugging and freezing.

(b) The embankment may contain no outlet piping that extends through the embankment unless the piping discharges to another facility or is a component of a re-circulating flush system.

(c) All pipes for manure transfer or manure flush systems shall have watertight joints in accordance with the following ASTM standards:

(i) ASTM D3212-Standard specification for joints for drain and sewer plastic pipes using flexible elastometric seals; or

(ii) ASTM C443-Standard specification for joints for concrete pipe and manholes, using rubber gaskets; or

(iii) Other standards recommended by the professional engineer and approved by the department.

(7) Storage period.

The minimum storage period of manure for a manure storage pond and manure treatment lagoon shall be one hundred eighty days of manure production unless alternative use and design is otherwise approved by the department. This section is not intended to address the surface water runoff where the runoff does not enter into the pond or lagoon.

(8) Freeboard.

Freeboard shall be provided for a manure storage pond and manure treatment lagoon in addition to the total storage volume such that the elevation of the emergency spillway or top of the settled embankment, if there is no designed emergency spillway, shall be less than the level that provides adequate storage to contain a precipitation event as required in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code, plus an additional one foot of freeboard.

(9) Liners.

The owner or operator shall include the use of a liner as part of the manure storage pond or manure treatment lagoon that achieves a hydraulic conductivity of at least one times ten to the minus seven centimeters per second (1 X 10 -7 cm/sec) to insure the integrity of the manure storage pond or manure treatment lagoon. A minimum of three feet of in situ soils with a hydraulic conductivity of one times ten to the minus seven centimeters per second will satisfy this requirement. The following design and construction criteria shall be followed:

(a) Ground water seepage shall be prevented from entering the bottom of the manure storage pond or manure treatment lagoon after construction by installing and/or maintaining a liner with a minimum liner thickness of three feet of in situ soil between the top of the seasonal high ground water surface and the bottom of the manure storage pond or manure treatment lagoon. In order to meet this requirement the ground water surface may be lowered by use of subsurface drainage lines that are properly designed by the engineering geologist or professional engineer and approved by the director.

(b) Soil liners shall be designed and constructed using procedures in section 651.1080 of the "United States Department of Agriculture, Natural Resources Conservation Service Agricultural Waste Management Field Handbook, Chapter Ten, Geotechnical Design and Construction, November 1997," and "United States Department of Agriculture, Ohio Natural Resources Conservation Service, Section IV, Field Office Technical Guide Conservation Practice Standard 521-F, Pond Sealing and Lining, Compacted Earth Liner. December 2001." A soil liner thickness shall be a minimum of three feet.

(c) Design and construction alternatives for ground water protection.

(i) As a result of the subsurface geological exploration conducted pursuant to rule 901:10-2-03 of the Administrative Code and the findings of the report submitted in accordance with that rule, an engineering geologist, professional engineer or the director may determine that installation of an additional liner is required to insure the integrity of the manure storage pond or manure treatment lagoon and to protect groundwater.

(ii) If an additional or alternative liner protection is required as set forth in paragraph (9)(c)(i) of this rule, then one or more of the following may be required by the director:

(a) Concrete liners that have a minimum thickness of five inches and shall include non-metallic water stops for all joints;

(b) Flexible plastic membranes that are installed under the supervision of the manufacturer or the manufacturer's representative and include written certification that the liner was installed in accordance with the manufacturers recommendations.

(c) Geosynthetic clay liners that are installed under the supervision of the manufacturer or the manufacturer's representative and include written certification that the liner was installed in accordance with the manufacturer's recommendations; or

(d) Other liner designs or materials will be considered at the discretion of the director if the minimum criteria of this paragraph of this rule are met.

(10) As required by rule 901:10-2-02 of the Administrative Code, installation of a manure storage pond or manure treatment lagoon in a one hundred year flood plain is prohibited unless accompanied by design or engineered controls that are designed and constructed as approved by the director and in accordance with the following:

(a) The manure storage pond or manure treatment lagoon embankments shall be designed and constructed to withstand the hydrostatic pressures from a one hundred year flood that may be exerted on the embankments during a flood event;

(b) The elevation of the lowest point on the embankment shall be at the summation of the elevation of the one hundred year flood plus a minimum freeboard height of two feet;

(c) For a manure storage pond or manure treatment lagoon with unequal length and width dimensions, the facility shall be oriented with the longest dimension parallel to the expected direction of floodwater flow;

(d) Any monitoring wells installed pursuant to this rule shall be physically protected from the floodwaters.

(11) Design and construction criteria for a manure storage pond or manure treatment lagoon located in a karst area.

(a) Manure storage ponds or manure treatment lagoons may be constructed within a karst area provided that the facility is designed to prevent seepage of manure to groundwater.

(b) Any portion of a manure storage pond or manure treatment lagoon located below the pre-construction soil surface level and constructed in a karst area shall be designed and constructed utilizing a rigid material such as concrete or steel or a properly designed clay or synthetic liner, when appropriate, upon findings in the geologic exploration.

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Appendix to rule 901:10-2-06 Manure Treatment Lagoon.

Single Stage Lagoon

As used in this appendix the term "lagoon" refers to "manure treatment lagoon" as defined in paragraph (BBB) of rule 901:10-1-01 of the Administrative Code. The total storage volume shall be based on the storage period selected by the owner or operator which shall be a minimum of six months as required by paragraph (A)(7) of rule 901:10-2-06 of the Administrative Code. The method for sizing total volume storage is based on the Rational Design Standard for Anaerobic Livestock Lagoons (Barth 1985). The owner or operator may choose to design and construct a single stage lagoon, a two-stage lagoon, or a manure storage pond followed by a manure treatment lagoon. If the owner or operator chooses either the two-stage lagoon or the manure storage pond and lagoon, then the owner or operator is required to calculate two lagoon volumes for comparison. The first volume is based on the maximum volatile solids loading rate for minimum treatment (MTV), plus the anticipated manure residual volume (mrV). The second is based on the volatile solids loading rate required to control odors and is called the Odor Control Volume (OCV). Precipitation plus liquid inputs shall be added to the larger of the two volumes to arrive at the total volume of the lagoon.

Summation of precipitation plus liquid input volumes to be added to a single stage lagoon:

1. Manure residuals water volume.
2. Precipitation less evaporation.
3. 25-year, 24-hour precipitation event volume on the surface, unless volume is for a facility subject to the requirements of paragraph (D) of rule 901:10-3-06 of the administrative code.
4. With a drainage area (DA), as that term is used in paragraph (E)(1)(c) of rule 901:10-2-04 of the Administrative Code, included, add the following:
5. Normal runoff that drains from the concentrated animal feeding facility's drainage area into the manure treatment lagoon during the storage period. Impermeable surfaces shall utilize a minimum factor of fifty per cent of average precipitation.
6. 25-year, 24- hour precipitation event runoff from the DA, unless volume is for a facility subject to the requirements of paragraph (D) of rule 901:10-3-06 of the administrative code.

The minimum treatment volume (MTV) is determined by dividing the daily volatile solids (VS) loading by a maximum volatile solids loading rate per unit volume (MLRV) times the activity ratio, K, for the location: MTV = VS/(MLRV)(K).

The following are MLRV's to be used for design:

Swine	MLRV=0.0062 lb/ft$_3$-day
Dairy	MLRV=0.0105 lb/ft$_3$-day
Poultry	MLRV=0.0062 lb/ft$_3$-day

The minimum manure residual accumulation period shall be 7 years, preferably 20 years, or the expected life of the facility. Manure residual volume is based on the Total Solids (TS) entering the lagoon multiplied by the manure accumulation residual multiplied (mrAR) by the number of years: mrV = (TS/yr) x mrAR x YEARS.

The following are manure residual accumulation ratios (mrAR) to be used for design:

High Concentrate Rations (Swine, Beef)	mrAR=0.0485 ft3/lb (TS)
High Forage Rations (Dairy, Beef)	mrAR=0.0729 ft3/lb (TS)
Poultry	
Layers	mrAR=0.0295 ft3/lb (TS)
Pullets	mrAR=0.0455 ft3/lb (TS)

The OCV is determined by dividing the daily volatile solids (VS) loading by a standardized loading rate, (LRV), times the activity ratio (K) for the location: OCV = VS/(LRV)(K). The following are LRV's to determine odor control volumes:

Swine	LRV=0.00378 lb/ft3-day
Dairy	The OCV for dairy and beef lagoons shall be equal to the MTV
Poultry	LRV=0.00253 lb/ft3-day

Lagoon activity ratios (K) are based on lagoon reaction rates throughout the United States. Ohio counties are listed as follows:

Findlay Area		**Medina Area**	
County	**Kvalue**	**County**	**Kvalue**
Allen	0.56 Ashland		0.56
Auglaize	0.57 Ashtabula		0.54
Crawford	0.56	Columbiana	0.57
Defiance	0.55 Cuyahoga		0.54
Fulton	0.54 Erie		0.54
Hancock	0.56 Geauga		0.54
Hardin	0.57 Huron		0.55
Henry	0.54 Lake		0.53
Lucas	0.54 Lorain		0.54
Marion	0.57 Mahoning		0.56
Morrow	0.57 Medina		0.55
Ottawa	0.54 Portage		0.55
Paulding	0.55 Richland		0.56
Putnam	0.56 Stark		0.56
Sandusky	0.54 Summit		0.55
Seneca	0.55 Trumbull		0.55
Van Wert	0.56	Wayne	0.56
Williams	0.54		
Wood	0.54		
Wyandot	0.56		
		Dayton Area	
Coshocton Area		Butler	0.61
Belmont	0.59 Champaign		0.59
Carroll	0.57 Clark		0.59

Coshocton	0.58	Clermont	0.63
Guernsey	0.59 Clinton		0.61
Harrison	0.58 Darke		0.59
Holmes	0.57 Fayette		0.61
Jefferson	0.58 Greene		0.60
Knox	0.58 Hamilton		0.62
Licking	0.59 Logan		0.58
Monroe	0.60 Madison		0.59
Morgan	0.61 Mercer		0.57
Muskingum	0.59	Miami	0.59
Noble	0.60 Montgomery		0.60
Perry	0.60 Preble		0.60
Tuscarawas	0.57	Shelby	0.58
Washington	0.61	Union	0.58
	Warren		0.61

Chillicothe Area			
Adams	0.64		
Athens	0.62		
Brown	0.64		
Delaware	0.58		
Fairfield	0.60		
Franklin	0.59		
Gallia	0.64		
Highland	0.62		
Hocking	0.61		
Jackson	0.63		
Lawrence	0.65		
Meigs	0.63		
Pickaway	0.60		
Pike	0.63		
Ross	0.62		
Scioto	0.64		
Vinton	0.62		

Two stage lagoon/pond (sizing)

First Stage
(MTV + mrV).

Second Stage (The summation of the following:)

1. MTV (Based on VS loading at the overflow or estimates of the VS loading from the first stage effluent.)
2. Manure volume.
3. Manure water volume.
4. Precipitation less evaporation (figured from the surface of stage 1 and stage 2.)
5. 25-year, 24-hour precipitation event from the surface of stage 1 and 2 [illegible]ess volume is for a facility subject to the requirements of paragraph (D) of rule 901:10-3-06 of the administrative code.

With a drainage area (DA), as that term is used in paragraph (D)(1)(c) of rule 901:10-2-04 of the Administrative Code, included, add the following:

6. Normal runoff that drains from the concentrated animal feeding facility's drainage area into the manure treatment lagoon during the storage period. Impermeable surfaces shall utilize a minimum factor of fifty per cent of the average precipitation.
7. 25-year, 24-hour precipitation event runoff from the DA unless volume is for a facility subject to the requirements of paragraph (D) of rule 901:10-3-06 of the administrative code.

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901:10-2-07 **Contents of a permit to operate and NPDES applications.**

(A) The application for a permit to operate and for a NPDES permit shall contain the following information:

(1) A manure management plan that is developed and implemented to comply with the best management practices set forth in rules 901:10-2-08 to 901:10-2-11, 901:10-2-13 to 901:10-2-16 and 901:10-2-18 of the Administrative Code, and

(2) Plans or schedules for inspections required in rule 901:10-2-08 of the Administrative Code.

(B) Additional requirements for an application for a permit to operate include submittal of:

(1) An insect and rodent control plan that conforms to best management practices and is in accordance with rule 901:10-2-19 of the Administrative Code.

(2) A plan for odor minimization in accordance with rule 901:10-2-12 of the Administrative Code.

(3) An emergency response plan in accordance with rule 901:10-2-17 of the Administrative Code.

(C) Additional requirements for an application for a NPDES permit for a large concentrated animal feeding operation shall contain the information required in Chapter 901:10-3 of the Administrative Code.

(D) If a biosecurity plan is submitted, it shall be included with the permit to operate application.

(E) The owner or operator shall maintain a copy of the current permit to operate and NPDES permit issued by the department at the concentrated animal feeding facility's site office.

(F) Additional requirements for an application for a NPDES permit for a medium or small concentrated animal feeding operation may also include best management practices specified by the director.

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901:10-2-08 **Contents of the manure management plan: inspections, maintenance and monitoring.**

(A) A manure management plan is a plan developed to minimize water pollution and protect waters of the state. The manure management plan shall include best management practices for reuse and recycling nutrients, prevent direct contact of confined animals with waters of the state, and ensure proper mortality management.

(1) The manure management plan shall specify the frequency of inspections to be conducted by the owner or operator at the manure storage or treatment facility; and

(2) The owner or operator shall maintain a list of equipment used, including land application equipment and a written chronological record of the dates of inspections, maintenance, calibration monitoring and repairs that shall be maintained in the operating record required by rule 901:10-2-16 of the Administrative Code and be made readily available during an inspection of the facility. These records shall also be made available at the request of the director. All repairs shall be completed promptly. The department shall inspect any major structural repairs; and

(3) The owner or operator must periodically inspect equipment used for land application of manure, litter, or process wastewater for leaks.

(4) At a minimum, the following must be inspected, performed, monitored or maintained at the manure storage or treatment facility and documented in the operating record:

(a) The operating level of manure treatment lagoons and manure storage ponds. The operating level must not exceed the level that provides adequate storage to contain a precipitation event as required in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code, plus an additional one foot of freeboard.

(b) The operating level of fabricated structures must not exceed the level that provides adequate storage to contain a precipitation event as required in rules 901:10-3-02 to 901:10-3-06 of the Administrative Code, plus an additional six inches of freeboard, unless the fabricated structure is designed and maintained for solid manure and is not subject to precipitation.

(c) For paragraph (A)(4)(a) and (A)(4)(b) of this rule, the maximum operating level shall not exceed that specified in the manure management plan.

(d) Inspect in order to confirm that domestic and industrial wastewater from showers, toilets, sinks, medical wastes, chemicals and other contaminants etc., handled on-site are not discharged into the manure storage or treatment facility unless designed and permitted to do so.

(e) Manure storage or treatment facilities under the control of the owner or operator shall be inspected for evidence of erosion, leakage, animal damage, cracking, excessive vegetation, or discharge.

(f) Inspect liquid manure volume weekly and note in the operating record the level of liquid manure in manure storage or treatment facilities by the depth marker required in paragraph (A)(4)(o) of this rule.

(g) Document in the operating record procedures to ensure proper operation and maintenance of liquid manure in storage or treatment facilities, when manure and manure residuals are removed from the manure storage pond or manure treatment lagoon. The owner or operator shall take care to prevent damage to lagoon or pond dikes and liners when manure residuals are removed.

(h) Inspect to determine that all stormwater conveyances are maintained to keep runoff from the surrounding property and buildings and stormwater shall be diverted away from the manure treatment lagoons and manure storage ponds to prevent any unnecessary addition to the liquid volume in these structures, unless they are designed for such runoff containment. Identify appropriate buffer strips or equivalent practices, to control runoff of manure to waters of the state, and divert clean water, as appropriate, out of the production area.

(i) Conduct weekly inspections of stormwater or diversion devices, runoff diversion structures, devices channeling contaminated stormwater to the manure storage pond or manure treatment lagoon and note proper operation and maintenance in the operating record.

(j) Inspect the protective vegetative cover and any other approved means or materials for erosion control to determine that cover is maintained on all disturbed areas (lagoon or pond embankments, berms, pipe runs, erosion control areas, etc.).

(k) Ensure that any emerging vegetation such as trees, shrubs and other woody species shall not be allowed to grow on the pond or lagoon dikes or side slopes. Pond or lagoon areas are to be kept mowed and accessible unless these areas are grassed waterways or buffers that manage precipitation and runoff.

(l) Surface water and groundwater protection.

(i) Conduct annual sampling and analysis of ground water from a well as described by paragraphs (A)(2)(e) or (B)(2)(d) of rule 901:10-2-03 of the Administrative Code. In the event that a well does not already exist at the facility and the operation is not an operation as described in paragraph (A)(1) of rule 901:10-2-03 of the Administrative Code or is not served by a public water system as defined by paragraph (UUU) of rule 901:10-1-01 of the Administrative Code, then the owner or operator shall install a well at the facility that is properly located, protected and operated. The well shall be easily accessible for sampling and have an adequate water quantity for sampling.

(ii) The director may require additional sampling, including but not limited to, ground water samples from any additional ground water monitoring wells installed as required in paragraph (C)(2) of rule 901:10-2-03 of the Administrative Code.

(iii) The director may require samples of manure discharges from the production area that may occur; and

(iv) Results of sampling and analysis shall be documented in the operating record and, for manure discharges from the production area, results shall also be recorded in the annual report submitted to the director in accordance with rule 901:10-2-20 of the Administrative Code.

(m) Ensure proper management of dead livestock as required by rule 901:10-2-15 of the Administrative Code to ensure that there shall be no discharge of mortality to waters of the state and no disposal in a manure storage or treatment facility that is not specifically designed to treat animal mortalities.

(n) Inspect drinking water lines daily, including drinking water or cooling water lines that are located above ground, readily visible or accessible for daily inspections, and record in the operating record.

(o) All liquid manure in manure storage ponds or treatment facilities must have a depth marker or other appropriate device as approved by the Director in accordance with rule 901:10-2-06 of the Administrative Code which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the twenty-five year, twenty four hour rainfall event, or, in the case of new sources subject to the requirement in rule 901:10-3-06(d) of the Administrative Code, the runoff and direct precipitation from a one-hundred year, twenty-four hour rainfall event.

(p) The director may determine that the monitoring required in subparagraphs (A)(4)(f), (A)(4)(n) and (A)(4)(o) of this rule may use alternative monitoring devices. Alternative monitoring devices include, but are not

limited to, sensors, remote sensors, electronic alarms, wireless receivers, other real time warning systems, or other flow control structure, or other steady state overflow structures.

(i) The owner or operator shall identify the alternative monitoring devices in the manure management plan submitted to the director. In approving the manure management plan, the director may approve the alternative monitoring devices.

(ii) The director may notify the owner or operator in writing to cease use of alternative monitoring devices if at any time that the director or the director's representative find that the operating record and documents maintained as required by this rule contain false or misleading information.

(q) Actions to be taken means actions to correct any deficiencies found as a result of the inspections conducted under this rule. Deficiencies are to be corrected as soon as possible and listed in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.

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901:10-2-09 **Contents of manure management plan: nutrient budget.**

(A) To the extent that manure is not managed through distribution and utilization methods in accordance with rule 901:10-2-11 of the Administrative Code, then the owner or operator shall prepare a manure management plan with a total nutrient budget for the facility based on the following:

(1) Targeted crop yields based on actual crop yields;

(2) Soil productivity information;

(3) Historical yield data;

(4) Potential yield; or

(5) Combinations of yield data.

(B) The manure management plan shall include the quantity of manure and manure nutrients for a twelve month period as derived from rule 901:10-2-10 of the Administrative Code.

(C) The manure management plan shall include the total summary of acres of land to be used for land application sites. This summary includes the land that is available for the duration of the permit and the land that is available for manure that is generated by the facility. The total summary shall be further characterized as follows:

(1) The total nutrient budget requirements on land application sites under the control of the owner or operator; and

(2) The quantity of commercial fertilizer nutrients or residual nutrients from all sources to be applied on land application sites under the control of the owner or operator for a twelve month period; and

(3) The quantity of nutrients to be managed by the owner or operator through distribution and utilization methods utilized for a twelve month period, in accordance with rule 901:10-2-11 of the Administrative Code.

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901:10-2-10 **Contents of manure management plan: manure characterization.**

The manure management plan shall contain information on manure to allow the owner or operator to plan for nutrient utilization at recommended agronomic rates and to minimize nutrient runoff that may impact waters of the state.

(A) Unless submitted as a permit to install application subject to paragraph (C) of rule 901:10-2-01 of the Administrative Code or for an operational change to be made to the manure management plan in accordance with rule 901:10-1-09 of the Administrative Code, manure shall be characterized by the owner or operator by analysis of manure from the manure storage and treatment facility, utilizing an actual sample from the facility. Manure characterization shall describe the manure by the per cent of liquid content, the per cent of solids content and/or manure density and shall follow the sampling procedures for manure sampling and analysis in "Recommended Methods of Manure Analysis" (a 3769), University of Wisconsin Extension, 2003. For a permit to install application as required by paragraph (C) of rule 901:10-2-01 of the Administrative Code or for an operational change or major operational change to be made to the manure management plan in accordance with rule 901:10-1-09 of the Administrative Code, the owner or operator must utilize the table appended to this rule.

(1) Total manure production quantified:

(a) Pounds per day; or

(b) Tons per year; or

(c) Cubic yards per day; or

(d) Gallons per day.

(2) Nutrient content quantified:

(a) Pounds per day; and/or

(b) Pounds per ton; or

(c) Pounds per one thousand gallons.

(B) The manure management plan shall contain an estimate, supported by calculations of the quantity and total nutrient content of manure produced, stored and treated during a twelve month period along with a schedule for manure removal or manure transfer

for purposes of land application. Manure may be removed based on results of inspections conducted pursuant to paragraph (A)(3)(f) of rule 901:10-2-08 of the Administrative Code or in accordance with distribution and utilization methods.

(C) At a minimum, manure from each manure storage or treatment facility shall be analyzed annually for the following: total nitrogen; ammonium nitrogen; organic nitrogen; phosphorus; potassium; and per cent total solids.

(D) In addition to the minimum requirements for annual manure analysis in paragraphs (A) to (C) of this rule, any manure with wastes that are process waste water, shall be characterized annually by the owner or operator by utilizing an actual sample from the facility, provided, however that for a permit to install application as required by paragraph (C) of rule 901:10-2-01 of the Administrative Code or for an operational change to be made to the manure management plan in accordance with rule 901:10-1-09 of the Administrative Code, the owner or operator may utilize a sample from a similar facility or by relying upon on existing published or documented data.

(E) Results of analyses and estimates conducted in paragraphs (A) to (D) of this rule shall be recorded in the operating record and shall be submitted as part of the annual report to the director required by rule 901:10-2-20 of the Administrative Code. Results of the manure analysis conducted in paragraph (C) of this rule shall be recorded in the operating record.

(F) After conducting manure analysis required in paragraph (C) of this rule, the owner or operator may request approval from the director for a major operational change to reduce the number of samples needed to be representative of each manure storage and treatment facility and to utilize composite sampling and analysis. The director may approve a request provided all of the following apply:

(1) The owner or operator submits a written request to the director along with copies of manure analyses from manure storage or treatment facilities from the same permitted facility;

(2) Manure analyses for three consecutive years demonstrate that analytical results are the same or similar for each manure storage or treatment facility at the permitted facility; and

(3) The owner or operator acknowledges that the director may notify the owner or operator in writing that the owner or operator shall comply with paragraph (C) if at any time the director or the director's representative find that composite sampling is no longer representative for reasons that include, but are not limited to:

(a) Changes in feed and feed rations;

(b) Age, size, or type of animals;

(c) Changes in clean out times;

(d) Changes in building design, such as changes in ventilation;

(e) Changes due to diseases and actions taken to eliminate disease.

(G) The manure management plan shall contain information on manure to allow the owner or operator or the person accepting manure under rule 901:10-2-11 of the Administrative Code to plan for nutrient utilization.

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Appendix to rules 901:10-2-04 and 901:10-2-10

Manure Production Characteristics

Values are as produced estimations and so not reflect any treatment. Values do not include bedding. The actual characteristics of manure can vary +30% from table values. Increase solids and nutrients by 4% for each 1% feed wasted above 5%.

		Total Measure of Manure Quantity					Total	Volatile		Nutrient Content		
	Size[1]	*Volume and/or Weight of Manure*			Water	Density	Solids	Solids	BOD_2	(lb/day)		
Animal	(lbs)	(lb/day)	(ft^3/day)	(gal/day)	(%)	(lb/day)	(lb/day)	(lb/day)	(lb/day)	(N)	(P_2O_2)	(K_2O)
Dairy Cattle	150	13	0.20	1.5	88	65	1.4	1.2	0.20	0.05	0.01	0.04
	250	21	0.32	2.4	88	65	2.3	1.9	0.33	0.08	0.02	0.07
Heifer	750	65 1.0		7.8	88	65	6.8	5.8	1.0	0.23	0.07	0.22
Lactating cow 1,000		108	1.7	12.7	88	62	10.0	8.5	1.60	0.58	0.30	0.31
	1,400	148	2.4	17.7	88	62	14.0	11.9	2.24	0.82	0.42	0.48
Dry cow	1,000	82	1.30	9.7	88	62	9.5	8.1	1.20	0.36	0.11	0.28
	1,400	115	1.82	13.6	88	62	13.3	11.3	1.70	0.50	0.20	0.40
Veal	250	9	0.14	1.1	96	62	0.32	0.14	0.22	0.04	0.03	0.06
Beef cattle												
Calf	450	26	0.42	3.1	92	63	3.40	2.88	0.58	0.14	0.10	0.11
High forage	750	62	1.0	7.5	92	62	5.8	5.2	1.05	0.41	0.14	0.25
High forage	1,100	92	1.4	11.0	92	62	8.5	7.6	1.50	0.61	0.21	0.36
High energy	750	54 0.87		6.5	92	62	4.2	3.9	1.0	0.38	0.14	0.22
High energy	1,100	80	1.26	9.5	92	62	6.2	5.7	1.50	0.54	0.21	0.32
Cow	1,000	63	1.00	7.5	88	63	7.70	6.00	1.40	0.31	0.19	0.26
Swine												
Nursery	25	2.7	0.04	0.3	89	62	0.27	0.22	0.09	0.02	0.01	0.01
Grow-Finish	150	9.5	0.15	1.2	89	62	1.0	0.90	0.30	0.08	0.05	0.04
Gestating	275	7.5	0.12	0.9	91	62	0.69	0.59	0.23	0.05	0.04	0.04
Lactating	375	22.5	0.36	2.7	90	63	2.25	2.03	0.75	0.18	0.13	0.14
Boar	350	7.2	0.12	0.9	91	62	0.66	0.59	0.23	0.05	0.04	0.04
Sheep	100	4.0	0.06	0.4	75	63	1.10	0.91	0.10	0.04	0.02	0.04
Poultry												
Layer	4	0.26	0.004	0.031	75	65	0.065	0.049	0.015	0.0035	0.0027	0.0016
Broiler	2	0.18	0.003	0.021	74	63	0.047	0.034	0.010	0.0023	0.0014	0.0011
Turkey	20	0.90	0.014	0.108	75	63	0.225	0.171	0.066	0.0126	0.0108	0.0054
Duck	6	0.33	0.005	0.040	73	62	0.089	0.053	0.012	0.0046	0.0038	0.0028
Horse	1,000	50	0.80	5.98	78	63	11.00	9.35	1.40	0.28	0.11	0.23

[1]Weights represent the average size of the animal during the stage of production.

Source: MWPS-18 (1) *Manure Characteristics* (2000). MidWest Plan Service. Iowa State University: Ames, IA.

901:10-2-11 **Contents of manure management plan: distribution and utilization methods.**

(A) If the owner or operator elects to use distribution and utilization methods, the following is required:

(1) The owner or operator may submit distribution and utilization methods for the beneficial use of manure as part of the manure management plan.

(2) If the owner or operator decides to use distribution and utilization methods then the owner or operator shall provide a copy of appendices A and F of rule 901:10-2-14 of the Administrative Code, and a copy of the most recent analytical results that list the nutrient content of the manure based on an analysis consistent with the rules to the manure recipient. The owner or operator shall record in the operating record the name and address of the manure recipient, the date of distribution, and the approximate amount of manure in tons or gallons distributed on that date.

(3) In addition to the information in paragraph (A)(2) of this rule, if the owner or operator decides to use distribution and utilization methods for liquid manure, then the owner or operator shall also provide a copy of appendix B, the available water capacity chart that illustrates how to comply with the requirements of rule 901:10-2-14 of the Administrative Code.

(B) All of the information in paragraphs (A)(1) to (A)(3) of this rule shall be recorded in the operating record as described in rule 901:10-2-16 of the Administrative Code.

(C) An estimated amount of total manure transferred to other persons by the owner or operator in the previous twelve months (tons/gallons) shall be reported in the annual report required by rule 901:10-2-20 of the Administrative Code.

(D) If the owner or operator is notified by the director, or otherwise becomes aware that the recipient is not in compliance with rule 901:10-1-06 of the Administrative Code or best management practices set forth in chapter 1501:15-5 of the Administrative Code or with other applicable laws and rules, the owner or operator shall cease providing manure to the recipient until written authorization to continue is provided by the department.

[Comment: Distribution and utilization may include land application, composting, vermiculture and alternative fuel source uses.]

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901:10-2-12 **Contents of manure management plan: methods to minimize odors.**

(A) A manure management plan shall include best management practices to minimize odors. These best management practices shall be identified in the manure management plan and shall be compatible with the overall content of the manure management plan. These best management practices may include the following:

(1) Remove, transfer and land apply manure at optimum temperatures;

(2) Remove, transfer and land apply manure when wind direction is less likely to affect neighboring residences;

(3) Promptly inject or incorporate manure to minimize odors; or

(4) If manure is applied by spray irrigation, use appropriate pressure and nozzles.

(5) Additional controls on odor are included in the appendix to rule 901:10-2-06 of the Administrative Code. The information appended to rule 901:10-2-06 of the Administrative Code includes waste treatment systems that control and promote additional treatment reduction of odor.

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901:10-2-13 **Contents of manure management plan: soil characterization.**

The manure management plan shall contain information on soils to allow the owner or operator to plan for nutrient utilization at recommended agronomic rates and to minimize nutrient runoff to waters of the state. Soil shall be sampled and analyzed by utilizing the following procedures:

(A) At a minimum, soil samples shall be taken to a uniform depth and the fertility analysis shall include: pH, phosphorus, potassium, calcium, magnesium and cation exchange capacity.

(B) Soil fertility analysis shall be conducted in accordance with Publication 221, "Recommended Chemical Soil Test Procedures for the North Central Region; Published by the North Central Regional Committee on Soil Testing and Plant Analysis (NCR-13), North Dakota Agricultural Experiment Station."

(C) Soil samples shall be representative of a land application site with one composite soil sample representing no more than twenty-five acres or one composite soil sample for each land application site, whichever is less.

(D) The manure management plan shall specify the soil sampling frequency in accordance with the following requirements:

(1) A site that receives manure shall be soil tested, at a minimum, once every three years; and

(2) If any land application site is used by the owner or operator the land application site shall be sampled at least six months following application.

(E) Results of the soil sampling events in paragraphs (A) to (D) of this rule shall be recorded in the operating record in accordance with rule 901:10-2-16 of the Administrative Code and shall include the location of the soil sample collection site, the depth of the sample collected and the analysis.

(F) In developing appropriate manure application rates for land application methods in accordance with rule 901:10-2-14 of the Administrative Code, the owner or operator shall use the Bray P1 soil test level or equivalent appropriate phosphorus soil test, (Mehlich III, Olsen, phosphorus retention test), or other test methods approved by the director. The owner or operator shall choose a phosphorus soil test method and identify the selected method in the manure management plan.

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901:10-2-14 Contents of manure management plan: land application methods.

This rule establishes best management practices that govern land application of manure on land application sites. The land application of manure at each land application site shall be conducted to utilize nutrients at agronomic rates, and to minimize nutrient runoff to waters of the state and shall be recorded in the operating record in accordance with rule 901:10-2-16 of the Administrative Code. The discharge of manure to waters of the state from a facility as a result of application of that manure by the facility to land areas under its control is a discharge from that facility subject to NPDES requirements except where it is an agricultural stormwater discharge as defined in rule 901:10-1-01 of the Administrative Code. Where manure has been applied in accordance with an approved manure management plan, a precipitation-related discharge of manure from land areas under the control of the facility is agricultural stormwater discharge.

(A) The manure management plan shall contain procedures on how manure shall be transported to land application sites in a manner that minimizes loss or spillage, and how spills will be promptly cleaned up or removed.

(B) Manure application rate - testing criteria:

(1) The manure application rate shall be based on the land application site's soil tests conducted in accordance with rule 901:10-2-13 of the Administrative Code and that are no older than three years.

(2) The manure application rate shall be based on the most current manure test results conducted in accordance with rule 901:10-2-10 of the Administrative Code. The manure test results expressed as a nutrient percentage shall be converted into either pounds per ton of dry or wet manure or pounds per one thousand gallons of liquid manure.

(C) Manure application rate - general criteria: The manure application rate shall be based on the most limiting factor of rates derived from paragraph (B) of this rule and of paragraphs (C) to (E) of this rule, whichever is determined to be the most restrictive factor for purposes of protecting waters of the state.

(1) For liquid manure:

(a) The crop nitrogen requirements or removal as described in paragraph (D) of this rule and as expressed in thousands of gallons of manure per acre;

(b) The crop phosphorus requirements or removal as described in paragraph (E) of this rule and as expressed in thousands of gallons of manure per acre;

(c) The restrictions on the rate of liquid manure application, taken from notes (1) and (5) in appendix A, table 2 of this rule, with volume expressed as a measure of gallons per acre or inches per acre;

(d) The application rate shall not exceed the available water capacity of the soil as described in appendix B of this rule; and

(e) The application rate shall be adjusted to avoid surface ponding and/or runoff from a land application site.

(2) For solid manure:

(a) The crop nitrogen requirements or removal of nitrogen as described in paragraph (D) of this rule expressed in pounds per ton of dry manure per acre; or

(b) The crop phosphorus requirements or removal as described in paragraph (E) of this rule expressed in pounds per ton of dry manure per acre; or

(c) The restrictions on the volume of solid manure applied, taken from notes (1) and (5) in appendix A, table 2 of this rule with volume expressed as a measure of tons/acre.

(3) All land applications of manure shall comply with all restrictions contained in appendix A of this rule unless a compliance alternative is submitted in the manure management plan and approved by the director. As a compliance alternative, the concentrated animal feeding operation may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the one hundred foot setback or a thirty five foot vegetated buffer.

Comment: The natural resources conservation service and the Ohio state university have conducted extensive research on manure injection and manure incorporation on all representative Ohio soil types. Refer to "United States Department of Agriculture - Natural Resource Conservation Service. Field Office Technical Guide - Conservation Practice Standard 633. Columbus, Ohio, June 2003, revised August 2004."

(4) For all land application of liquid manures, the owner or operator shall maintain or have access to methods or devices to capture or stop subsurface drain flow if liquid manure reaches the subsurface drain outlets. Use of drain outlet

plugs or other devices shall be recorded in the operating record in accordance with rule 901:10-2-16 of the Administrative Code.

(5) Calculate the total amount of nitrogen and phosphorus to be applied to each field, including sources other than manure such as commercial fertilizer or other organic by-products.

(6) Land application of manure shall not occur if the forecast contains a greater than fifty per cent chance of precipitation as determined in "Managing Manure Nutrients at Concentrated Animal Feeding Operations, Appendix M, United States Environmental Protection Agency, EPA-821-B-04-006, August 2004," exceeding an amount of one-half inch for a period extending twenty-four hours after the start of land application. Record weather conditions in the operating record for conditions at the time of application and for twenty-four hours prior to and following application.

(D) The manure application rate for nitrogen shall be based on the following criteria:

(1) The application rate for nitrogen shall be based on utilization of crops at the recommended agronomic rates and based on minimum runoff and leaching that may impact waters of the state.

(2) In determining the agronomic rate for nitrogen, the owner or operator shall do the following:

(a) Determine the nitrogen requirements or removal rates for the realistic yield goal of planned crops using nutrient amounts from appendix C, tables 1, 2 or 3 of this rule.

(b) Subtract the nitrogen credit for crop residue, legumes, and other sources of nitrogen to be given to the next corn crop in accordance with values for previous crops given in appendix C, table 4 of this rule;

(c) When applying nitrogen to a grass or legume cover crop that is growing or being established immediately after manure application, manure can be applied at the recommended nitrogen rate for the next non-legume crop or the nitrogen removal rate for the next legume crop.

(3) In determining how to minimize nitrogen leaching that may impact waters of the state, the owner or operator shall do the following:

(a) Assess each land application site with the Ohio nitrogen leaching risk

assessment procedure contained in appendix C, table 5 of this rule;

(b) If the nitrogen leaching risk assessment procedure completed in accordance with paragraph (D)(3)(a) of this rule demonstrates that the land application site has a high nitrogen leaching potential and no growing crop, then application of manure shall be limited to fifty pounds of nitrogen per acre calculated at the time of application prior to October first.

(4) In calculating the actual rate of application of nitrogen from manure, the figures in appendix C, table 6 of this rule shall be used along with the manure test results conducted according to rule 901:10-2-10 of the Administrative Code.

(5) The criteria applicable to manure application and the requirements of paragraph (D)~~(C)~~ of this rule may be changed only if the owner or operator can demonstrate to the director nutrient insufficiency in accordance with the presidedress nitrate soil test procedures of tables 7 and 8 in appendix C of this rule.

(E) Manure application rate phosphorus criteria:

(1) The application rate for phosphate applications shall be based on the following:

(a) Estimated plant uptake by crops at the recommended agronomic rates;

(b) Soil test analysis obtained pursuant to rule 901:10-2-13 of the Administrative Code;

(c) Subsequent phosphorus removal in plant biomass; and

(d) Minimum runoff that may impact waters of the state.

(2) In determining the agronomic rate for phosphate application, the owner or operator shall do the following:

(a) Determine the phosphorus requirements for the realistic yield goal of planned crops and/or crop rotations using amounts from appendix C, table 1 or appendix D, tables 1 to 5 of this rule.

(b) The application rate for phosphorus shall not exceed the rate provided in appendix C, table 1 or appendix D, tables 1 to 5 of this rule, unless

following the procedures in paragraph (E)(3) of this rule.

(3) In determining how to minimize phosphorus runoff that may impact waters of the state, the owner or operator shall do the following and apply no more than the value as determined by table 2 of appendix E of this rule:

(a) Prior to the land application of manure, a land application site shall be assessed with either the phosphorus index risk assessment procedure in appendix E, table 1 of this rule or the phosphorus soil test risk assessment procedure in appendix E, table 2 of this rule;

(b) Application of phosphorus shall not occur on land with soil tests over one hundred fifty parts per million Bray P1 or equivalent unless the owner or operator can demonstrate an alternative to the director through the use of the phosphorus index risk assessment procedure contained in appendix E, table 1 of this rule.

(c) Phosphorus applications between two-hundred and fifty pounds per acre and five hundred pounds per acre are not recommended but may be made if the values for liquid manure exceed sixty pounds phosphorus per one thousand gallons and if the values for solid manure exceed eighty pounds phosphorus per ton and application is subject to these additional requirements:

(i) No manure application shall occur on land with soil tests that exceed more than one hundred parts per million Bray P1;

(ii) No manure application shall occur on frozen or snow-covered ground;

(iii) The manure shall be incorporated within twenty-four hours;

(iv) No additional phosphorus application shall be made for a minimum of three years on fields with soils tests that measure less than forty parts per million Bray 1 or equivalent; and

(v) No additional phosphorus application shall be made for a minimum of five years on fields with soils tests between forty and one-hundred parts per million Bray P1 or equivalent.

(d) Notwithstanding the procedures in paragraph (E)(3)(a) or (E)(3)(b) of this rule but subject to the restrictions in appendix B of this rule, for a single

phosphorus application in a year, the application rate shall not exceed five hundred pounds per acre of phosphorus.

(F) Land application for crops or other uses not listed in appendices C and D of this rule will be considered on a case-by-case basis. The owner or operator shall submit existing published or documented data that is acceptable to the director.

(G) General criteria for frozen and snow-covered ground. In addition to complying with all of the criteria in paragraphs (A) to (F) of this rule, the following actions are required for surface application of manure to land with frozen or snow-covered ground.

If manure can be injected or incorporated then the land application site is not frozen or snow covered and therefore subject to paragraphs (A) to (F) of this rule.

The owner or operator shall comply with rule 901:10-2-08 of the Administrative Code and this rule and use best efforts to avoid surface application of manure to frozen or snow covered ground by ensuring enough manure storage capacity by November of each year for a minimum of one hundred twenty to one hundred eighty days.

Manure injection or manure incorporation performed within twenty-four hours at the land application site or manure stockpiling at the land application site are preferred alternatives to surface application of manure.

In the event that surface application of manure on frozen or snow-covered ground is unavoidable, then application shall be performed in accordance with all of the following requirements in paragraph (G)(1) of this rule.

(1) Application.

(a) Prior approval for surface application of manure shall be obtained from the director or his designated representative.

(b) Except as required by paragraph (G)(1)(g) of this rule, the application rate is limited to ten wet tons per acre for solid manure with more than fifty per cent moisture and five wet tons per acre for manure with less than fifty per cent moisture.

(c) Except as required by paragraph (G)(1)(g) of this rule, liquid manure the application rate is limited to five thousands gallons per acre.

(d) Applications are to be made on land with at least ninety per cent surface

residue cover at the time of application such as good quality hay or pasture field, all corn grain residue remaining after harvest, and all small grain residue cover remaining after harvest. Vegetation or residue shall not be completely covered by ice or snow at the time of application.

(e) Manure ponding shall be prevented. Manure shall not be applied on more than twenty contiguous acres. Contiguous areas for application are to be separated by a break of at least two hundred feet. Areas that are furthest from steams, ditches, waterways, surface waters are to be utilized in preference to areas with the potential for surface water runoff.

(f) Setbacks from surface waters and conduits to surface waters, (including grassed waterways and surface drains) shall be a minimum of two hundred feet. Setbacks shall have at least ninety percent surface residue cover and vegetation or residue shall not be completely covered by ice or snow at the time of application.

(g) For application fields with slopes greater than six percent, manure shall be applied in alternating strips sixty to two hundred feet wide generally on the contour, or in the case that the field is managed in contour strips with alternative strips in grass or legume, manure shall only be applied on alternative strips. Manure application rates shall be determined for each separate application strip area and not the area of the entire application field.

(h) Any manure application with phosphorus exceeding two hundred and fifty pounds per acre is prohibited.

(2) Monitoring.

(a) Concentrated field surface drainage and tile outlets shall be visually monitored at the conclusion of manure application and periodically afterwards when weather, temperature increase, snowmelt and rainfall are likely to produce manure runoff. Periodic visual monitoring shall continue until manure is assimilated into the application field and is no longer likely to discharge into waters of the state.

(b) Upon discovering a discharge, the owner or operator shall comply with rule 901:10-2-17 of the Administrative Code.

(c) In the event that the owner or operator fails to comply with the land

application requirements for frozen or snow covered ground, including but not limited to prior notice to the department, notice of discharges, monitoring and record keeping, for more than two surface land application events, then land application on any frozen or snow-covered shall be prohibited for that owner or operator for the duration of the permit upon receipt of a notice of deficiencies resulting in noncompliance pursuant to section 903.17 of the Revised Code.

(d) On and after April 1, 2007, in addition to the requirements for visual monitoring and reporting in paragraph (G)(2)(a) of this rule, the director may require the owner or operator to collect representative grab samples from discharges of manure from the land application site.

Replaces: 901:10-2-14

Effective:

R.C. 119.032 review dates: 11/09/2006

Certification

Date

Promulgated Under: 119.03
Statutory Authority: 903.08, 903.10
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Appendix A to rule 901:10-2-14: How to Use the Appendices to this Rule.

Refer to Appendix A, Tables 1 and 2 - Soils Prone to Flooding through Appendix F, Most Limiting Manure Application Rates of rule 901:10-2-14 of the OAC.)

1. Determine if the site has soils that are prone to flooding and when the expected flooding seasons are (Appendix A, Table 1). Note that applications can only be made to soils prone to flooding at times outside the predicted flooding season. All applications to soils prone to flooding must be incorporated within 24 hours and must follow the setbacks in Appendix A, Table 2.

2. Determine if a solid or liquid manure application will be performed. Determine if solid manure will be stockpiled at the land application site. Stockpiles must meet the setbacks described in column 1 of Appendix A Table 2.

3. For liquid manure applications, follow Appendix B, Available Water Capacity Chart, and Appendix F, Most Limiting Manure Application Rates Chart (Table 1 - tiled fields, Table 2 - non-tiled fields). For solid manures, follow Appendix F, Most Limiting Manure Application Rates Chart.

4. Determine the nutrient removal for the expected cropping sequence using Appendix C, Tables 1-3. Determine residual nitrogen credits for the expected cropping sequence using Appendix C, Table 4.

5. Determine the nitrogen leaching potential of the field based on Appendix C, Table 5, Nitrogen Leaching Assessment Procedure. Note that all tiled fields have a high nitrogen leaching potential. High nitrogen leaching potential fields must have application rates less than or equal to 50 lb/ac as applied nitrogen (calculated by adding NH4-N to 1/3 Organic N) from June - October 1st unless the field has a cover crop planted.

6. Use the current manure analysis and the relevant sections of Appendix C Tables 6-7 through Appendix D, Tables 1-5 to determine the amount of manure nutrients available for crop production.

7. Use Appendix E, Table 1 (P-Index) if the Bray P1or equivalent value of the soil test is over 150 ppm. P-Index may only be relied upon for a transitional period of time to allow the owner or operator an opportunity to find other fields or other methods to distribute nutrients from of the facility in order to achieve less than 150 ppm Bray P1 soil test method.

8. Use Appendix F, Most Limiting Manure Application Rates Chart, Nitrogen, P_2O_5, K_2O, Rate (tons or gallons per acre), or Available Water Capacity *to determine the application rate. The selected application rate* must be the most restrictive of the five *"Limiting Application Rate Criteria" for each Field Situation & Time of Year.*

Other Notes:

9. When using Appendix F, although not recommended, Phosphate manure application rates can be made between 250-500lb/ac/yr in cases where liquid manure exceeds 60 lbs. P_2O_5 per 1000 gallons or solid manure that exceed 80 lbs. P_2O_5 per ton. The following criteria also apply: manure must be incorporated within 24 hours and no applications can be made on either frozen or snow covered ground or fields with soil tests over 100 ppm Bray P1; soil tests less than 40 ppm Bray P1 shall have no further P additions for 3 years; soil tests between 40 – 100 ppm Bray P1 shall have no further additions of P for 5 years; no other limiting criteria can be violated.

10. When using legumes as a nitrogen removal source, the maximum legume nitrogen removal must be less than or equal to 150 lbs./ac.

11. When applying liquid manure to tiled fields, the following criteria must be followed (except for growing crops):

    11a. Applications must be less than or equal to 0.5" or 13,576 gal/ac.

11b. Use a tool (AERWAY tool or similar tool) that can disrupt/close (using horizontal fracturing) the preferential flow paths in the soil, or till the surface of the soil 3-5" deep to a seedbed condition to soak up the liquid manure and keep it out of preferential flow channels.

11c. If injection is used, it should only be deep enough to cover the manure with soil. Till the soil at least 3" below the depth of injection prior to application. Tillage prior to application will be considered incorporation of the manure.

11d. The outlets must be monitored before, during, and after application AND provisions planned to plug the tile or capture the tile flow if liquid manure reaches the tile outlets. If No-till or pastures are used for applications, tiles must be plugged.

12. If manure is to be applied on frozen or snow covered ground, the field must have at least 90% surface residue cover (e.g. good quality hay or pasture field, all corn grain residue). For applications to or frozen or snow covered ground, manure shall not be applied on more than 20 contiguous acres. Contiguous areas for application are to be separated by a break from streams, ditches, waterways, surface water, etc (areas that present the least runoff potential and are furthest from surface water The setbacks in column 3 should be followed. Prior approval must be obtained from the ODA, Livestock Environmental Permitting Program before frozen or snow/ice covered ground surface manure applications. If manure can be incorporated within 24 hours on frozen ground, approval from ODA, Livestock Environmental Permitting Program is not required.

13. For surface manure applications, follow the setbacks in column 2. For incorporation within 24 hours or injection, follow the setbacks in column 4.

Appendix A Table 1 to rule 901:10-2-14 Soils Prone to Flooding

Soils	Month	
Abscota Variant	Feb-Jun	
Adrian	Nov-May	
Aetna	Dec-Jun	
Algansee	Nov-May	
Algiers	Nov-Jun	**Frequently flooded**
Algiers	Dec-Jun	**Occasionally flooded**
Alluvial land	Nov-Dec	**Long duration**
Alluvial land	Jan-Dec	**Very long duration**
Ashton	Dec-May	
Beaucoup	Mar-Jun	
Bonnie	Oct-Jun	
Brookston	Dec-May	
Carlisle	Nov-May	
Ceresco	Mar-May	
Chagrin	Nov-May	
Chavies	Nov-Mar	
Clifty	Nov-May	
Coblen	Nov-Jun	
Cohoctah	Nov-Apr	
Cuba	Jan-May	
Defiance	Jan-May	
Edwards	Sep-May	
Eel	Oct-Jun	
Eel variant	Jan-May	
Elkinsville	Jan-Dec	
Euclid	Dec-Jun	
Fitchville	Dec-Jun	
Flatrock	Dec-Apr	
Flatrock, limestone substratum	Nov-Apr	
Fluvaquents	Nov-Jun	
Genesee	Oct-May	
Genesee variant	Jan-May	
Gessie	Oct-May	
Glendora	Jan-Dec	
Grigsby	Dec-Apr	
Hackers	Jan-Apr	
Harrod	Nov-Jun	
Hartshorn	Nov-May	
Haymond	Dec-May	
Holly	Sep-May	**Frequently flooded, very long duration**
Holly	Nov-May	
Holton	Dec-Jun	
Huntington	Dec-May	
Joliet	Apr-Jun	
Jules	Mar-Jun	
Kerston	Mar-May	

Killbuck	Jan-Dec	
Kinn	Dec-Apr	
Knoxdale	Dec-Apr	
Kyger	Nov-May	
Landes	Jan-Jun	
Landes variant	Nov-Jun	
Lanier	Nov-Jun	
Latty	Jan-May	
Lenawee	Mar-May	
Lindside	Dec-Apr	
Linwood	Nov-Jun	
Lobdell	Jan-Apr	**Frequently flooded**
Lobdell	Nov-Apr	
Martinsville	Jan-Apr	
Martisco	Mar-Jun	
McGary variant	Jan-Dec	
Medway	Nov-Jun	
Medway variant	Nov-May	
Medway, limestone substratum	Nov-Dec	
Melvin	Sep-May	**Frequently flooded, long duration**
Melvin	Dec-May	
Mentor	Jan-Dec	
Millgrove	Nov-Jun	
Montgomery	Nov-May	
Moshannon	Dec-May	
Muskego	Nov-May	
Newark	Dec-Apr	
Newark variant	Jan-Apr	
Nolin	Feb-May	
Nolin variant	Feb-Apr	
Olentangy	Nov-Dec	
Orrville	Nov-May	
Otego	Nov-Dec-	
Papakating	Nov-Jun	
Patton	Jan-Dec	
Peoga	Jan-Dec	
Pewamo	Mar-Apr	
Philo	Dec-May	
Piopolis	Mar-Jun	
Pope	Nov-Apr	
Rockmill	Sep-Jun	
Romeo	Mar-Jun	
Ross	Nov-Jun	
Rossburg	Nov-Jun	
Sarahsville	Dec-May	
Saranac	Nov-May	
Scioto	Nov-Jun	
Sebring	Nov-Jun	**Occasionally flooded**
Senecaville	Dec-Apr	
Shoals	Oct-Jun	
Shoals variant	Nov-May	**used in Miami, Putnam, and Richland Counties**

Shoals variant	Oct-Jun	**used in Champaign County**
Shoals, till substratum	Nov-Dec	
Skidmore	Dec-May	
Sligo	Mar-Apr	
Sloan	Nov-Jun	
Sloan, till substratum	Nov-Dec	
Stanhope	Nov-Dec	
Stendal	Jan-May	
Stone	Nov-Jun	
Stonelick	Nov-Jun	
Stringley	Nov-Jun	
Taggart	Jan-Dec	
Tioga	Nov-May	
Tioga Variant	Jan-Apr	
Toledo	Nov-May	
Tremont	Jan-Dec	
Wabash	Nov-May	
Wabasha	Sep-Jun	
Wakeland	Jan-May	
Wallkill	Sep-Jun	
Wappinger	Jan-Dec	
Warsaw variant	Jan-May	
Wayland	Nov-Jun	
Wick	Oct-Jun	
Wilbur	Oct-Jun	
Willette	Nov-Dec	
Zepernick	Nov-Jun	
Zipp	Dec-May	

Appendix A Table 2 to rule 901:10-2-14: Land application restrictions and setbacks

Land Application Restrictions

	1 Stockpiles	2 Surface Application	3 Winter Applications Frozen or Snow Covered Ground (1)	4 Surface Incorporation w/l 24 Hours OR Direct Injection
Class V wells, sinkholes	300'	300'	300'	100'
Surface Waters of the State (7)	300'	35' veg cover, 100' (2)	35' veg. cover, 200' ~~(2)~~(8)	35' veg. cover, 100'(2)
~~Private or Public Well~~ Wells	300'	300'	300'	100'
Bedrock	> 3' from bedrock	none	none	none
Public Surface Drinking Water Intake	1500'	300'	300'	300'
Springs	300'	300'	300'	300'
Neighboring residences:	500'	300'	300'	100'
Flooding/flood plains/floodways (3):	do not stockpile	do not apply	do not apply	permissible (3)
Slope (4):	0-6%	>15% see note 5	If > 6% see note 1	>15% see note 5
Field Surface ~~Drains~~ Furrows(6)	300'	35'	200'	none
Maximum Application Rate:	Liquid Manure - Based on Appendix B (AWC Chart) & Appendix F (Most Limiting Nutrient Chart) Solid Manure - Based on Appendix F (Most Limiting Nutrient Chart)			

Note (1): All winter surface applications must have prior approval from the Ohio Department of Agriculture. Application on frozen and snow covered soil is not recommended. However, if manure application becomes necessary on frozen or snow covered soils, only limited quantities of manure shall be applied to address waste storage limitations until non frozen soils are available for manure application. If frozen or snow covered ground application becomes necessary, applications are to be applied only if ALL the following criteria are met:

a. Application rate is limited to 10 wet tons/acre for solid manure more than 50% moisture and 5 wet tons for manure less than 50% moisture. For Liquid manure the application rate is limited to 5000 gallons/acre.

b. Applications are to be made on land with at least 90% surface residue cover (e.g. good quality hay or pasture field, all corn grain residue remaining after harvest, all wheat residue cover remaining after harvest).

c. Manure shall not be applied on more than 20 contiguous acres. Contiguous areas for application are to be separated by a break of at least 200 feet. Utilize those areas for manure application that are the furthest from streams, ditches, waterways, surface water, etc. (areas that present the least runoff potential and are furthest from surface water).

d. Increase the application setback distance to 200 feet "minimum" from all grassed waterways, surface drainage ditches, streams, ~~surface inlets,~~ water bodies, and field surface furrows. This distance may need to be further increased due to local conditions.

e. The rate of application shall not exceed the rates specified in Table 4 - Determining The Most Limiting Manure Application Rates for winter application.

f. Additional winter application criteria for fields with significant slopes more than 6% - Manure shall be applied in alternating strips 60 to 200 feet wide generally on the contour, or in the case of contour strips on e alternating strips. ~~All winter surface applications must have prior approval from the Ohio Department of Agriculture.~~

~~Note (2): The first setback refers to a vegetative buffer strip that must be maintained while the second refers to the total setback distance.~~
~~Buffer strip is defined in the rules 901:10-1-01(R).~~
~~Can use a 35' non-vegetative buffer for intermittent stream / ditches or surface inlets if the manure application area has at least 50% vegetation/residue cover at the time of application.~~

Note (2): Either a 35' wide vegetative buffer strip must be present or a total setback of 100' must be maintained. As a compliance alternative, the concentrated animal feeding operation may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the one hundred foot setback or a thirty five foot vegetative buffer. Buffer strip is defined in OAC 901:10-1-01(R).

Note (3): No applications during expected flooding season as reported in Appendix A, Table 1

Note (4): Must have < 5 ton/ac yearly average soil loss to perform surface manure applications

Note (5): Manures are not to be applied to cropland over 15% slope or to pastures/hayland over 20% slope unless ONE of the following precautions are taken:

a. Immediate incorporation or injection with operations done on the contour, UNLESS the field has 80% ground cover (residue or canopy).
b. Applications are timed during periods of lower runoff and/or rainfall (May 20th - October 15th)
c. Split applications are made (seperated by rainfall events) with single applications not exceeding 10 wet tons/ac or 5000 gal/ac.
d. The field is established and managed in contour strips with alternated strips in grass or legume.

Note (6): Applications can be through field surface furrows ~~drains~~ if criteria in Appendix A, How to Use Appendices ~~Appendicies~~ are followed.

Note (7): See OAC 3745-1-02(B)(77)

Note (8): The first setback refers to a vegetative buffer strip that must be maintained while the second refers to the total setback distance. Buffer strip is defined in OAC 901:10-1-01(R).

Source: USDA-NRCS (2003). Field Office Technical Guide-Conservation Practice Standard, 633, Columbus, Ohio.

revised ~~7/05~~ 11/06

Appendix B to rule 901:10-2-14 Available Water Capacity (AWC)

Practical Soil Moisture Interpretations for Various Soils Textures and Conditions to Determine Liquid Waste Volume Applications not to exceed AWC.

This table shall be used to determine the AWC at the time of application and the liquid volume in gallons that can be applied not to exceed the AWC. To determine the AWC in the upper 8 inches use a soil probe or similar device to evaluate the soil to a depth of 8 inches.

For land application, liquid manure application may also be calculated by converting acres per inch to gallons per acre. This conversion is based on the following formula: 1 acre – inch equals 27,156 gallons per acre.

Available Moisture in the Soil	Sands and Loamy Sands	Sandy Loam and Fine Sandy Loam	Very Fine Sandy Loam, Loam, Silt Loam, Silty Clay Loam	Sandy Clay, Silty Clay, Clay, Fine and Very Fine Textured Soils
< 25% Soil Moisture	Dry, loose and single-grained; flows through fingers.	Dry and loose; flows through fingers.	Powdery dry; in some places slightly crusted but breaks down easily into powder.	Hard, baked and cracked; has loose crumbs on surface in some places.
Amount to Reach AWC	20,000 gallons/ac	27,000 gallons/ac	40,000 gallons/ac	27,000 gallons/ac
25-50% or Less Soil Moisture	Appears to be dry; does not form a ball under pressure.	Appears to be dry; does not form a ball under pressure.	Somewhat crumbly but holds together under pressure.	Somewhat pliable; balls under pressure.
Amount to Reach AWC	15,000 gallons/ac	20,000 gallons/ac	30,000 gallons/ac	20,000 gallons/ac
50 - 75 % Soil Moisture	Appears to be dry; does not form a ball under pressure.	Balls under pressure but seldom holds together.	Forms a ball under pressure; somewhat plastic; slicks slightly under pressure.	Forms a ball; ribbons out between thumb and forefinger.
Amount to Reach AWC	10,000 gallons/ac	13,000 gallons/ac	20,000 gallons/ac	13,000 gallons/ac
75% to Field Capacity	Sticks together slightly; may form a weak ball under pressure.	Forms a weak ball that breaks easily, does not stick.	Forms ball; very pliable; slicks readily if relatively high in clay.	Ribbons out between fingers easily; has a slick feeling.
Amount to Reach AWC	5,000 gallons/ac	7,000 gallons/ac	11,000 gallons/ac	7,000 gallons/ac
100% Field Capacity	On squeezing, no free water appears on soil, but wet outline of ball on hand.	On squeezing, no free water appears on soil, but wet outline of ball on hand.	On squeezing, no free water appears on soil, but wet outline of ball on hand.	On squeezing, no free water appears on soil, but wet outline of ball on hand.
Above Field Capacity	Free water appears when soil is bounced in hand.	Free water is released with kneading.	Free water can be squeezed out.	Puddles: free water forms on surface

Note: Liquid manure applications to tiled fields must be less than or equal to 13,576 gal/ac.

Appendix C Table 1 to rule 901:10-2-14 Nutrients removed in harvested portions of crops.

Table 1	Nutrients Removed for Given Yield[a]			Nutrients Removed for Unit Yield[b]	
Crop/Yield	N P_2O_5 K_2O P_2O_5				K_2O
	lb/acre			lb/bu or ton	
Alfalfa (6 T)	340[c]	80	360	13.3 lb/T	60 lb/T
Corn (150 Bu)					
Grain	135	55	40	0.37 lb/bu	0.27 lb/bu
Stover	100	25	160		
Corn-Silage (26T)	235	80	235	3.1 lb/T	9.0 lb/T
Grass-Cool Season (3.5T) Tall Grasses and/or Forage Legumes (established)	140	45	175	13.0 lb/T	60.0 lb/T
Oats (100 Bu)					
Grain	65	25	20	0.25 lb/bu	0.20 lb/bu
Straw	35	15	100	0.15 lb/bu	1.0 lb/bu
Sorghum-Grain (7,600 lb)					
Grain	105	30	30	0.39 lb/100 lb	0.39 lb/100 lb
Stover	80	50	230		
Soybean (50 Bu)	190[c] 40		70	0.80 lb/bu	1.4 lb/bu
Sugar Beets-Roots (25 T)	100	50	250	2.0 lb/T	10.0 lb/T
Tobacco-Burley and Cigar Filler					
Leaf (3000 Lb)	105	25	185		
Stems and Suckers (2000 lb)	55	15	65		
Leaves and Stalks				1.3 lb/100 lb	8.3 lb/100 lb
Wheat (55 Bu)					
Grain	70	35	20	0.64 lb/bu	0.36 lb/bu
Straw	30	5	50	0.09 lb/bu	0.91 lb/bu

[a]Source: National Plant Food Institute and others.
[b]Source: Ohio Agronomy Guide, 12th Edition.
[c]Inoculated legumes fix nitrogen from the air.

Appendix C Table 2 to rule 901:10-2-14 Nitrogen rates[a] for corn based on yield potential.

	Corn yield potential (bu/acre)					
Previous Crop	80	100	120	140	160	180+
Corn, small grains	80	110	140	160	190	220

[a]N fertilizer rates are based on the following relationship:
N (lb/acre) = -27 + (1.36 x yield potential) - N credit or 110 + [1.36 x (yield potential - 100) - N credit.

Appendix C Table 3 to rule 901-10-2-14 Nitrogen rates for wheat based on yield potential.

Yield Potential bu/acre	Nitrogen rate pounds N to apply/acre
50	40
70	75
90+	110

1. N rate is based on the relationship:
N (lb/acre) = 40 + [1.75 x (yield potential - 50)]
2. No nitrogen credits are made based on previous crop.

Appendix C Table 4 to rule 901:10-2-14 Residual nitrogen credits based on previous crop.

Previous Crop	N Credits
	Pounds of N
Corn, small grains	0
Soybeans	30
Grass sod	40
Established forage legume	
Average stand (3 plants/ft2)	b
Good stand (5 plants/ft)	b
Annual legume cover crop	30

bN credits for established forage legume = 40 + 20 x (plants/to maximum of 140.

ft2)

Appendix C Table 5 to rule 901:10-2-14 Ohio - Nitrogen Leaching Assessment Procedure

Ohio - Nitrogen Leaching Risk Assessment Procedure

Soils are classified as having a high, medium or low nitrogen leaching potential with relative index ratings from 0-10+ for their potential to leach nitrates below the root zone. The leaching potential is rated as high, medium or low by combining the soil's hydrologic soil grouping (A, B, C, or D), the local county's annual rainfall, and the local county's season rainfall (October 1 to March 1).

To determine the soil's nitrogen leaching potential, use the following procedure:

First, determine the soils hydrological soil grouping - A, B, C, or D. For this information, refer to USDA-NRCS Engineering Field Manual, Chapter 2 - Ohio Supplement (1989), Table 2.1, pages 2-42 through 2-83.

Second, Determine the local county's annual rainfall and the local county's season rainfall (October 1 to March 1). For this information, refer to USDA-NRCS Engineering Field Manual, Chapter 2 - Ohio Supplement (1989), Exhibit OH2-3, Supplement pages 1 through 4 and USDA-NRCS Engineering Field Manual, Chapter 2 - Ohio Supplement (1989), Exhibit OH2-1, and Sheets 1 through 3.

Third, refer to the table (next page) - Ohio (By County) Leaching Index Ratings for Soils by Hydrologic Groups (A, B, C, D) for the respective county to determine the soils relative leaching index rating.

(a) Soils with a rating of 0-2 have a low potential to leach nitrates below the root zone.
(b) Soils with a rating of 3-10 have a medium potential to leach nitrates below the root zone.
(c) Soils with a rating of 10+ have a high potential to leach nitrates below the root zone.
(d) All soils with systematic subsurface drains (tile) are rated high potential.

Ohio (By County) Leaching Index Ratings for Soils by Hydrologic Groups (A, B, C, D)

County	A	B	C	D	County	A	B	C	D
1. Adams	15	10	6	4	45. Licking	15	8	6	4
2. Allen	10	6	4	2	46. Logan	15	8	4	4
3. Ashland	15	8	4	4	47. Lorain	15	8	4	2
4. Ashtabula	15	10	4	4	48. Lucas	10	6	4	2
5. Athens	15	10	6	4	49. Madison	15	8	6	4
6. Auglaize	10	8	4	2	50. Mahoning	15	8	4	4
7. Belmont	15	10	6	4	51. Marion	15	8	4	4
8. Brown	15	10	6	4	52. Medina	15	8	4	4
9. Butler	15	10	6	4	53. Meigs	15	10	6	4
10. Carroll	15	8	4	4	54. Mercer	10	8	4	2
11. Champaign	15	8	4	4	55. Miami	15	8	4	4
12. Clark	15	8	6	4	56. Monroe	15	10	6	4
13. Clermont	15	10	6	4	57. Montgomery	15	10	6	4
14. Clinton	15	10	6	4	58. Morgan	15	8	6	4
15. Columbiana	15	8	4	4	59. Morrow	15	8	4	4
16. Coshocton	15	8	4	4	60. Muskingum	15	8	6	4
17. Crawford	15	8	4	2	61. Noble	15	8	6	4
18. Cuyahoga	15	8	4	4	62. Ottawa	10	6	4	2
19. Darke	15	8	4	4	63. Paulding	10	6	4	2
20. Defiance	10	6	4	2	64. Perry	15	8	6	4
21. Delaware	15	8	4	4	65. Pickaway	15	8	6	4
22. Erie	10	8	4	2	66. Pike	15	10	6	4
23. Fairfield	15	8	6	4	67. Portage	15	8	4	4

24. Fayette	15	10	6	4	68. Preble	15	10	6	4
25. Franklin	15	8	6	4	69. Putnam	10	6	4	2
26. Fulton	10	6	4	2	70. Richland	15	8	4	4
27. Gallia	15	10	6	4	71. Ross	15	10	6	4
28. Geauga	15	10	4	4	72. Sandusky	10	6	4	2
29. Greene	15	10	6	4	73. Scioto	15	10	6	4
30. Guernsey	15	8	6	4	74. Seneca	10	6	4	2
31. Hamilton	15	10	6	4	75. Shelby	15	8	4	4
32. Hancock	10	6	4	2	76. Stark	15	8	4	4
33. Hardin	10	8	4	2	77. Summit	15	8	4	4
34. Harrison	15	8	6	4	78. Trumbull	15	8	4	4
35. Henry	10	6	4	2	79. Tuscarawas	15	8	4	4
36. Highland	15	10	6	4	80. Union	15	8	4	4
37. Hocking	15	10	6	4	81. Van Wert	10	6	4	2
38. Holmes	15	8	4	4	82. Vinton	15	10	6	4
39. Huron	10	8	4	2	83. Warren	15	10	6	4
40. Jackson	15	10	6	4	84. Washington	15	10	6	4
41. Jefferson	15	8	6	4	85. Wayne	15	8	4	4
42. Knox	15	8	4	4	86. Williams	10	6	4	2
43. Lake	15	10	4	4	87. Wood	10	6	4	2
44. Lawrence	15	10	6	4	88. Wyandot	10	8	4	2

Appendix C Table 6 to rule 901:10-2-14 Method of Calculating N Availability of Manures.

This table can be used to estimate the availability of ammonia and organic nitrogen in the soil. Only about one-third of the organic nitrogen in animal manure is available to crops during the year it is applied, and the remaining two-thirds, residual organic nitrogen, becomes part of the soil organic matter. It is mineralized or becomes available at the rate of approximately five per cent a year. Because ammonia is subject to high volatilization, incorporation factors of time of year and days until incorporation effect the availability of nitrogen.

The first column is the per cent of available ammonia from animal manure. The second column is the per cent of available organic nitrogen from animal manure. The third column is the time of year in which application can be made. The fourth column is the number of days till incorporation.

For example: Using the first row of data, if manure is applied in November, fifty per cent of the available nitrogen comes from ammonia and thirty-three per cent of the available nitrogen from residual organic nitrogen in manure if incorporated in less than five days.

Using the second row of data, if manure is applied in November, twenty-five per cent of the available nitrogen comes from ammonia and thirty-three per cent of the available nitrogen from residual nitrogen in manure if incorporation is more than five days after application.

Method of Calculating N Availability of Manures[a]			
Available Nitrogen %		**Time of Application**	**Days Until Incorporated [b]**
NH_4	**Organic**	**Date**	**Days**
50	33	Nov-Feb	≤5
25	33	Nov-Feb	>5
50	33	Mar-Apr	≤3
25	33	Mar-Apr	>3
75	33	Apr-Jun	≤1
25	33	Apr-Jun	>1
75	15	Jul-Aug	≤1
25	15	Jul-Aug	>1
25	33	Sep-Oct	≤1
15	33	Sep-Oct	>1
[a] The calculations are for all animal manures. It is assumed that 50% of the organic N in poultry manure is converted to NH_4 rapidly and is therefore included in the NH_4 column for calculating available N.			
[b] Incorporation is the mixing of manure and surface soil .			

Source: Ohio Livestock Manure And Wastewater Management Guide - Bulletin 604. M. A. Veenhuizen, D.J. Eckert, K.Elder, J.W. Johnson, W.F. Lyon, K.M. Mancl and G. Schnitkey (1992). Columbus, OH: Ohio State University.

Appendix C Table 7 to rule 901:10-2-14 Nutrient Sufficiency Ranges for Corn, Soybeans, Alfalfa and Wheat.

Element	Corn	Soybeans	Alfalfa	Wheat
	Ear leaf sampled at initial silking	Upper fully developed leaf sampled prior to initial flowering	Top 6 inches sampled prior to initial flowering	Upper leaves sampled prior to initial bloom
	---------- Percent (%) ----------			
Nitrogen	2.90-3.50	4.25-5.50	3.76-5.50	2.59-4.00
Phosphorus	0.30-0.50	0.30-0.50	0.26-0.70	0.21-0.50
Potassium	1.91-2.50	2.01-2.50	2.01-3.50	1.51-3.00
Calcium	0.21-1.00	0.36-2.00	1.76-3.00	0.21-1.00
Magnesium	0.16-0.60	0.26-1.00	0.31-1.00	0.16-1.00
Sulfur	0.16-0.50	0.21-0.40	0.31-0.50	0.21-0.40
	---------- Parts per million (ppm) ----------			
Manganese	20-150	21-100	31-100	16-200
Iron	21-250	51-350	31-250	11-300
Boron	4-25	21-55	31-80	6-40
Copper	6-20	10-30	11-30	6-50
Zinc	20-70	21-50	21-70	21-70
Molybdenum	-	1.0-5.0	1.0-5.0	-

Original Source: M.L. Vitosh (Michigan State University), J.W. Johnson (The Ohio State University), and D.B. Mengel (Purdue University) (1995). Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat and Alfalfa. Bulletin E-2567. East Lansing Michigan; Michigan State University.

Appendix D Table 1 to rule 901:10-2-14 Phosphate (P_2O_5) Rate for Corn.

	Yield potential - bu/acre				
Soil test	100	120	140	160	180
ppm (lb/acre)	lb P_2O_5 per acre				
5 (10)[1]	85	95	100	110	115
10 (20)	60	70	75	85	90
15-30 (30-60)	35	45	50	60	65
35 (70)	20	20	25	30	35
40 (80)	0	0	0	0	0

[1] Values in parentheses are lb/acre.

Appendix D Table 2 to rule 901:10-2-14 Phosphate (P_2O_5) Rate for Corn Silage.

	Yield potential - tons per acre				
Soil test	20	22	24	26	28
ppm (lb/acre)	lb P_2O_5 per acre				
5 (10)[1]	115	125	130	135	140
10 (20)	90	100	105	110	115
15-30 (30-60)	65	75	80	85	90
35 (70)	35	40	40	45	45
40 (80)	0	0	0	0	0
[1] Values in parentheses are lb/acre.					

Appendix D Table 3 to rule 901:10-2-14 Phosphate (P_2O_5) Rate for Soybeans.

	Yield potential - bu/acre				
Soil test	30	40	50	60	70
ppm (lb/acre)	lb P_2O_5 per acre				
5 (10)[1]	75	80	90	100	105
10 (20)	50	55	65	75	80
15-30 (30-60)	25	30	40	50	55
35 (70)	10	15	25	25	30
40 (80)	0	0	0	0	0
[1] Values in parentheses are lb/acre.					

Appendix D Table 4 to rule 901:10-2-14 Phosphate (P_2O_5) Rates for Wheat.

	Yield potential - bu/acre				
Soil test	50	60	70	80	90
ppm (lb/acre)	lb P_2O_5 per acre				
15 (30)[1]	80	90	95	100	105
20 (40)	55	65	70	75	80
25-40 (50-80)	30	40	45	50	55
45 (90)	15	20	20	25	30
50 (100)	0	0	0	0	0

[1] Values in parentheses are lb/acre.

Appendix D Table 5 to rule 901:10-2-14 Phosphate (P_2O_5) Rates for Alfalfa.

	Yield potential - tons per acre				
Soil test	5	6	7	8	9
ppm (lb/acre)	lb P_2O_5 per acre				
15 (30)[1]	115	130	140	185	165
20 (40)	90	105	115	130	140
25-40 (50-80)[2]	65	80	90	105	115
45 (90)	35	40	45	50	60
50 (100)	0	0	0	0	0
[1] Values in parentheses are lb./acre.					

Appendix E to rule 901:10-2-14.

Table 1 Phosphorus Index (P Index) Risk Assessment Procedure

The P Index is a procedure that combines well-established factors that influence the runoff of phosphorus to surface waters. Each of the factors is evaluated based on site-specific data and weighted according to its overall effect on phosphorus transport. Each of the site subvalues are added together to establish an overall site rating of low, moderate, high, or very high risk.

In most cases the use of the P Index will allow higher rates of Phosphorus application than the Phosphorus Soil Test Risk Assessment Procedure. The use of the P Index should be viewed as a continuous measure until other alternatives can be developed to utilize excess phosphorus produced on the farm.

Purpose:

The P Index is a planning tool designed to help identify fields or areas of fields on a farm that have a higher or lower risk of Phosphorus runoff from manure or other organic materials. Based on the risk assessment the appropriate land treatment and nutrient application treatments can be planned to minimize Phosphorus transport from the site.

Procedure:

Use the P Index Assessment Procedure Worksheet to determine the site's overall P Index. Use the following guidance to determine each of the site's subvalues. The subvalues are added together to determine the overall site P Index. The worksheet can be photocopied as needed. A "Field Summary Worksheet" is also available with this procedure to record a series of site/field values for a given farm. It can be photocopied as needed.

1. **SOIL EROSION** – Sheet and rill erosion as measured by the Revised Universal Soil Loss Equation (RUSLE) [USDA-NRCS (2001) National Soil Survey handbook, Section 618.55] or Wind Erosion Prediction Procedure (where wind erosion is the primary concern) [USDA-NRCS (2001) National Soil Survey handbook, Section 618.72]. Determine the predicted soil loss and multiply by (1) to determine the "soil loss" site subvalue.

2. **CONNECTIVITY TO WATER** – Defines the vulnerability of P to be transferred from the site to a perennial stream or water body. The more closely connected the runoff is from the field via concentrated flow (from a defined grassed waterway or surface drain) to a perennial stream or water body the higher the vulnerability of P transport. To determine the "connectivity to water" site subfactor ask the question: Does concentrated flow (via a defined waterway, tile inlet, or surface drain) leave the site? Read the value definitions to determine the site's "connectivity to water" subvalue.

3. **RUNOFF CLASS** – This represents the effect of the Hydrologic Soil Group (A, B, C, D) combined with the effect of slope. This factor represents the site's runoff vulnerability. Use the table below to determine the runoff class. The runoff class is the site's subvalue.

Runoff Class Matrix - Phosphorus Index Values

	Hydrologic Soil Group			
Slope Range	**A**	**B**	**C**	**D**
<1 %	0	1	3	6
1-3%	1	2	4	7
4-6%	2	3	5	8
7-10%	3	5	7	10
11-15%	4	6	9	12
>15%	6	8	11	15

Appendix C Table 8 to rule 901:10-2-14 Sidedress N fertilizer rates for corn, based on a presidedress nitrate soil test at the 4 to 6 leaf stage.

Soil Nitrate Level			Corn Yield Potential (Bu/A)			
80 100		120	140	160	180	
ppm NO3-N			----------pounds additional fertilizer N to apply per acre----------			
0-10 80	110		140	160	190	220
11-15 50	80		110	140	160	190
16-20	30	60	90	120	140	170
21-25 0	10		40	60	90	120
>25 0	0		0	0	0	0

Instructions.

To effectively use the presidedress nitrate soil test, soil samples should be collected when the corn is in the 4 to 6 leaf stage, or 6 to 12 inches tall. Where manure or fertilizer has been broadcast, sampling procedures consist of taking a composite soil sample of 20-25 soil cores at random throughout the sampling area. The cores should be collected to a depth of 12 inches.

4. **SOIL "P" TEST (BRAY-KURTZ P1)** – The soil test procedure using the Bray P1 extraction, or other extraction test calibrated to Bray P1, that provides an index of plant available P expressed in either ppm or lbs/ac (ppm X 2 = lbs/ac). Determine the Bray P1 value in PPM and multiply the PPM by (0.07) to determine the "soil P test site subvalue.

5. **FERTILIZER P2O5 APPLICATION RATE** - The amount of manufactured (commercial) phosphate fertilizer applied expressed in lbs/ac of P2O5. To determine the site's subvalue multiply the year's P fertilizer application rate by (0.05).

6. **FERTILIZER P2O5 APPLICATION METHOD** – Defines if the phosphate (P2O5) fertilizer is actually incorporated into the soil and the time interval between application and incorporation or if the fertilizer is applied over a given amount of crop residue. Incorporation or injection with the fertilizer application equipment or using a tillage tool operated a minimum of 3-4 inches deep to incorporate the P2O5 fertilizer. To determine the site's subvalue select the description that most closely describes the method of application. The value with that description is the site's subvalue.

7. **ORGANIC P2O5 APPLICATION RATE** - The amount of phosphate applied (expressed in lbs/ac of P2O5) from manure, sludge, or other bio-solids. To determine the site's subvalue multiply the year's P fertilizer application rate by (0.06).

8. **ORGANIC P2O5 APPLICATION METHOD** - Defines if the phosphate (P2O5) from the manure, sludge, or other bio-solids is actually incorporated into the soil, the time interval between application and incorporation, or if the manure/bio-solids are applied over a given amount of crop residue. Incorporation or injection with the application equipment or by using a tillage tool operated a minimum of 3-4 inches deep to incorporate the manure, sludge, or other bio-solids. To determine the site's subvalue select the description that most closely describes the method of application. The value with that description is the site's subvalue.

9. **BUFFER STRIP** - Deduct 2 points if field runoff flows via sheet flow through a designed filter strip - minimum 35 feet wide. For the type of buffer strip that is limited to the use of filter strips only, it is critical that sheet flow crosses the filter strip, not concentrated flow, to credit a 2 point deduction.

Phosphorus Index Risk Assessment Procedure Worksheet

Site Characteristic	**Phosphorus Vulnerability Values**				
1. Soil Erosion	**Soil Loss (Tons/Acre/Year) X 1.0**				
2. Connectivity to Water. Does concentrated flow (via a defined waterway, tile inlet, or surface drain) leave the site?	NO, and the site is not adjacent to an intermittent or perennial stream. **Value = 0**	NO, but the site is adjacent to an intermittent or perennial stream. **Value = 4.0**	Yes, but the site is intermittent or pere **Value = 8.0**	Yes, and the site is adjacent to and/or the concentrated flow outlets into an intermittent stream or through a tile inlet. **Value = 12.0**	Yes, and the site is adjacent to and/or the concentrated flow outlets into a perennial stream or through a tile inlet; OR Outlets to a pond or lake within 1 mile. **Value = 16.0**
3. Runoff Class	**See Runoff Class Matrix**				

4. Soil Test Bray-Kurtz P1 PPM	**Bray – Kurtz P1 (PPM) X (0.07)**				
5. Fertilizer P2O5 Application Rate	**Fertilizer P2O5 Applied (Lbs/Acre) X (0.05)**				
6. Fertilizer P2O5 Application Method	0 Applied **Value = 0**	Immediate Incorporation Or Applied on 80% Cover **Value = 0.75**	Incorporation < 1 Week Or Applied on 50-80% Cover **Value = 1.5**	Incorporation > 1 Week & < 3 Months Or Applied on 30-49% Cover **Value = 3.0**	No Incorporation Or Incorporation > 3 Months Or Applied on < 30% Cover **Value = 6.0**
7. Organic P2O5 Application Rate	**Available - Manure / Biosolids P2O5 Applied (Lbs/Ac) X (0.06)**				
8. Organic P2O5 Application Method	0 Applied **Value = 0**	Immediate Incorporation Or Applied on 80% Cover **Value = 0.5**	Incorporation < 1 Week Or Applied on 50-80% Cover **Value = 1.0**	Incorporation > 1 Week & < 3 Months Or Applied on 30-49% Cover **Value = 2.0**	No Incorporation Or Incorporation > 3 Months Or Applied on < 30% Cover **Value = 4.0**
Buffer Strip Factor (Deduct 2 points if field runoff flows through a designed filter strip - minimum 35 feet wide)					
Total Site Index Value					

Field Vulnerability for Phosphorus Loss to Surface Water

Phosphorus Index for Field	Generalized Interpretation of Phosphorus Index & Management
LOW < 15	LOW potential for P movement from the field. If farming practices are maintained at the current level there is a low probability of an adverse impact to surface waters from P loss. Manure or other bio-solids can be applied to meet the recommended nitrogen for the next grass crop or nitrogen removal of the next legume crop.
MEDIUM 15-30	MEDIUM potential for P movement from the field. The chance of organic material and nutrients getting into surface water exists. Runoff reduction practices such as buffers, setbacks, lower manure/bio-solid rates, cover crops, and crop residue practices alone or in combination should be considered to reduce P loss impacts. Manure or other bio-solids can be applied to meet the recommended nitrogen for the next grass crop or nitrogen removal of the next legume crop. Applications of P at the crop removal rate should be considered.
HIGH 31-45	HIGH potential for P movement from the field and for an adverse impact on surface waters unless remedial action is taken. Runoff reduction practices such as buffers, setbacks, lower manure/bio-solid rates, cover crops, and crop residue practices alone or in combination should be considered to reduce P loss impacts. Limit application of P to crop removal rates for one year.

VERY HIGH **> 45**	VERY HIGH potential for P movement from the field and an adverse impact on surface water. Remedial action is required to reduce the risk of P loss. A complete soil and water conservation system is needed. Apply no additional P.

Appendix E Table 2 of rule 901:10-2-14.

Phosphorus Soil Test Risk Assessment Procedure
Nitrogen and Phosphorus Application Criteria For Manure, ~~Organic By-Products, and Biosolids~~

Criteria Applicable to All Soil Test Levels:

1. Nitrogen application rates from manure, ~~other organic by-products, or biosolids~~ shall be based on Total Ammonium Nitrogen Content plus 1/3 of the Organic Nitrogen calculated at time of application when applied during the summer, fall, or winter for spring planted crops. When applied in the spring for spring planted crops the nitrogen application rate can be adjusted to apply the recommended nitrogen within the P2O5, K2O, and other limitations.
2. Nitrogen rates are not to exceed the succeeding crop's recommended Nitrogen for non-legume crops or the Nitrogen removal in the crop's biomass for legume crops.
3. All applications are based on current soil test results (not more than 3~~-5~~ years old).
4. No manufactured P2O5 applied above 40 ppm Bray P1 or equivalent test, unless recommended by appropriate industry standards or the land grant universities for specialty crops, vegetable crops, etc.
5. Manure shall be applied in accordance with the restrictions and setbacks in Appendix A Table 2 of this rule.

"P" Soil Test Level	**Application Criteria**
Bray P1 < 40 ppm (< 80 Lbs/Ac) OR Other Equivalents (e.g. Mehlich 3) ~~**LOW POTENTIAL**~~	**Recommended N or P2O5.** Manure ~~or other Organic By-Products~~ can be applied to meet the succeeding crop's recommended nitrogen ~~NITROGEN~~ requirements for non-legume crops or the nitrogen ~~NITROGEN~~ removal for legume recommended P2O5 but not to exceed the nitrogen ~~NITROGEN~~ needs of the succeeding crop.
Bray P1 40-100 ppm (80 – 200 Lbs/Ac) OR Other Equivalents (e.g. Mehlich 3) ~~**MODERATE POTENTIAL**~~	**Recommended N or P2O5 Removal whichever is less.** The field shall have > 30% ground cover at the time of application or the manure ~~or other organic by-products~~ shall be incorporated within one week. The manure ~~or other organic by-products~~ can be applied to meet the succeeding crop's recommended nitrogen ~~NITROGEN~~ requirements for non-legume crops or the nitrogen ~~NITROGEN~~ removal for legume crops; or P2O5 removal (annual or multiple year applications) whichever is less.
Bray P1 100-150 ppm (200-300 Lbs/Ac) OR Other Equivalents (e.g. Mehlich 3) ~~**HIGH POTENTIAL**~~	**Recommended N or P2O5 Removal whichever is less ~~PLUS additional distance criteria from drainageway/water source or other sensitive area, OR Filter Strips.~~** Manure ~~or other organic by-products~~ shall ~~can~~ be applied so as not to exceed ~~to meet~~ the succeeding crop's recommended nitrogen ~~NITROGEN~~ requirements for non-legume crops or the nitrogen ~~NITROGEN~~ removal for legume crops. In addition a multiple year application of Phosphorus is authorized if the following conditions are met: ~~; or P2O5 removal (annual or multiple year applications) whichever is less IF:~~ 1. The application field has > 50% ground cover at the time of application; or ~~the material is incorporated within 7 days on areas with < 50% cover.~~ ~~AND~~ 2. The manure is incorporated into the application field within 7 days on fields with <50% cover. ~~2. Unless the manure or other organic by-products are~~

	~~incorporated within 24 hours, no manure or other organic by products are to be applied within 100 feet of a drainageway, water source or other sensitive area; or, the width of a vegetative filter strip (minimum width 35 feet) maintained adjacent to the drainageway, water source, or sensitive area.~~
Bray P1 > 150 ppm (> 300 Lbs/Ac) OR Other Equivalents (e.g. Mehlich 3) ~~VERY HIGH POTENTIAL~~	1. No additional P2O5 – Use P2O5 Draw-down Strategies; or 2. Shall use the P Site Assessment in Appendix E Table 1.

Source: USDA-NRCS (2001). Field Office Technical Guide – Conservation Practice Standard. *Section 1.* Columbus, OH.

Appendix F to rule 901:10-2-14 Most Limiting Manure Application Rates.

Table 1. Most Limiting Manure Application Rates for Tiled Fields.

Select the Most Limiting Application Rate Based on the Following Criteria					
Field Situation & Time of Year	**Limiting Application Rate Criteria**				
	Nitrogen	**P2O5 4/**	**K2O**	**Tons/Ac Gallons/Ac**	**AWC Table**
Subsurface Drained (Tiled) Fields					
(April - June) Subsurface Drained or High N Leaching Potential	1/ Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	13,000 gal/ac	Upper 8"
(April - June) **Pasture > 20% or Cropland > 15%** Subsurfaced Drained or High N Leaching Potential	Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	5/ 10 wet tons 5,000 gal/ac - unless contoured strips or incorporated immediately	Upper 8"
(July - Sept.) **No Growing Crop** Subsurface Drained or High N Leaching Potential	2/ 50 lbs/ac as applied N	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	13,000 gal/ac	Upper 8"
(July - Sept.) **With a Growing Cover Crop** Subsurface Drained or High N Leaching Potential	3/ Next year's crop needs as applied N	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	13,000 gal/ac	Upper 8"
(July - Sept.) **No Growing Crop** **Cropland > 15%** Subsurfaced Drained or High N Leaching Potential	2/ 50 lbs/ac as applied N	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	13,000 gal/ac	Upper 8"
(Oct. - March) Subsurface Drained or High N Leaching Potential	3/ Next year's crop needs as applied N	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	13,000 gal/ac	Upper 8"
(Oct. - March) **Pasture > 20% or Cropland > 15%** Subsurfaced Drained or High N Leaching Potential	3/ Next year's crop needs as applied N	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	5/ 10 wet tons 5,000 gal/ac - unless contoured strips or incorporated immediately	Upper 8"
Frozen or Snow Cover Subsurface Drained or High N Leaching Potential	3/ Next year's crop needs as applied N	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	5/ 10 wet tons < 50% solids, 5 wet tons > 50% solids, liquid manure 5,000 gal/ac	

Note: Comments below Table 2 also pertain to this Table.

Appendix F to rule 901:10-2-14 Most Limiting Manure Application Rates.

Table 2. Most Limiting Manure Application Rates for Non-Tiled Fields.

Select the Most Limiting Application Rate Based on the Following Criteria					
Field Situation & Time of Year	**Limiting Application Rate Criteria**				
	Nitrogen	**P2O5 4/**	**K2O**	**Tons/Ac Gallons/Ac**	**AWC Table**
Non Subsurface Drained (Tiled) Fields					
(July - Sept.) Not Subsurface Drained	1/ Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac		Upper 8"
(Oct. - March) Not Subsurface Drained	1/ Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac		Upper 8"
(April - June) Not Subsurfaced Drained Pasture > 20% or Cropland > 15%	1/ Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	5/ 10 wet tons 5,000 gal/ac - unless contoured strips or incorporate immediately	Upper 8"
(July - Sept.) Not Subsurfaced Drained Pasture > 20% or Cropland > 15%	1/ Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac		Upper 8"
Frozen or Snow Cover Not Subsurface Drained	1/ Next year's crop needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	5/ 10 wet tons < 50% solids, 5 wet tons > 50% solids, liquid manure 5,000 gal/ac	
(Oct. - March) Not Subsurfaced Drained Pasture > 20% or Cropland > 15%	1/ Crop Needs factoring N losses	Crop Needs or Crop Removal < 250 Lbs/ac	Crop Needs or Crop Removal < 500 Lbs/ac	5/ 10 wet tons 5,000 gal/ac - unless contoured strips or incorporate immediately	Upper 8"

1/ Crop Needs factoring N losses - Maximum total nitrogen applied to meet the succeeding crop's recommended NITROGEN requirements for non-legume crops or 150 lbs/ac NITROGEN for the succeeding legume crop. **Considers loss of N through application method and time of year.**

2/ 50 lbs/ac as applied N - Nitrogen application limited to 50 lbs/ac based on the addition of the NH4 or NH3 (ammonium/ammonia) content of the manure + 1/3 of the organic nitrogen content the manure as applied. **Considers no losses due to application method or time of year.**

3/ Next year's crop needs as applied N – Maximum total nitrogen applied to meet the succeeding crop's recommended NITROGEN requirements for non-legume crops or 150 lbs/ac NITROGEN for the succeeding legume crop. **Considers no losses due to application method or time of year.**

4/ Under special conditions and criteria the rate of P2O5 application can be increased to 500 lbs./acre (See Appendix A or rule 901:10-2-14). **Frozen or Snow covered ground and fields over 100 ppm Bray P1 soil test are exempt and are always limited to applications less than or equal to 250 lb/ac P_2O_5.**

5/ Wet tons refers to the weight of the manure as it is applied – include solids and moisture weight.

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901:10-2-15 **Manure management plan and the plan for the disposal of dead livestock.**

A manure management plan shall include a plan for the disposal of dead livestock. The plan shall include best management practices to burn, bury, render or compost consistent with sections 941.14, 953.26, and 1511.022 of the Revised Code. In the alternative, the owner or operator may choose to follow the requirements set forth in section 3734.02 of the Revised Code and rules promulgated thereunder. Records for implementing the plan for the disposal of dead livestock shall be included in the operating record set forth in rule 901:10-2-16 of the Administrative Code.

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901:10-2-16 **Permit to operate and operating record requirements.**

(A) An operating record shall be generated as part of the permit to operate and NPDES permit.

(1) The owner or operator shall maintain the operating record on forms provided by the department and other forms selected by the owner or operator for the facility. The operating record shall be retained for a minimum period of five years, shall be made available to the director upon request, and shall record and document the following information:

(a) The manure storage or treatment facility. Records required by rule 901:10-2-08 or 901:10-2-19 of the Administrative Code, including:

(i) Measurements of manure volume and the depth of liquid manure in manure storage or treatment facilities by the depth marker or other appropriate device as approved by the Director in accordance with rule 901:10-2-06 of the Administrative Code as required by paragraph (A)(3)(o) of rule 901:10-2-08 of the Administrative Code which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the twenty-five year, twenty-four hour rainfall event, or, in the case of new sources subject to the requirement in paragraph (C) of rule 901:10-3- 06 of the Administrative Code, the runoff and direct precipitation from a one-hundred year, twenty-four hour rainfall event, plus the levels of freeboard as required in either paragraph (A)(3)(a) or paragraph (A)(3)(b) of rule 901:10-2-08 of the Administrative Code;

(ii) Records of inspections of the structural integrity and vegetative management systems of the manure storage or treatment facility taken at intervals specified in the manure management plan and including evidence of erosion, leakage, animal damage, and problems of emerging vegetation.

(iii) Records of measurements of storage capacity remaining in the manure storage and treatment facility, based upon inspections conducted at intervals specified in the manure management plan.

(iv) Records of inspections of stormwater conveyances, diversion devices, runoff diversion structures, and devices channeling contaminated stormwater to the manure storage pond or manure treatment lagoon.

(v) Records of inspections of the protective vegetative cover that is maintained on all disturbed areas (lagoon or pond embankments, berms, pipe runs, erosion control areas, etc.)

(vi) Implementation dates of those best management practices necessary to operate and maintain settling basins, grass filtration or soil infiltration systems or diverting clean water and roof water away from the production area..

(vii) Records of groundwater sampling and analysis and any surface water sampling and analysis.

(viii) Records required in rule 901:10-2-19 of the Administrative Code for the insect and rodent control plan.

(ix) Records of inspections of water lines located above ground and readily accessible or visible for daily inspection, including drinking water or cooling water lines.

(x) Records of actions taken to correct any deficiencies found as a result of inspections conducted in the production area. If actions were not taken within thirty days of discovery, then the operating record shall record the reasons explaining why corrections could not be made immediately.

(xi) Records documenting the current design of any manure storage or treatment facility including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity.

(xii) Records of the date, time, and estimated volume of any overflow or discharge from the production area.

(b) Manure characterization records. Manure characterization data, test methods, results, and other information as required in paragraph (E) of rule 901:10-2-10 of the Administrative Code.

(c) Land application site records. Records for each land application site, including:

(i) The owner or operator shall maintain or have access to adequate land application equipment and record this in the operating record.

(ii) The owner or operator shall list or otherwise describe those acres of land in the operating record for land application of manure, whether the land is owned or leased. In the alternative, use of a distribution and utilization plan should be recorded in the operating record.

(iii) When liquid manure is applied to a land application site with subsurface drains, document the periodic observations of the drain outlets for liquid manure flow during and after application in the operating record.

(iv) When liquid manure is applied to a land application site with a subsurface drain, document the use of drain outlet plugs or other devices in the operating record.

(v) Land application sites as described on a soil survey map.

(vi) All soil tests within the last five years. Soil test results shall be maintained in the operating record with the information required in rule 901:10-2-13 of the Administrative Code.

(vii) Implementation dates of those best management practices to maintain vegetative cover and protect stream channels or areas adjacent to such stream channels.

(viii) Records of the cropping schedule for each land application site for the past year, anticipated crops for the current year, and anticipated crops for the next two years after the current year.

(ix) Targeted crop yield for each crop in each land application site based on:

(a) Soil productivity information;

(b) Historical yield data;

(c) Potential yield; or

(d) Combinations of yield data.

(x) An additional ten per cent may be added to the potential and/or historical yields to account for improvements in management and technology.

(a) When historical yield data is not available a realistic yield may be based on local research or on yields from similar soils and/or cropping systems in the area.

(b) For new or potential crops or varieties, industry yield estimates may be used until actual yields are available for documentation in the operating record.

(xi) Actual yield, if available.

(xii) Results of the nitrogen leaching risk assessment procedure and the phosphorus soil test assessment procedure and an explanation of the basis for determining manure application rates, as provided in rule 901:10-2-14 of the Administrative Code.

(xiii) The number of years needed to reach one hundred fifty parts per million Bray P1 or equivalent if manure application rates exceed the phosphorus crop removal rates.

(xiv) Date, rate, quantity and method of application of the nutrient, and/or form and source of manure, commercial fertilizer and/or other organic by-products.

(xv) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.

(xvi) Condition of soil at the time of application including, but not limited to, available water capacity and evidence of soil cracks and related information on soil conditions.

(xvii) Temperature, including general weather conditions at time of application and for twenty-four hours prior to and following application.

(xviii) Implementation dates of those best management practices necessary to reduce the risk of nitrogen or phosphorus runoff by crop rotation, cover crops or residue management in accordance with paragraphs (B) to (E) of rule 901:10-2-14 of the Administrative Code.

(xix) Record the annual projected nutrient budget for nitrogen and phosphorus for each site for the plant production sequence and/or crop rotation.

(d) Unless otherwise recorded with the insect and rodent control plan implementation or land application records, records of inspections and actions taken at manure stockpile or manure transfer sites.

(e) The records for implementation of distribution and utilization methods, if used, shall include:

(i) Quantity of manure transferred off-site for each twelve month period (tons/gallons);

(ii) Date of off-site transfer for distribution;

(iii) Name and address of recipient of manure; and

(iv) Record that the recipient was provided with a copy of the appendices A, B and F to rule 901:10-2-14 of the Administrative Code, a copy of the most recent manure analysis consistent with the rules.

(f) Disposal of dead livestock. The records for implementing the plan for the disposal of dead livestock shall include, but not be limited to:

(i) The disposal method used for removal of dead livestock;

(ii) A record of the date and time of inspection of each facility; and

(iii) Those best management practices necessary to implement the disposal of dead livestock.

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901:10-2-17 **Emergency response plan.**

(A) An emergency response plan shall include, but is not limited to the following:

(1) The names and telephone numbers of persons who are identified by the owner or operator as responsible for implementing the plan.

(2) Areas of the facility where potential spills can occur and their accompanying surface and subsurface drainage points.

(3) Procedures to be followed in the event of a spill, including actual or imminent discharge to waters of the state:

(a) Actions to contain or manage the spill;

(b) Identification of proper authorities to be contacted;

(c) Actions to mitigate any adverse effects of a spill; and

(d) Identification of equipment and clean-up materials to be used in the event of a spill.

(4) Procedures for reporting.

(a) The owner or operator shall report by telephone to the department as soon as possible, but in no case more than twenty-four hours following first knowledge of the occurrence of the following:

(i) The times at which the discharge or manure spill occurred and was discovered;

(ii) The approximate amount and the characteristics of the discharge or manure spillage;

(iii) The waters of the state affected by the discharge or spillage;

(iv) The circumstances which created the discharge or spillage;

(v) The names and telephone numbers of persons who have knowledge of these circumstances;

(vi) Those steps being taken to clean up the discharge or spillage; and

(vii) The names and telephone numbers of persons responsible for the cleanup.

(b) For any emergency that requires immediate reporting after normal business hours, contact the Ohio department of agriculture's emergency telephone number.

(c) If applicable, the owner or operator shall notify appropriate local authorities.

(d) The owner or operator shall also file a written report of the occurrence in letter form within five days following first knowledge of the occurrence, unless the director allows an extension of time or waives the reporting requirement. This report shall outline the actions taken or proposed to be taken to correct the problem and to ensure that the problem does not recur.

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901:10-2-18 **Closure plan requirements.**

No later than one hundred eighty days before the expiration of a permit to operate or a NPDES permit, the owner or operator must submit an application to renew the permits. However the owner or operator of a facility need not continue to seek continued permit coverage under a permit to operate or a NPDES permit or reapply for permit coverage if the facility has ceased operation, if the facility is no longer a concentrated animal feeding facility or a concentrated animal feeding operation, or if the facility is no longer required to maintain permit coverage in the permit program in accordance with Section 903.082 of the Revised Code. In addition, the owner or operator shall demonstrate to the satisfaction of the director that there is no remaining potential for a discharge of manure that was generated while the operation was a concentrated animal feeding operation, other than agricultural stormwater from land application areas.

(A) The owner or operator shall notify the director in writing and allow the director opportunity to inspect the facility to verify that a permit is no longer required and that the facility is closed for purposes of Chapter 903 of the Revised Code in accordance this rule. Thereafter, the director will notify the owner or operator in writing that the facility is closed in accordance with this rule.

(B) If all or part of the manure storage or treatment facility at a concentrated animal feeding facility or a concentrated animal feeding operation will be closed or discontinued, the owner or operator shall implement a closure plan for all or part of the manure storage or treatment facility. At least ninety days before closure, the owner or operator shall submit such a closure plan for the director's approval that provides for the following:

(1) Implementation of best management practices during closure.

(2) Removal of all manure from the discontinued portions of the manure storage or treatment facility.

(3) Removal of all associated appurtenances and conveyance structures from uncovered liquid manure storage or treatment facilities.

(4) Land application of the manure in accordance with rule 901:10-2-14 of the Administrative Code or disposal in another manner allowed by these rules.

(C) If the manure storage or treatment facility will not be completely closed for purposes of Chapter 903 of the Revised Code, the owner or operator shall apply for a permit modification removing the closed portions of the facility from the permit and

recalculating the storage volume for the facility. If applicable, the owner or operator shall also submit an application for a permit to install.

(D) If no portion of a manure storage or treatment facility at a concentrated animal feeding facility or a concentrated animal feeding operation will be discontinued, the owner or operator shall, at least ninety days before closure, submit for the director's approval, and thereafter shall implement, a closure plan that provides for the following:

(1) Implementation of best management practices during closure.

(2) Any other action necessary to prevent a discharge of manure that was generated while the operation was a concentrated animal feeding operation, other than agricultural stormwater from application areas.

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901:10-2-19 **Permit to operate: insect and rodent control plan.**

(A) Purpose and applicability.

(1) This rule establishes the best management practices to minimize the presence and negative effects of insects and rodents at the concentrated animal feeding facility and in surrounding areas, including land on which the manure is stored or applied. Subject to the requirements set forth in rules 901:10-2-07 and 901:10-2-08 of the Administrative Code, and rule 901:10-1-06 of the Administrative Code no person shall own or operate a concentrated animal feeding facility unless an insect and rodent control plan for the facility has been approved by the director.

[Comment: In preparing the plan, the owner or operator is advised to refer to the Food Quality Protection Act (FQPA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); and worker protection standards (WPS).]

(2) An insect and rodent control plan that specifies plans to minimize the activity of insects and rodents and their presence at the facility is to be integrated with other requirements of the permit to operate in accordance as set forth in rules 901:10-2-07 to 901-10-2-19 of the Administrative Code.

(B) Contents of an insect and rodent control plan.

(1) An insect and rodent control plan shall be prepared by the owner or operator and shall be submitted to the director for approval. Upon approval by the director, the insect and rodent control plan shall be incorporated into the permit to operate. The insect and rodent control plan shall be specific to the agricultural animal species of the facility.

(2) An insect and rodent control plan shall:

(a) Include a narrative description of balanced integrated pest management to minimize the presence and negative effects of insects and rodents;

(b) Set forth with specificity the standard operating procedures for actions to minimize the activity and reduce the presence of insects and rodents at the facility; and

(c) Set forth methods of monitoring and procedures for record keeping in the operating record to document inspection results and actions performed.

[Comment: The department may make available scientific references concerning the methods for monitoring and recommendations for control of insect and rodent populations to owners or operators or direct them to other resources.]

(3) Standard operating procedures set forth in paragraphs (B)(3)(a) to (B)(3)(d) and paragraph (C) of this rule set forth some but not all of the necessary integrated pest management actions to minimize the activity and reduce the presence of insects and rodents at the facility.

(a) Management controls. The following management controls require regular inspections to be conducted by the owner or operator in intervals as described in the insect and rodent control plans. Monitoring records and inspection records shall be maintained in the operating record as required by rule 901:10-2-16 of the Administrative Code. Management controls consist of the following:

(i) The owner or operator shall specify inspection intervals in the insect and rodent control plan and shall conduct and document inspections as specified in the plan.

(ii) The owner or operator shall inspect for the presence or absence of watering and feeding system leaks. If any leaks are detected, appropriate repairs shall be undertaken promptly.

(iii) The owner or operator shall inspect and record observations made regarding the presence and level of pest activity. Appropriate control actions shall be undertaken promptly when activity of insects and rodents is observed that requires actions as described in the plan required by paragraph (B)(2) of this rule.

(iv) The owner or operator shall manage moisture levels in manure to minimize the activity and reduce the presence of insects and rodents at the facility. Methods to control moisture may include but are not limited to: building design; adequate ventilation; mechanical aeration; leak detection and repair; proper site grading and drainage and maintenance of watering and feeding systems.

(v) Except for manure storage ponds and manure treatment lagoons, manure storage or treatment facilities shall be covered unless the runoff and drainage is collected and stored, or directed to a specifically designed infiltration area or other adequate treatment system. Appropriate control actions shall be undertaken prior to the removal of manure to minimize the activity and reduce the presence of insects and rodents at the facility.

(vi) Except for manure storage ponds and manure treatment lagoons, the owner or operator shall inspect manure storage or treatment facilities for pest activity prior to the removal of manure. Appropriate control actions shall be undertaken prior to the removal of manure to minimize the activity and reduce the presence of insects and rodents.

(vii) The owner or operator shall inspect land application sites during and after the land application of manure.

(viii) The owner or operator shall monitor manure stockpiles for insect and rodent activity on a seasonally appropriate basis.

(b) The following management actions are required but do not require record keeping and consist of the following:

(i) Maintain sanitation procedures designed to minimize the activity and reduce the presence of insects and rodents including: maintenance of vegetation around the buildings; cleaning of the facility; removal of dead or trapped animals at a frequency that prevents their accumulation and utilization of covered receptacles for food, feed, dead animals or refuse that are durable, cleanable, inaccessible to insects or rodents, leak proof and nonabsorbent;

(ii) Buildings shall be maintained and managed in such a manner as to minimize the activity and reduce the presence of insects and rodents. The director may consider the function, purpose and age of the buildings;

(iii) The owner or operator shall maintain or have prompt access to appropriate insect and rodent control equipment;

(iv) The owner or operator shall maintain or have prompt access to suitable cleaning implements and supplies as necessary for effective cleaning of the facility; and

(v) The owner or operator shall maintain or have prompt access to insect and rodent monitoring methods and devices.

(c) Biological controls may be used to minimize the activity and reduce the presence of insects and rodents as part of integrated pest management. Biological controls shall include standard operating procedures designed to encourage the development and preservation of beneficial organisms.

[Comment: Beneficial organisms may be appropriate when contained within the facility but may not be appropriate when removed from the

fac ty. Prior to manure removal, the owner or operator is advised to evaluate the potential effects of beneficia organisms outside of the facility, e.g., at any site used for land application of manure.]

(d) Chemical controls may be used to minimize the activity and reduce the presence of insects and rodents as part of integrated pest management.

[Comment: Utilization of chemical controls may require, but not be limited to, asking the owner or operator to become a certified pest control applicator and keep accurate records on methods or products used and on dosage rates under Chapter 921. of the Revised Code.]

(e) Utilization of chemical controls may include, but not be limited to the following:

(i) Insecticides, larvicides, rodenticides, space sprays, fly baits, vapor strips;

(ii) Chemical application equipment; and

(iii) Inside and outside control measures.

(C) Storing, stockpiling and land applying manure.

(1) The insect and rodent control plan shall be consistent with the manure management plan in order to minimize the activity and reduce the presence of insects and rodents at the facility and shall include both the manure storage or treatment facility and the land application site.

(2) The storing, stockpiling and land application of manure shall be done in accordance with standard operating procedures set forth in this paragraph and in the owner or operator's insect and rodent control plan in order to minimize the activity and reduce the presence of insects and rodents. These standard operating procedures may include but are not limited to:

(a) Treatment of pests at the land application site;

(b) Setback distances during land application that are consistent with the manure management plan for the facility and with rule 901:10-2-14 of the Administrative Code;

(c) Extended stockpiling times after removal from the facility and prior to land application;

(d) Covering of the manure storage or treatment facility or covering the stockpile for thermal treatment;

(e) Implementing appropriate control measures for manure stockpiled more than one week; and

(f) Chemical treatment of the manure or the facility;

(g) Manure stockpiled for over one week shall have appropriate control actions implemented.; and

(h) If the presence of insect and rodent activity is not minimized and/or reduced prior to the removal of manure from the manure storage or treatment facility, the owner or operator shall visually monitor and observe fields spread with that manure for pest activity during application and shall conduct a final inspection of those fields when applications are complete.

(D) Emergency procedures. Each facility shall develop and maintain emergency procedures of action in order to minimize the activity and reduce the presence of insects and rodents at the facility.

(E) Compliance. Compliance with an insect and rodent control plan shall be determined as follows:

(1) Before proceeding with the procedures set forth in rule 901:10-5-03 of the Administrative Code, the director shall review the operating record, together with the insect and rodent control plan, examine any records of management actions taken, records of implementation of standard operating procedures and other appropriate control actions, and any monitoring data collected in the operating record.

(2) The director shall determine if insect and rodent activity has been minimized and the presence of the insects and rodents reduced by evaluating the records and assessing trends and making visual observations at the facility as evidenced by implementation of the insect and rodent control plan over an appropriate period of time and during periodic inspections at the facility. In making this determination for an appropriate period of time, consideration will be given, but not limited to the following: prevailing wind patterns, siting criteria, precipitation patterns, seasonal effects and weather conditions.

(3) Upon completion of the evaluation described in paragraphs (E)(1) and (E)(2) of this rule, the director may do the following:

(a) If the owner or operator is in compliance with the plan, the director may seek voluntary action by the owner or operator to modify the insect and rodent control plan including but not limited to further minimizing and reducing the activity and presence of insects and/or rodents at the facility; or

(b) If the owner or operator will not consent to modifying the plan, or if the owner or operator is not in compliance with the plan, then the director may propose to modify the insect and rodent control plan or the owner or operator may submit an application to modify the plan, in accordance with the procedures in rule 901:10-1-09 of the Administrative Code.

(4) The director is not required to comply with paragraphs (E)(1) to (E)(3) of this rule if the director determines:

(a) An emergency exists as described in rule 901:10-5-05 of the Administrative Code; or

(b) In consultation with federal, state or local health agencies, the director determines that there exists a high risk of zoonotic disease.

(F) Criteria for approving, disapproving or modifying an insect and rodent control plan including any major operational change to an insect and rodent control plan..

(1) The director shall consider the following criteria in determining an action on an insect and rodent control plan:

(a) Compliance with paragraphs (B) to (D) of this rule.

(b) Completeness and appropriateness of the methods for disposal of rodents on a daily or weekly basis or if there is an emergency. The director will require compliance with rule 901:10-2-15 of the Administrative Code.

(c) In order to comply with rule 901:10-1-09 of the Administrative Code for any proposed major operational change of the insect and rodent control plan, the owner or operator shall:

(i) Demonstrate that insect and rodent activity has been minimized; or

(ii) Demonstrate that the proposed major operational change will improve the management of pests: and

(iii) Authorize the director or the director's representative to evaluate the operating records and assess trends and make visual observations at the facility of implementation of the insect and rodent control plan over an appropriate period of time and during periodic inspections at the facility. In making a determination under this paragraph and rule 901:10-1-09 of the Administrative Code, the director may consider the following: prevailing wind patterns, siting criteria, precipitation patterns, seasonal effects, weather conditions, and applicable scientific and technical references for monitoring and control of insect and rodent populations.

(2) The director must act upon, approve or deny an insect and rodent control plan within ninety days of receiving it.

(G) Penalties. The director or his designated representative will determine civil penalties for violations of this rule in accordance with the rule 901:10-5-04 of the Administrative Code.

901:10-2-19

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ACTION: Final

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901:10-2-20 **Annual report.**

The owner or operator of a concentrated animal feeding operation with a NPDES permit must submit an annual report to the director. The annual report must include:

(A) The number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, chickens other than laying hens, swine weighing fifty-five pounds or more, swine weighing less than fifty-five pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);

(B) Estimated amount of total manure generated by the facility in the previous twelve months (tons/gallons);

(C) Estimated amount of total manure transferred to other person by the facility in accordance with rule 901:10-2-11 of the Administrative Code;

(D) Total number of acres for land application covered by the manure management plan developed in accordance with rule 901:10-2-07 of the Administrative Code;

(E) Total number of acres under control of the facility that were used for land application of manure in the previous twelve months;

(F) Summary of all manure discharges from the production area that have occurred in the previous twelve months, including date, time, and approximate volume; and

(G) A statement indicating whether the current version of the facility's manure management plan was developed or approved by a certified nutrient management planner.

901:10-2-20

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901:10-3-01 **Additional requirements for a NPDES permit application.**

(A) Concentrated animal feeding operations must have or seek to obtain coverage under a NPDES permit within the time frame provided in accordance with 40 C.F.R. 122.23(g) and in division (J) of section 903.08 of the Revised Code.

(B) Unless otherwise indicated, the application for an individual NPDES permit and the NPDES permit (if issued by the director) shall contain the following information:

(1) The information required in rule 901:10-1-02 of the Administrative Code for NPDES permits.

(2) To the extent required by federal law, a manure management plan that complies with the requirements of rules 901:10-2-08 to 901:10-2-11, 901:10-2-13 to 901:10-2-16 and rule 901:10-2-18 of the Administrative Code.

(a) Inspections required in rule 901:10-2-08 of the Administrative Code.

(b) Information on nutrient budget, manure characterization, soil tests, distribution and utilization methods for manure (if applicable to the facility), and land application of manure as required in rules 901:10-2-09 to 901:10-2-14 of the Administrative Code.

(3) An operating record developed in accordance with rule 901:10-2-16 of the Administrative Code with the use of forms prescribed by the director and other forms selected by the owner or operator for the facility and approved by the director. The operating record shall be maintained at the site office at all times. Upon approval of the NPDES permit, the operating record shall be deemed part of the NPDES permit.

(4) An emergency response plan containing the information required in rule 901:10-2-17 of the Administrative Code.

(C) Any person who discharges or proposes to discharge pollutants and who does not have an effective NPDES permit, except persons covered by a general NPDES permit, must submit a complete application to the director in accordance with this rule. The director shall not issue a NPDES permit before receiving a complete application for a NPDES permit except NPDES general permits. An application for a NPDES permit is complete when the director receives an application form and any supplemental information which are completed to his or her satisfaction. All applicants for NPDES permits must provide the following information to the director:

(1) The activities conducted by the applicant, which require it to obtain a NPDES permit~~, specifically~~:

(a) Information about the number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, chickens other than layers, swine weighing fifty-five pounds or more, swine weighing less than fifty-five pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);

(b) The types of manure storage areas, waste containment areas, and total capacity for manure storage (tons/gallons);

(c) The total number of acres under control of the applicant available for land application of manure;

(d) Estimated amounts of manure generated per year (tons/gallons);

(e) Estimated amounts of manure transferred to other persons per year (tons/gallons); and

(f) For operations that must seek coverage under a permit after December 31, 2006, certification that a nutrient management plan has been completed and will be implemented upon the date of permit coverage.

(2) The name and address of the owner and operator and information required by paragraph (C)(1) of rule 901:10-2-01 of the Administrative Code;

(3) Whether the operation is located on Indian lands;

(4) A listing of all permits or construction approvals received or applied for under any of the following programs:

(a) Hazardous waste management program under the Resource Conservation and Recovery Act (RCRA);

(b) Underground injection control (UIC) program under the Safe Drinking Water Act (SDWA);

(c) The Prevention of Significant Deterioration (PSD) program under the Clean Air Act;

(d) Non-attainment program under the Clean Air Act;

(e) National Emissions Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;

(f) Dredge or fill permits under section 404 of the Clean Water Act;

(g) Other relevant environmental permits, including state permits;

(5) Latitude and longitude of the production area (entrance to the production area); and

(6) A topographic map of the geographic area in which the concentrated animal feeding operation is located showing the specific location of the production area.

(D) Purpose and applicability of the individual NPDES permit.

(1) On or after the date on which the United States environmental protection agency approves the NPDES program submitted by the director of agriculture, each concentrated animal feeding operation as defined in ~~section 903.01 of the Revised Code or~~ rule 901:10-3-07 of the Administrative Code has a duty to seek coverage under a NPDES permit issued by the director of agriculture. A concentrated animal feeding operation is not required to seek coverage under a NPDES permit only if the owner or operator has received from the director notification of a determination that the concentrated animal feeding operation has no potential to discharge manure in accordance with this rule and rules 901:10-6-01 to 901:10-6-06 of the Administrative Code.

(2) Persons that have been issued a NPDES permit by the director are required to comply with the following requirements as determined by the director:

(a) Rule 901:10-3-10 of the Administrative Code;

(b) Rules 901:10-3-02 to 901:10-3-06 of the Administrative Code;

(c) Applicable water quality standards adopted under section 6111.041 of the Revised Code;

(d) National standards of performance for new sources;

(e) The antidegradation policy adopted under section 6111.12 of the Revised Code; and

(f) Other applicable requirements of the Act.~~act.~~

(E) In establishing the terms and conditions of the NPDES permit, the director, to the extent consistent with the Act, ~~act,~~ shall consider technical feasibility and economic costs and shall allow a reasonable period of time for coming into compliance with the permit.

(F) The director, upon request, may make a case-specific determination that a large concentrated animal feeding operation has no potential to discharge manure to waters of the state. In making this determination, the director must consider the potential for discharges from both the production area and any land application areas. The director must also consider any record of prior discharges by the operation. In no case may the concentrated animal feeding operation be determined to have no potential to discharge if it has had a discharge within the five years prior to the date of the request submitted under this paragraph. For purposes of this rule, the term no potential to discharge means that there is no potential for any manure to be added to waters of the state under any circumstance or climatic condition. A determination that there is no potential to discharge for purposes of this rule only relates to discharges of manure covered by this rule.

(1) In requesting a determination of no potential to discharge, the owner or operator must submit any information that would support such a determination. Such information shall be submitted within the time frame provided in accordance with 40 C.F.R. 122.23(g) or 40 C.F.R. 122.23(h) and must include all of the information specified in paragraph (C) of this rule. The director has discretion to require additional information to supplement the request, and may also gather additional information through on-site inspection of the concentrated animal feeding operation.

(2) The director must base the decision to grant a no potential to discharge determination on the administrative record, which includes all information submitted in support of a no potential to discharge determination and any other supporting data gathered by the permitting authority. The director must notify any concentrated animal feeding operation seeking a no potential to discharge determination of its final determination within ninety days of receiving the request.

(3) If the director's final decision is to deny the no potential to discharge determination, the owner or operator must seek coverage under a NPDES

permit within thirty days after the denial.

(4) Any unpermitted operation that discharges manure into waters of the state is in violation of this chapter even if it has received a no potential to discharge determination from the director. Any operation that has received a determination of no potential to discharge, but who anticipates changes in circumstances that could create the potential for a discharge, should contact the department and apply for and obtain permit authorization prior to the change of circumstances.

(5) Where the director has issued a determination of no potential to discharge, the director retains the authority to subsequently require NPDES permit coverage if circumstances at the facility change, if new information becomes available, or if there is other reason for the director to determine that the operation has a potential to discharge.

(G) In addition to conditions required in all permits to meet the requirements of rule 901:10-3-10 of the Administrative Code, the director shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of the act and regulations. These shall include conditions under 40 CFR sections 122.44, 122.46, 122.47, 122.48 and 40 CFR Part 132.

Replaces: 901:10-3-01

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Certification

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Date

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901:10-3-02 **Effluent limitations definitions and applicability.**

(A) Rules 901:10-3-02 to 901:10-3-11~~901:10-3-12~~ of the Administrative Code are applicable to concentrated animal feeding operations that are subject to a NPDES permit and establish effluent limitations for both the production area and the land application area as those terms are defined in section 903.01 of the Revised Code. The discharge of manure to waters of the state by the owner or operator of a concentrated animal feeding operation to land application areas under the control of the owner or operator, is a discharge from that concentrated animal feeding operation and subject to a NPDES permit unless the discharge is an agricultural stormwater discharge. Where the manure has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of nutrients in manure in compliance with the best management practices set forth in Chapter 901:10-2 of the Administrative Code, then a precipitation-related discharge of manure from land application areas under the control of an owner or operator is an agricultural stormwater discharge.

(B) An animal feeding facility is defined as a concentrated animal feeding operation only if the specific threshold specified in division (M) of section 903.01 of the Revised Code is met for any one animal species. "Concentrated animal feeding operation" may also mean any animal feeding facility that meets the criteria of division (Q) or division (EE) of section 903.01 of the Revised Code. Once an operation is defined as a concentrated animal feeding operation, the NPDES requirements apply with respect to all animals in confinement at the operation and all manure generated by those animals or the production of those animals, regardless of the type of animal.

(C) Best practicable control technology currently available or BPT means the degree of effluent reduction attainable through the application of the best control measures and practices currently available which shall be determined by taking into account the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, the age of the equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impacts (including energy requirements) and such other factors as deemed appropriate.

(D) Best available technology economically achievable or BAT means the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods and other alternatives. BAT shall be determined by taking into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impacts (including energy requirements) and such other factors as deemed appropriate.

(E) Any facility or operation subject to Chapter 903. of the Revised Code that introduces manure, including process wastewater, into a publicly owned treatment works must comply with 40 CFR part 403 and Chapter 6111. of the Revised Code and rules promulgated thereunder.

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901:10-3-03 **Horses and sheep.**

This rule applies to discharges resulting from the production areas at horse and sheep concentrated animal feeding operations. This rule does not apply to such concentrated animal feeding operations with less than the following capacities: ten thousand sheep or five hundred horses.

(A) Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

(1) Except as provided in rule 901:10-3-08 of the Administrative Code, and subject to the provisions of paragraph (A)(2) of this rule, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BPT: there shall be no discharge of manure to waters of the state.

(2) Manure in the overflow may be discharged to waters of the state whenever rainfall events, either chronic or catastrophic, cause an overflow of manure from a facility designed, constructed and operated to contain all manure plus the runoff from a ten-year, twenty-four hour rainfall event for the location of the point source.

(B) Effluent limitations attainable by the application of the best available technology economically achieveable (BAT).

(1) (1)Except as provided in rule 901:10-3-08 of the Administrative Code, and when the provisions of paragraph (B)(2) of this rule apply, any existing point source subject to the rule must achieve the following effluent limitations representing the application of BAT: there shall be no discharge of manure into waters of the state.

(2) Whenever rainfall events cause an overflow of manure from a facility designed, constructed, operated, and maintained to contain all manure plus the runoff from a twenty-five year, twenty-four hour rainfall event at the location of the point source, any manure in the overflow may be discharged into waters of the state.

(C) Standards of performance for new sources (new source performance standards or "NSPS").

(1) Except as provided in paragraph (C)(2) of this rule, any new source subject to this rule must achieve the following performance standards: there must be no discharge of manure to waters of the state.

(2) Whenever rainfall events cause an overflow of manure from a facility designed, constructed, operated, and maintained to contain all manure plus the runoff from a twenty-five year, twenty-four hour rainfall event at the location of the point source, any manure in the overflow may be discharged into waters of the state.

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901:10-3-04 **Dairy cows and cattle other than veal calves.**

This rule applies to operations defined as concentrated animal feeding operations under rule 901:10-1-01 (HH) of the Administrative Code and includes the following animals: mature dairy cows, either milking or dry; cattle other than mature dairy cows or veal calves. Cattle other than mature dairy cows includes but is not limited to heifers, steers, and bulls. This rule does not apply to such concentrated animal feeding operations with less than the following capacities: seven hundred mature dairy cows whether milked or dry; one thousand cattle other than mature dairy cows or veal calves.

(A) Effluent limitations attainable by the application of the best practicable control technology currently available (BPT). Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BPT:

(1) For the concentrated animal feeding operation production areas. Except as provided in paragraph (A)(1) through (A)(2) of this rule, there must be no discharge of manure into waters of the state from the production area.

(a) Whenever precipitation causes an overflow of manure, pollutants in the overflow may be discharged into waters of the state provided:

(i) The production area is designed, constructed, operated and maintained to contain all manure including the runoff and the direct precipitation from a twenty-five year, twenty-four hour rainfall event;

(ii) The production area is operated in accordance with the requirements set forth in the manure management plan in rule 901:10-2-08 of the Administrative Code and the records required by rule 901:10-2-16 of the Administrative Code.

(b) Voluntary alternative performance standards. Any concentrated animal feeding operation subject to this rule may request the director to establish NPDES permit effluent limitations based upon site-specific alternative technologies that achieve a quantity of pollutants that would be discharged under the baseline performance standards as provided by paragraph (A)(1)(a) of this rule.

(i) Supporting information. In requesting site-specific effluent limitations to be included in the NPDES permit, the concentrated animal feeding facility owner or operator must submit a supporting technical analysis and any other relevant information and data that would support such

site-specific effluent limitations within the time frame provided by the director. The supporting technical analysis must include calculation of the quantity of pollutants discharged, on a mass basis where appropriate, based on a site-specific analysis of a system designed, constructed, operated and maintained to contain all manure including the runoff from a twenty-five year, twenty-four hour rainfall event. The technical analysis of the discharge of pollutants must include:

(a) All daily inputs to the manure storage or treatment facility, including manure, direct precipitation, and runoff.

(b) All daily outputs from the manure storage or treatment facility, including losses due to evaporation, manure residuals removal, and the removal of process wastewater or process generated wastewater for use on cropland at the concentrated animal feeding operation or transport off site.

(c) A calculation determining the predicted median annual overflow volume based on a twenty-five year period of actual rainfall data applicable to the site.

(d) Site-specific pollutant data, including N, P, BOD5, and total suspended solids (TSS) for the concentrated animal feeding operation from representative sampling and analysis of all sources of input to the storage system or other pollutant data.

(e) Predicted annual average discharge of pollutants, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering paragraphs (A)(1)(b)(i)(a) to (A)(1)(b)(i)(d) of this rule.

(ii) The director has the discretion to request additional information to supplement the supporting technical analysis, including inspection of the concentrated animal feeding operation.

(c) The concentrated animal feeding operation shall attain the limitations and requirements of this rule as of the date of permit coverage.

(2) For concentrated animal feeding operation land application areas.

Discharges from land application areas are subject to the following requirements:

(a) Develop and implement the best management practices set forth for the manure management plan in rule 901:10-2-07(A)(1) of the Administrative Code;

(b) Maintain the records specified in rule 901:10-2-16 of the Administrative Code; and

(c) The concentrated animal feeding operation shall attain the limitations and requirements of this rule by December 31, 2006.

(B) Effluent limitations attainable by the application of the best conventional pollutant control technology (BCT).

(1) Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BCT:

(a) For the concentrated animal feeding operation production areas: the operation shall attain the requirements in paragraph (A)(1) of this rule.

(b) For the land application areas: The operation shall attain the same limitations and requirements set forth for the manure management plan in paragraph (A)(2) of this rule.

(C) Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

(1) Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BAT:

(a) For concentrated animal feeding operation production areas: The operation shall attain the same limitations and requirements set forth in paragraph (A)(1) of this rule.

(b) For the operation land application areas: the facility shall attain the same limitations and requirements as those set forth for the manure management plan in paragraph (A)(2) of this rule.

(D) New source performance standards (NSPS).

(1) Any new point source subject to this rule must achieve the following effluent limitations representing the application of NSPS:

(a) For the concentrated animal feeding operation production areas, the facility shall comply with the requirements of paragraph (A)(1) of this rule.

(b) For the land application areas, the operation shall attain the requirements as listed for the manure management plan in rule 901:10-2-07(A)(1) of the

Administrative Code and the records required in rule 901:10-2-16 of the Administrative Code.

(c) The facility shall attain the limitations and requirements of this rule as of the date of permit coverage.

(d) Any source subject to this rule that commenced discharging after April 14, 1993 and prior to April 14, 2003 which was a new source subject to the standards specified in paragraph (C) of rule 901:10-3-03 of the Administrative Code, revised as of July 1, 2002, must continue to achieve those standards for the applicable time period specified in 40 CFR 122.29(d)(1). Thereafter, the source must achieve the standards specified in paragraphs (A)(1) and (A)(2) of this rule.

901:10-3-04

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901:10-3-05 **Effluent limitations for ducks category of feedlots.**

This rule applies to discharges resulting from the production areas at dry lot and wet lot duck concentrated animal feeding operations. This rule does not apply to such concentrated animal feeding operations with less than the following capacities: five thousand ducks.

(A) Definitions

(1) Dry lot means a facility for raising ducks in confinement with a dry litter floor cover and no access to swimming areas.

(2) Wet lot means a confinement facility for raising ducks which is open to the environment, has a small portion of shelter area, and having open water runs and swimming areas to which ducks have access.

(B) Effluent limitation attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Effluent limitations

Regulated parameter	~~Maximum Daily2~~ Maximum Daily[1]	~~Maximum Monthly Average1~~ Maximum Monthly Average[1]	Maximum Daily[2]	Maximum Monthly Average[2]
BOD5	3.66	2.0	1.66	0.91
Fecal coliform	(3)	(3)	(3)	(3)

Metric units

1 Pounds per 1,000 ducks

2 Kilograms per 1,000 ducks

3 Not to exceed most probable number (mpn) of 400 per 100 ml at any time. ~~cells/100 ml at any time.~~

(C) New source performance standards (NSPS).

(1) Except as provided in paragraph (C)(2) of this rule, any new source subject to this rule must achieve the following performance standards: there must be no discharge of manure into waters of the state.

(2) Whenever rainfall events cause an overflow of manure from a facility designed, constructed, operated, and maintained to contain all manure plus the runoff from a twenty-five year, twenty-four hour rainfall event at the location of the point source, any manure in the overflow may be discharged into waters of the state.

(D) Pretreatment standards for new sources

(1) Except as provided in paragraph (D)(2) of this rule, any new source subject to this rule must comply with paragraph (E) of rule 901:10-3-02 of the Administrative Code and must achieve the following performance standards: there must be no introduction of manure to a publicly owned treatment works.

(2) Whenever precipitation events cause an overflow of manure from a facility designed, constructed, operated and maintained to contain all manure plus the runoff from a twenty-five year, twenty-four hour rainfall event at the location of the point source, any manure in the overflow may be introduced to a publicly owned ~~publicly-owned~~ treatment works but in accordance with the requirements of paragraph (E) of rule 901:10-3-02 of the Administrative Code.

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901:10-3-06 **Swine, poultry, and veal calves.**

This rule applies to operations defined as concentrated animal feeding operations and includes the following animals: swine; chickens; turkeys; and veal calves. This rule does not apply to such operations with less than the following capacities: two thousand five hundred swine each weighing fifty-five pounds or more; ten thousand swine each weighing less than fifty-five pounds; thirty thousand laying hens or broilers if the facility uses a liquid manure handling system; one hundred twenty-five thousand chickens other than laying hens if the facility uses other than a liquid manure handling system; eighty-two thousand laying hens if the facility uses other than a liquid manure handling system; fifty-five thousand turkeys; and one thousand veal calves.

(A) Effluent limitations attainable by the application of the best practicable control technology currently available (BPT). Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BPT:

(1) For ~~operation~~ production areas. Except as provided in paragraph (A)(1)(a) of this rule, there must be no discharge of manure into waters of the state from the production area. The limitations and requirements of this paragraph must be attained as of the date of permit coverage.

(a) Whenever precipitation causes an overflow of manure, pollutants in the overflow may be discharged into waters of the state provided:

(i) The production area is designed, constructed, operated and maintained to contain all manure including the runoff and the direct precipitation from a twenty-five year, twenty-four hour rainfall event; <u>and</u>

(ii) The production area is operated in accordance with the requirements set forth in the manure management plan in rule 901:10-2-08 of the Administrative Code and the records required by rule 901:10-2-16 of the Administrative Code.

<u>(b) Voluntary alternative performance standards. Any CAFO subject to this subpart may request the director to establish NPDES permit effluent 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 paragraph (A)(1) of this paragraph.</u>

<u>(i) Supporting information. In requesting site-specific effluent limitations to be included in the NPDES permit, the CAFO owner</u>

or operator must submit a supporting technical analysis and any other relevant information and data that would support such site-specific effluent limitations within the time frame provided by the director. The supporting technical analysis must include calculation of the quantity of pollutants discharged, on a mass basis where appropriate, based on a site-specific analysis of a system designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater, including the runoff from a 25-year, 24-hour rainfall event. The technical analysis of the discharge of pollutants must include:

(a) All daily inputs to the storage system, including manure, litter, all process waste waters, direct precipitation, and runoff.

(b) All daily outputs from the storage system, including losses due to evaporation, sludge removal, and the removal of waste water 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 N, P, BOD5, TSS, for the CAFO from representative sampling and analysis of all sources of input to the storage system, or other appropriate pollutant data.

(e) Predicted annual average discharge of pollutants, expressed where appropriate as a mass discharge on a daily basis (lbs/day), and calculated considering paragraphs (A)(1)(b)(i)(a) through (A)(1)(b)(i)(d) of this paragraph.

(ii) The director has the discretion to request additional information to supplement the supporting technical analysis, including inspection of the CAFO.

(c) The CAFO shall attain the limitations and requirements of this paragraph as of the date of permit coverage.

(2) For the land application areas.

(a) The operation shall attain the same limitations and requirements listed for the manure management plan in paragraph (A)(1) of rule 901:10-2-07 of the Administrative Code and record keeping requirements in rule 901:10-2-16 of the Administrative Code.

(b) The operation shall attain the limitations and requirements of this paragraph by December 31, 2006.

(B) Effluent limitations attainable by the application of the best conventional pollutant control technology (BCT).

(1) Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BCT:

(a) For operation production areas: the operation shall attain the same limitations and requirements in paragraph (A)(1) of this rule.

(b) For the land application areas: the operation shall attain the same limitations and requirements in paragraph (A)(2) of this rule.

(C) Effluent limitations attainable by the application of the best available technology economically achievable (BAT).

Except as provided in rule 901:10-3-08 of the Administrative Code, any existing point source subject to this rule must achieve the following effluent limitations representing the application of BAT:

(1) For production areas: the concentrated animal feeding operation shall attain the same limitations and requirements in paragraph (A)(1) of this rule.

(2) For land application areas: the concentrated animal feeding operation shall attain the same limitations and requirements listed in paragraph (A)(2) of this rule.

(D) New source performance standards (NSPS).

Any new source subject to this rule must achieve the following effluent limitations representing the application of NSPS.

(1) For production areas: there must be no discharge of manure into waters of the state from the production area, subject to paragraphs (D)(1)(a) to (D)(1)(b) of this rule.

(a) Manure storage and treatment facilities designed, constructed, operated, and maintained to contain all manure including the runoff and the direct

precipitation from a one-hundred year, twenty-four hour rainfall event and operated in accordance with the manure management plan and records required by rules 901:10-2-08 and 901:10-2-16 of the Administrative Code, will fulfill the requirements of paragraph (D) of this rule.

(b) Provisions for upset/bypass, as provided in paragraphs (T) and (U) of rule 901:10-3-10 of the Administrative Code, apply to a new source subject to paragraph (D) of this rule.

(2) For land application areas: the operation shall comply with the requirements listed for the manure management plan required by paragraph (A)(1) of rule 901:10-2-07 of the Administrative Code and the recordkeeping requirements of rule 901:10-2-16 of the Administrative Code.

(3) The operation shall attain the limitations and requirements of paragraph (D) of this rule as of the date of permit coverage.

(4) Voluntary superior environmental performance standards. Any new source concentrated animal feeding operation subject to this rule may request the director to establish alternative NPDES permit limitations based upon a demonstration that site-specific innovative technologies will achieve overall environmental performance across all media which is equal to or superior to the reductions achieved by baseline standards as provided by paragraph (D)(1)(a) of this rule. The quantity of pollutants discharged from the production area must be accompanied by an equivalent or greater reduction in the quantity of pollutants released to other media from the production area (e.g., air emissions from housing and storage) and/or land application areas for all manure at on-site and off-site locations. The comparison of quantity of pollutants must be made on a mass basis where appropriate. The director has the discretion to request supporting information to supplement such a request.

(5) Any source subject to this rule that commenced discharging after April 14, 1993 and prior to April 14, 2003 which was a new source subject to the standards specified in 40 CFR 412.15, revised as of July 1, 2002, must continue to achieve those standards for the applicable time period specified in 40 CFR 122.29(d)(1). Thereafter, the source must achieve the standards specified in paragraphs (A)(1) and (A)(2) of this rule.

Replaces: 901:10-3-06

Effective:

R.C. 119.032 review dates: 11/09/2006

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Certification

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Date

Promulgated Under: 119.03
Statutory Authority: 903.08, 903.10
Rule Amplifies: 903.01, 903.08, 903.09, 903.10
Prior Effective Dates: 9/15/2005

901:10-3-07 Designated operations and determinations by the director.

(A) The director may designate any animal feeding facility as a concentrated animal feeding operation in accordance with division (F)(1) of section 903.10~~901.10~~ of the Revised Code upon determining that it is a significant contributor of manure to waters of the state. In making a designation, the director shall consider the following factors:

(1) The size of the animal feeding facility and the amount of manure reaching waters of the state;

(2) The location of the animal feeding facility relative to waters of the state;

(3) The means of conveyance of manure into waters of the state;

(4) The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of manure into waters of the state; and

(5) Other relevant factors.

(B) No animal feeding facility shall be designated under this rule unless the director has conducted an on-site inspection of the animal feeding facility and determined that the facility should and could be regulated under the permit program. In addition, no animal feeding facility with numbers of animals below those established in division (Q) of section 903.01 of the Revised Code may be designated as a concentrated animal feeding operation or concentrated animal feeding facility unless:

(1) Manure is discharged into waters of the state through a constructed ditch, flushing system, or other similar constructed device; or

(2) Manure is discharged directly into waters of the state which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the facility.

(C) The director may determine that an animal feeding facility that is not a medium concentrated animal feeding operation or a small animal feeding operation is a concentrated animal feeding operation in accordance with section 903.082 of the Revised Code.

(D) If the director determines that an animal feeding facility shall nevertheless be required to be permitted as a medium or small concentrated animal feeding operation, then the owner or operator shall apply to the director for a permit to operate as a concentrated animal feeding operation. If the director determines that

best management practices cannot be met without modifying the existing facility, the owner or operator shall apply for a permit to install.

Replaces: 901:10-3-07

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901:10-3-08 **Variances.**

(A) A variance may be requested in accordance with section 301 or section 302 of the Federal Water Pollution Control Act. A request for a variance will be decided upon by the director, but the director's decision shall not be incorporated into any term or condition of a NPDES permit until the United States environmental protection agency regional administrator grants or denies the request for a variance or, in the case of variances under paragraph (B)(4) or (B)(5) of this rule, the administrator grants or denies the request for a variance.

(B) The regional administrator may deny, forward or submit to the United States environmental protection agency office director for water enforcement and permits a recommendation for approval for a request for a variance listed in paragraph (B) of this rule that has been forwarded by the director:~~.~~

(1) Extensions based on delay in completion of a publicly owned treatment works provided that the extension meets the requirements of section 301(i) of the Act~~act~~;

(2) Extensions based on the use of innovative technology where effluent reduction will be significantly reduced with significantly reduced cost. The variances may provide an extended two-year period to comply provided that the extension meets the requirements of section 301(k) of the Act~~act~~;

(3) A variance based on the economic capability of the applicant provided that the variance shall meet the requirements of section 301(c) of the Act~~act~~. The owner or operator must show progress in reductions with the maximum use of technology while utilizing economic capability; ~~;~~

(4) A variance based on the presence of "fundamentally different factors" or "FDF" that meets the requirements of section 301(n) of the act. A FDF variance is not timely unless filed when effluent limits are to be modified in a rulemaking procedure. A FDF variance shall be "no less stringent a limit than justified by fundamental differences" while also demonstrating that the existing limit will cause adverse affect; or

(5) A variance that meets the requirements of section 301(g) of the act for nonconventional pollutants that include ammonia, chlorine, color, iron, and total phenols.

(6) A variance based on water quality related effluent limitations under section 301 of the Act~~act~~ applies~~apply~~ only to the owner or operator requesting the variance and only to the pollutant or pollutants specified in the variance. A variance does not affect or require corresponding changes to the water quality

standard for the waterbody as a whole.

(a) Eligibility. The owner or operator is not eligible for a variance under this paragraph if the following apply:

(i) The owner or operator is a new discharger or the owner or operator of a facility that commenced a discharge after March 23, 1997.

(ii) If the variance would likely jeopardize the continued existence of an endangered or threatened species listed under section four of the Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat.

(iii) If standards will be attained by implementing effluent limits required under sections 301 (b) and 306 of the act and by the owner or operator implementing cost-effective and reasonable best management practices for nonpoint source control.

(b) Timeframe for variances. A water quality based variance issued under paragraph (B)(6) of this rule shall not exceed five years or~~of~~ the term of the NPDES permit whichever is less. A water quality based variance shall be reviewed and modified if necessary as part of each water quality standards review pursuant to section 303(c) of the Act~~act~~.

(c) Conditions to grant a variance. A variance may be granted if:

(i) The owner or operator demonstrates to the director that attaining the water quality standard is not feasible because:

(a) Naturally occurring pollutant concentrations prevent the attainment of the water quality standard;

(b) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the water quality standard, unless these conditions may be compensated for by the discharge of a sufficient volume of effluent to enable the water quality standard to be met without violating water conservation requirements;

(c) Human-caused conditions or sources of pollution prevent the attainment of the water quality standard and cannot be remedied, or would cause more environmental damage to

correct than to leave in place;

(d) Dams, diversions or other types of hydrologic modifications preclude the attainment of the water quality standard, and it is not feasible to restore the waterbody to its original condition or to operate such modification in a way that would result in the attainment of the water quality standard;

(e) Physical condition related to the natural features of the waterbody, such as the lack of a proper substrate cover, flow, depth, pools, riffles, and the like, unrelated to chemical water quality, preclude attainment of the water quality standard; or

(f) Controls more stringent than those required by sections 301(b) and 306 of the act would result in substantial and widespread economic and social impact.

(ii) In addition to the requirements of paragraph (B)(6)(c)(i) of this rule the owner or operator shall also:

(a) Show that the variance requested conforms to the requirements of the antidegradation policy as set forth in section 6111.12 of the Revised Code; and

(b) Characterize the extent of any increased risk to human health and the environment associated with granting the variance compared with compliance with the water quality standard absent the variance, such that the director is able to conclude that any such increased~~increase~~ risk is consistent with the protection of the public health, safety and welfare.

(d) Submittal of the variance application. The owner or operator shall submit an application for a variance to the director. The application shall include:

(i) All relevant information demonstrating that attaining the water quality standard is not feasible based on one or more of the conditions in paragraphs (B)(6)(c)(i) and (B)(6)(c)(ii) of this rule.

(e) Public notice of preliminary decision. Upon receipt of a complete application for a variance and upon making a preliminary decision

regarding the variance the director shall provide public notice of the request and preliminary decision for a public comment pursuant to the procedures set forth in Chapter 901:10-6 of the Administrative Code. The director shall notify the other Great Lakes States and Tribes of the preliminary decision for discharges in the Lake Erie basin. This public notice requirement may be satisfied by including the supporting information for the variance and the preliminary decision in the public notice of the draft NPDES permit.

(7) The director shall issue a final decision on the variance request within ninety days of the expiration of the public comment period required in paragraph (B)(6)(e) of this rule. If the director decides to grant or deny a variance then the director shall do so in accordance with Chapter 119. of the Revised Code. If all or part of the variance is approved by the director, the decision shall include all permit conditions needed to implement those parts of the variance so approved. Such permit conditions shall, at a minimum, require:

(a) Compliance with an initial effluent limitation which, at the time the variance is granted, represents the level currently achievable by the owner or operator and which is no less stringent than that achieved under the previous permit;

(b) That reasonable progress be made toward attaining the water quality standards for the waterbody as a whole through appropriate conditions;

(c) When the duration of a variance is shorter than the duration of a permit, compliance with an effluent limitation sufficient to meet the underlying water quality standard, upon the expiration of said variance; and

(d) A provision that allows the director to reopen and modify the permits based on any triennial water quality standards revisions to the variance.

The director shall deny a variance request if the permittee fails to make the demonstrations required under paragraph (B)(6)(c) of this rule.

(8) Incorporating into the permit. The director shall establish and incorporate into the NPDES permit all conditions needed to implement the variance as determined in paragraph (B)(7) of this rule.

(9) Renewal of the variance. A variance may be renewed subject to the requirements of paragraph (B)(8) of this rule. As part of any renewal application, the owner or operator shall again demonstrate that attaining a water quality standard is not feasible based on the requirements of paragraph

(B)(6)(c) of this rule. The application shall also contain information concerning compliance with the conditions incorporated into its permit as part of the original variance pursuant to paragraphs (B)(7) and (B)(8) of this rule. Renewal of a variance may be denied if the owner or operator did not comply with the conditions of the original variance.

(10) All variances and supporting information shall be submitted by the director to the regional administrator and shall include:

(a) Relevant applications as set forth in paragraph (B)(6)(d) of this rule;

(b) Public comments and records of any public hearings pursuant to paragraph (B)(6)(e) of this rule;

(c) The final decision of the director; and

(d) The NPDES permit.

(e) Information required by this paragraph shall be submitted by the director within thirty days of the date of the final variance decision. The information required by paragraph (B)(6)(d) of this rule shall be submitted in accordance with the terms of the memorandum of agreement with the regional administrator pursuant to 40 CFR 123.24.

(11) All variances shall be transmitted to the Ohio environmental protection agency and appended to the water quality standard rules adopted in accordance with section 6111.041 of the Revised Code.

(C) The United States environmental protection agency regional administrator or the United States environmental protection agency office of the director for water enforcement and permits may approve or deny any variance request submitted under paragraph (B) of this rule. If the regional administrator or office director approves the variance, the director may prepare a draft permit incorporating the variance. Any public notice of a draft permit for which a variance has been approved or denied shall identify the applicable procedures for appealing that decision. An owner or operator shall be afforded an appeal of the decision in accordance with 40 C.F.R. section 124.64 and Chapter 119. of the Revised Code.

Replaces: 901:10-3-08

Effective:

R.C. 119.032 review dates: 11/09/2006

Certification

Date

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Prior Effective Dates: 9/15/2005

ACTION: Final

DATE: 06/19/2002 9:00 AM

901:10-3-09 **Appeals of variances.**

When the director issues a permit on which the United States environmental protection agency has made a variance decision, separate appeals of the state permit and of the United States environmental protection agency variance decision are possible. If the owner or operator is challenging the same issues in both proceedings, the regional administrator will decide, in consultation with state officials, which case will be heard first.

901:10-3-09

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R.C. 119.032 review dates: 07/02/2007

CERTIFIED ELECTRONICALLY

Certification

06/19/2002 09:00 AM

Date

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Statutory Authority: R.C. 903.08
Rule Amplifies: R.C. 903.10

901:10-3-10 **Standard permit terms and conditions.**

(A) This rule describes the terms and conditions that are applicable to NPDES permits. In establishing the terms and conditions of a NPDES permit, the director, to the extent consistent with the Act, shall consider technical feasibility and economic costs and shall allow a reasonable period of time for coming into compliance with the terms and conditions of the permit. The owner or operator shall comply with all terms and conditions of the NPDES permit.

(B) Duty to mitigate. The owner or operator shall take all reasonable steps to minimize or prevent any discharge or disposal in violation of the permit which has a reasonable likelihood of adversely affecting human health or the environment. This permit may be modified, suspended or revoked for cause.

(C) Permit actions. The NPDES permit may be modified, revoked and reissued, or terminated for cause. The filing by the owner or operator of a request for permit modification, suspension, revocation or a notification of planned changes or anticipated noncompliance does not stay or suspend any permit term or condition.

(D) Duty to comply. The owner or operator shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the act and chapter 903 of the Revised Code and is grounds for an enforcement action; for permit revocation; suspension; modification; or denial of a permit renewal application.

(E) General effluent limitations. The effluent shall, at all times, comply with Ohio water quality standards.

(F) Duty to reapply. If any person who wishes to commence a discharge or to continue any activity regulated by the permit after the expiration date of this permit, an application for a permit or renewal of a permit shall be submitted to the director at least one hundred eighty days prior to discharge or the expiration date of the permit.

(G) The permit does not convey any property rights of any sort or any exclusive privilege.

(H) Inspection and entry. The owner or operator shall allow the director or an authorized representative upon the presentation of proper identification, at reasonable times and in compliance with biosecurity procedures:

(1) To enter the facility or operation where any records are kept under the terms and conditions of the permit;

(2) To have access for review and copying any records that must be kept under the terms and conditions of the permit;

(3) To inspect, at reasonable times:

(a) Equipment, (including any monitoring and control equipment) or method;

(b) Any manure storage or treatment facility;

(c) Practices required or regulated under the permit; and

(4) To sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

(I) Duty to provide information. The owner or operator shall furnish to the department within a reasonable time any information that the department may request to determine whether cause exists for modifying, revoking, and reissuing or terminating the permit or to determine compliance with the permit. The owner or operator shall also furnish to the department, upon request, copies of records required by this permit to be kept.

(J) Monitoring and records.

(1) Records of samples and measurements taken including, but not limited to, samples and measurements of manure, soils, process wastewater and process generated water for the purpose of monitoring shall be representative of the monitored activity.

(2) The owner or operator shall retain records of all monitoring information, including all calibration and maintenance records and, if applicable, original strip chart recordings or continuous monitoring instrumentation. Copies of reports required by this permit and records of data used to complete the application for this permit shall be retained for a period of at least five years from the date of this permit, the sample, measurement, report or application. This period may be extended by request of the department at any time.

(3) Records of monitoring information shall include:

(a) The date, exact place and time of sampling or measurements;

(b) The individual(s) who performed the sampling or measurements;

(c) The date(s) analyses were performed;

(d) The analytical techniques or methods used; and

(e) The results of such analyses.

(K) Monitoring must be conducted according to rules 901:10-2-04 and 901:10-2-13 of the Administrative Code and according to test procedures approved under 40 C.F.R. part 136, unless other test procedures have been specified in this permit and approved by the regional administrator. Monitoring must be conducted in accordance with any water quality analytical procedures approved by the department. The owner or operator shall maintain equipment or lease the equipment or otherwise obtain access to equipment to ensure accurate measurements.

(L) Additional requirements for recording and reporting of monitoring results. All permits shall specify:

(1) Requirements concerning the proper use, maintenance and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(2) Required monitoring including type, intervals and frequency sufficient to yield data which are representative of the monitoring activity including, when appropriate, continuous monitoring; and

(3) Applicable reporting requirements based upon the impact of the regulated activity; and

(4) Requirements to report monitoring results shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but in no case less than one year.

(M) Signatures. All permit applications and reports required by the permit and other information submitted to the director shall be signed and certified as follows:

(1) All permit applications shall be signed as follows:

(a) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(ii) The manager of one or more production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment

recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures; or

(b) For a partnership or sole proprietorship: by a general partner for a partnership or the proprietor, respectively.

(c) The written authorization is submitted to the director.

(2) All reports required by permits and other information requested by the director shall be signed by the person described above or a duly authorized representative of that person. A person is a duly authorized representative of the person described above only if:

(a) The authorization is made in writing by the person described above;

(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility such as the position of manager, or a position of equivalent responsibility; (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(c) The written authorization is submitted to the director.

(d) Changes to authorization. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying this rule must be submitted prior to or together with any reports, information, or applications to be signed by an authorized representative..

(3) Certification. Any person signing a document under this rule shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

(N) Need to halt or reduce activity is not a defense. It shall not be a defense for an owner or operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(O) Proper operation and maintenance. The owner or operator shall at all times properly operate and maintain all facilities (and related appurtenances) which are installed or used by the owner or operator to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(P) Emergency notification. In an emergency, the owner or operator shall follow the facility's emergency response plan, which shall include, at a minimum, the following:

(1) The names and telephone numbers of persons who are identified by the owner or operator as responsible for implementing the plan;

(2) Areas of the facility where potential spills can occur and their accompanying surface and subsurface drainage points; and

(3) Procedures to be followed in the event of a spill, including actual or imminent discharge to waters of the state. These procedures shall include:

(a) The owner or operator shall report a spill or discharge by telephone to the department as soon as possible, but in no case more than twenty-four hours following first knowledge of the occurrence and shall provide the following information:

(i) The time at which the discharge or spillage occurred, if known, was discovered;

(ii) The approximate amount and the characteristics of the discharge or spillage;

(iii) The waters of the state affected by the discharge or spillage;

(iv) The circumstances which created the discharge or spillage;

(v) The names and telephone numbers of persons who have knowledge of these circumstances;

(vi) Those steps being taken to clean up the discharge or spillage;

(vii) The names and telephone numbers of the persons responsible for the cleanup.

(b) For any emergency that requires immediate reporting after normal business hours, the owner or operator shall use the Ohio department of agriculture's emergency telephone number.

(c) If applicable, the owner or operator shall notify appropriate local authorities.

(d) The owner or operator shall also file a written report of the occurrence in letter form within five days following first knowledge of the occurrence, unless waived, in writing, by the department. On a case-by-case basis, the director may waive the written report if an oral report of a spill was received within twenty-four hours of the incident. This report shall outline the actions taken, proposed to be taken to correct the problem and to ensure that the problem does not recur.

(Q) Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within twenty-four hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. A written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance. On a case-by-case basis the director may waive the written report if an oral report of a spill was received within twenty-four hours of the incident.

The following shall be included as information which must be reported within twenty-four hours:

(1) Any unanticipated bypass that exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violations of a maximum daily discharge limitation for any of the pollutants listed by the director in the permit to be reported within twenty-four hours. The director may waive the written report on a case-by-case basis for reports if the oral report has been received within twenty-four hours.

(R) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, any compliance schedule of this permit shall be submitted fourteen days after each schedule date.

(S) Anticipated noncompliance. The owner or operator shall give advance notice to the director of any planned changes at the facility that may result in noncompliance with permit requirements.

(T) Bypass means the intentional diversion of manure from any portion of the production area.

(1) Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded but only if it also is for essential maintenance to assure efficient operation.

(2) If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

(3) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (Q) of this rule.

(4) Bypasses are prohibited and the director may take enforcement action unless:

(a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of manure, or maintenance during normal periods of equipment downtime. This condition will not be satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass.

(c) The owner or operator submitted notices as required by paragraph (P) of this rule.

(d) The director may approve an anticipated bypass after considering its adverse effects if the director determines that the bypass will meet the conditions listed in this rule.

(U) Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

(1) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based effluent limitations if the requirement of paragraph (U)(2) of this rule is met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is a final administrative action subject to judicial review.

(2) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed, contemporaneous operating records, or other relevant evidence that:

(a) An upset occurred and the permittee can identify the cause of the upset;

(b) The permitted operation was at the time being properly operated;

(c) The permittee submitted notice of the upset as required in paragraph (Q) of this rule; and

(d) The permittee complied with any compliance measures required under paragraph (B) of this rule.

(3) In any proceeding to enforce the NPDES permit the owner or operator seeking to establish the occurrence of an upset has the burden of proof.

(V) Planned changes. The owner or operator shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. section 122.29(b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

(W) Other noncompliance. The owner or operator shall report all instances of noncompliance not reported under paragraphs (Q) and (R) of this section at the time monitoring reports are submitted. These reports shall contain the information listed in paragraph (Q) of this rule.

(X) Other information. Where the owner or operator becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the director, it shall promptly submit such facts or information.

(Y) Reporting obligations.

(1) Annual reports and information required to be submitted by the permit or by the rules may be submitted in hard copy format in the Ohio Department of Agriculture [fill in #] report form pre-printed by the Ohio Department of Agriculture or an approved facsimile. The original report form must be signed and mailed to: Ohio Department of Agriculture, Livestock Environmental Permitting Program, 8995 East Main Street, Reynoldsburg, Ohio 43068.

(2) Alternatively, annual reports and information may be submitted electronically using the Ohio department of agriculture developed software, based on a memorandum in agreement signed by a responsible corporate officer, general partner, proprietor or a duly authorized representative of the owner or operator (see rule 901:10-3-10(M) of the Administrative Code) and submitted to the Ohio department of agriculture to receive an authorized personal identification number (pin) prior to sending data electronically. A hard copy of the Ohio department of agriculture form must be generated, signed and maintained on site for records retention purposes.

(Z) Other obligations which may apply.

(1) Outfalls and discharge points. All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted operation unless the director determines that effluent limitations are infeasible and the best management practices shall be utilized.

(2) Continuous discharges. For any continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as:

(a) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works; and

(b) Average weekly and average monthly discharge limitations for any utilized publicly owned treatment works.

(3) Non-continuous discharges. Discharges which are not continuous shall be particularly described and limited, considering the following factor, as appropriate:

(a) Frequency (for example, a batch discharge shall not occur more than once every three weeks);

(b) Total mass (for example, not to exceed one hundred kilograms of zinc and two hundred kilograms of chromium per batch discharge);

(c) Maximum rate discharge of pollutants during the discharge (for example, not to exceed two kilograms of zinc per minute); and

(d) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc or more than two hundred and fifty grams (1/4 kilogram) of zinc in any discharge).

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901:10-3-11 **Stormwater permits general and individual.**

(A) Definitions.

[Comment: the following definitions shall apply specifically to stormwater. All other definitions contained in this rule and not otherwise defined below shall retain the meaning in the rules contained in definitions rule 901:10-1-01 of the Administrative Code and in Chapter 903. of the Revised Code.]

(1) Best management practices for stormwater means erosion control, sediment control and water quality management practices that are the most effective and practicable means of controlling, preventing and minimizing degradation of surface water, including construction-phasing, minimizing the length of time soil areas are exposed, prohibitions and other management practices published by the state or other agencies, such as "Rainwater and Land Development, Ohio's Standards for Storm Water Management, Land Development and Urban Stream Protection, Second Edition, 1996," prepared~~Prepared~~ by the Ohio department of natural resources, division of soil and water conservation.

(2) Construction activity means clearing, grading, excavation, grubbing and filling.

(3) Erosion means the wearing away of soil by rainfall, surface water runoff, wind or ice movement.

(4) Erosion control means methods employed to prevent erosion. Examples include soil stabilization practices, horizontal slope grading, temporary or permanent cover and construction phasing.

(5) Exposed soil area means all areas of the construction site where the perennial vegetation (including trees, shrubs and brush) has been removed. This includes topsoil stockpile areas, borrow areas and disposal areas within the construction site.

(6) Final stabilization means that all soil disturbing activities at the site have been completed and that a uniform perennial vegetative cover with a density of seventy percent of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been employed.

(7) First order stream means all streams identified on a United States geological survey seven and five tenths minute topographical map by either a dashed or blue solid line.

(8) Impervious surface means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt or gravel roads.

(9) "National Pollutant Discharge Elimination System" (NPDES) means the program for issuing, modifying, revoking, reissuing, terminating, monitoring and enforcing permits under the Clean Water Act (Sections 301, 318, 402 and 405) and United States Code Title 33, sect. 1317, 1328, 1342, and 1345.

(10) Permanent cover means final stabilization including, but not limited to, grass, gravel, asphalt and concrete.

(11) Sediment means solid material, both mineral and organic, that is in suspension, is being transported or has been moved from its site of origin by air, water, gravity or ice and has come to rest on the earth's surface.

(12) Sediment control means methods employed to prevent sediment from leaving the site. Sediment control practices include filter strips, silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins.

(13) Soil means the unconsolidated, erodible earth material consisting of minerals or organics.

(14) Stabilized means the exposed ground surface has been covered by staked sod, rip rap, wood fiber blanket, or other material, which prevents erosion from occurring. Grass seed by itself is not stabilization.

(15) Stormwater means the precipitation runoff, stormwater runoff, snowmelt runoff and any other surface runoff and drainage defined in 40 CFR section 122.26(b)(13). Stormwater does not include construction site dewatering or agricultural stormwater discharges.

Stormwater resulting from an animal feeding facility includes immediate access roads and rail lines used or traveled by carriers of raw materials, products, waste materials, or by-products~~by-products~~ used or created by the facility, sites used for handling material other than manure, refuse sites, sites used for storage and maintenance of material handling equipment, shipping and receiving areas, and under the control of the owner or operator. All areas

that fall within the meaning of production area are excluded from this definition.

(16) Temporary protection means temporary methods employed to prevent erosion. Examples of temporary protection include: straw, wood fiber blanket, wood chips and erosion netting.

(17) Waters of the state means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems and ~~all~~ other bodies or accumulations of water, surface and underground, natural or artificial which are situated wholly within, partly within or border upon this state or are within its jurisdiction, except those private waters which do not combine or effect~~affect~~ a junction with natural surface or underground waters.

(18) Wet weather discharge refers collectively to point source discharges that result from precipitation events, such as rainfall and snowmelt. Wet weather discharges include stormwater runoff, combined sewer overflows and wet weather sanitary sewer overflows. Stormwater runoff accumulates pollutants such as oil and grease, chemicals, nutrients, metals and bacteria as it travels across land.

(B) Permit requirements.

(1) General stormwater requirements. No person shall discharge stormwater resulting from an animal feeding facility without first obtaining a NPDES permit issued by the director of agriculture in accordance with rules when such a permit is required by the act. The director may designate a stormwater discharge as a point source subject to a NPDES permit. In addition, any person may petition the director to require a NPDES permit for a discharge which is composed entirely of stormwater which contributes to a violation of water quality standards~~standard~~ or is a significant contributor of pollutants to waters of the United States. Persons that have been issued a NPDES permit by the director of the Ohio environmental protection agency for the discharge of storm water from an animal feeding facility prior to the date on which the USEPA approved the NPDES program submitted by the director of agriculture under this section may continue to operate under that permit until it expires or is modified or revoked. Such a permit shall be enforced by the director of agriculture upon the transfer of authority to enforce the terms and conditions of the permit.

(2) Construction stormwater requirements. No person shall discharge stormwater resulting from an animal feeding facility that is undergoing construction activities that include clearing, grading, excavating, grubbing and/or filling

activities that result in the disturbance of one or more acres unless the person first obtains a NPDES permit issued by the director of agriculture in accordance with rules when such a permit is required by the Actaet. Persons that have been issued a NPDES permit by the director of the Ohio environmental protection agency for the discharge of stormwater from an animal feeding facility prior to the date on which the USEPA approved the NPDES program submitted by the director of agriculture under this section may continue to operate under that permit until it expires or is modified or revoked. Such a permit shall be enforced by the director of agriculture upon the transfer of authority to enforce the terms and conditions of the permit.

(C) Individual permit or general permit.

(1) The director may require an owner or operator to apply for and obtain either an individual NPDES permit or coverage under a NPDES general permit. Any interested person may petition the director to take action under circumstances listed below. An individual NPDES permit may be required under the following circumstances:

(a) A discharge exists and is a significant contributor of pollutants;

(b) Noncompliance with the conditions of a NPDES general permit;

(c) Noncompliance with the rules; or

(d) Receiving streams not meeting applicable water quality standards;

(e) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

(f) Effluent limitation guidelines are promulgated for point sources covered by a general NPDES permit;

(g) A water quality management plan containing requirements applicable to such point sources is approved; or

(h) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

(2) The director may require the owner or operator authorized to discharge by a general permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application and a statement setting a deadline for the owner or operator to file the application and a statement that on the effective date of the individual permit, coverage under this general permit shall automatically terminate. The director may grant additional time to submit the application upon request of the applicant. If an owner, operator or developer fails to submit in a timely manner an individual NPDES permit application required by the director under this paragraph, then the applicability of this general permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

(3) Any owner or operator authorized by general permit may request to be excluded from the coverage of a general permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request to the director in accordance with the requirements of 40 CFR section 122.26. The request shall be granted by issuance of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

(4) When an individual NPDES permit is issued to an owner or operator otherwise subject to a general permit, or the owner, operator or developer is approved for coverage under an NPDES general permit, the applicability of a general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of approval for coverage under the general permit, whichever the case may be.

(D) Requirements for stormwater discharge associated with construction activity.

(1) Application. Individuals who intend to obtain coverage for a stormwater discharge associated with construction activity shall submit an application for a permit at least thirty days prior to the commencement of new construction activity. Application requirements for stormwater discharges associated with construction activity include a summary of the following:

(a) The location (including a scaled map) and the nature of the construction activity;

(b) The total area of the site and the area of the site that is expected to undergo excavation, grubbing and filling during the life of the permit;

(i) The owner or operator's name, address, telephone number, and manager's name (if applicable);

(ii) The proposed start and end date of the project;

(iii) An estimate of the area to be disturbed;

(iv) Proposed measures, including best management practices to control pollutants in stormwater discharges during construction;

(v) Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed;

[Comment: These measures should be compatible with paragraph (F) of rule 901:10-2-04 of the Administrative Code.]

(vi) An estimate of the runoff of the site and the increase in the impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and

(vii) The name of the receiving water.

(2) Fees. A one-time fee must be submitted with the application in accordance with rule 901:10-1-04 of the Administrative Code. The owner or operator will indicate on the application whether the stormwater permit is to be a general or individual permit.

(3) Transfer. A stormwater permit is transferable if the owner or operator notifies the department of agriculture in writing sixty days prior to any proposed transfer. The transferee must inform the department of agriculture in writing that he or she will assume the responsibilities of the original transferor. The director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act~~act~~.

(4) Record keeping.

(a) For construction stormwater requirements, the facility's final plans and specifications, which incorporate the requirements of the erosion and sediment control plan must be:

(i) Available at the construction site in either the field office, the inspector's vehicle, or contractor's vehicle; and

(ii) Available to federal, state and local officials for inspection for the duration of this permit.

(b) The following plans and records must be made available to federal, state, and local officials within twenty-four hours of request for the duration of this permit:

(i) The erosion and sediment control plan.

(ii) Records of all inspections. Records shall include:

(a) The dates and times of inspections;

(b) Findings of inspections;

(c) Corrective actions taken (including dates and times); and

(d) Documentation of changes to the erosion and sediment control plan made during construction.

(iii) Dates of all precipitation events exceeding one-half inch.

(iv) The owner or operator shall retain records for a period of five years after the completion of the construction activity.

(c) The notice of the general stormwater permit coverage card or individual stormwater permit shall be posted at any of the following locations:

(i) Construction site entrance and visible from the nearest public roadway;

(ii) Visible from nearest public roadway, if no construction site entrance exists;

(iii) Field office (if applicable); or~~and~~

(iv) For linear utility and noncontiguous projects, at the office responsible for project administration.

(5) Sediment control

(a) Stabilization and nonstructural practices. A description of control practices designed to preserve existing vegetation where attainable and revegetation of disturbed areas as soon as practicable after grading or construction shall be provided. Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing and protection of trees. The owner or operator shall initiate appropriate vegetative practices on all disturbed areas within seven days if they are to remain dormant for more than forty-five days. For areas within fifty feet of any stream, first order or larger, soil stabilization practices shall be initiated within two days on all inactive, disturbed areas. Permanent or temporary soil stabilization shall be applied to disturbed areas within seven days after final grade is reached on any portion of the site. When seasonal conditions prohibit the application of temporary or permanent seeding, non-vegetative soil stabilization practices such as mulching and matting shall be used.

(b) Structural practices. A description of structural practices that shall store runoff allowing sediments to settle and/or~~and or~~ divert flows from exposed soils or otherwise limit runoff from eroding exposed areas of the site shall be provided. Structural practices shall be used to control erosion and trap sediment from all sites remaining disturbed for more than fourteen days. Such practices may include, but are not limited to, sediment traps, sediment basins, silt fences, earth diversion dikes, check dams and storm drain inlet protection.

(i) Timing. Sediment control structures shall be functional throughout earth disturbing activity. Sediment ponds and perimeter sediment barriers shall be implemented as the first step of grading and within seven days from the start of grubbing. They shall continue to function until the upslope development area is restabilized.

(c) Settling ponds. Concentrated stormwater runoff from disturbed areas flowing at rates which exceed the design capacity of sediment barriers shall pass through a sediment settling pond. The facility's storage capacity shall be a minimum of sixty-seven cubic yards per acre of drainage area.

(d) Sediment barriers. Sheet flow runoff from denuded areas shall be intercepted by sediment barriers. Sediment barriers, such as silt fences or diversions directing runoff to settling facilities, shall protect adjacent properties and water resources from sediment transported by sheet flow.

(e) Stream protection. Structural practices shall be designed and implemented on site to protect all adjacent streams, first order and larger, from the impacts of sediment runoff.

Other erosion and sediment control practices shall prevent sediment laden water from entering storm drain systems, unless the storm drain system drains to a settling pond. These practices shall divert runoff from disturbed areas and steep slopes where practicable and stabilize channels and outfalls from erosive flows.

(6) Post construction stormwater pollution prevention. A description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed shall be provided. Such practices may include among others: infiltration of runoff, flow reduction by use of open vegetated swales and natural depressions and stormwater retention and detention ponds.

[Comment: These measures should be compatible with paragraph (F) of rule 901:10-2-04 of the Administrative Code.]

(a) Where such controls are needed to prevent or minimize erosion, velocity dissipation devices shall be placed at the outfall of all detention or retention structures and along the length of any outfall channel as necessary to provide a non-erosive flow velocity from the structure to a watercourse. Justification shall be provided by the owner or operator for rejecting each practice based on site conditions.

(7) Surface water protection. If the project site contains any streams, rivers, lakes, wetlands or other surface waters, certain construction activities at the site may be regulated under the Act~~act~~. Sections 404 and 401 of the Act~~act~~ regulate the discharge of dredged or fill material into surface waters and the impacts of such activities on water quality, respectively. Construction activities in surface waters which may be subject to regulation include, but are not limited to: sewer line crossings, grading, backfilling or culverting streams, filling wetlands, road and utility line construction, bridge installation and installation of flow control structures.

(8) Other controls.

(a) Waste disposal. No solid (other than sediment) or liquid waste, including building materials, shall be discharged in stormwater runoff.

(b) Off-site vehicle tracking of sediments shall be minimized.

(c) The plan shall ensure and demonstrate compliance with applicable state or local waste disposal, sanitary sewer or septic system regulations.

(9) Maintenance

(a) All temporary and permanent control practices shall be maintained and repaired as needed to assure continued performance of their intended function.

(b) The pollution prevention plan shall be designed to minimize maintenance requirements. The owner or operator shall provide a description of maintenance procedures needed to assure the continued performance of control practices.

(10) Inspections

(a) Procedures in a plan shall provide that all erosion and sediment controls on the site are inspected at least once every seven calendar days and within twenty-four hours after any precipitation event greater than one-half inch of precipitation in a twenty-four hour period. In addition, qualified inspection personnel provided by the owner or operator shall conduct a weekly inspection of the construction site to identify areas contributing to stormwater discharges associated with construction activity and evaluate whether measures associated with erosion and control of pollutant loadings identified in a stormwater pollution prevention plan are adequate and properly implemented. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Discharge locations shall be inspected to determine whether erosion and sediment control measures are effective in preventing significant impacts to the receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.

(11) Notice of termination.

(a) Once the construction activity is completed, the permittee shall submit notice to the department of agriculture within thirty days after final site stabilization has been achieved. Final site stabilization is considered achieved once all temporary erosion and sediment control practices are removed and disposed of and all trapped sediment has been permanently stabilized to prevent further erosion.

(b) The stormwater pollution prevention plan shall contain the following:

(i) Erosion and sediment control practices;

(ii) Permanent stormwater management practices to be used to control pollutants in stormwater after construction operations have been completed.

[Comment: These measures should be compatible with paragraph (F) of rule 901:10-2-04 of the Administrative Code.]

(c) The owner or operator shall amend the plan whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the state and shall record such changes in the operating record required by rule 901:10-2-16 of the Administrative Code. If the stormwater pollution prevention plan proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity, the owner or operator may change the plan, provided such charges are recorded in the operating record.

(d) The owner or operator shall inform all contractors and subcontractors who will be involved in the implementation of the stormwater pollution prevention plan of the terms and conditions of the permit that authorizes the discharges.

(E) Requirements for general and individual stormwater permits.

(1) A stormwater pollution prevention plan shall be developed for the production area of each facility required to have a stormwater permit.

(a) The stormwater pollution plan shall comply with and be submitted as part of paragraph (F) of rule 901:10-2-04 of the Administrative Code and the application for a permit to install. The stormwater pollution plan shall contain spill prevention and good housekeeping techniques, along

with plans to divert clean water. Spill prevention and good housekeeping techniques, along with diversion of clean water, shall be used to ensure that uncontained storm water from the production area is not contaminated by manure and to ensure that storm water discharges from the following areas maintain Ohio water quality standards in the receiving waters of the state: immediate access roads and rail lines used or traveled by carriers of raw materials, products, waste material, or by-products used or created by the CAFO; refuse sites; sites used for the storage and maintenance of material handling equipment; and shipping and receiving areas. Storm water that is contaminated by manure or raw materials (such as silage) is process wastewater, which is included in the definition of manure and may only be discharged in accordance with a NPDES permit.

(b) The stormwater pollution plan shall be included with the conditions of a NPDES permit which shall require compliance with the stormwater pollution plan as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

(2) Fees. A one-time fee must be submitted with the application in accordance with rule 901:10-1-04 of the Administrative Code. The owner or operator will indicate on the application whether the stormwater permit is to be a general or individual permit.

(3) Transfer. A stormwater permit is transferable as part of a NPDES permit. The owner or operator shall notify the department of agriculture in writing sixty days prior to any proposed transfer. The transferee must inform the department of agriculture in writing that he or she will assume the responsibilities of the original transferor.

(4) Inspections and record keeping. The facility shall implement the best management practices, including inspections, in rule 901:10-2-08 of the Administrative Code and shall maintain records specified in rule 901:10-2-16 of the Administrative Code.

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901:10-4-01 **General permit to operate requirements.**

(A) General permit to operate or general permit means a type of permit developed by the director for one or more categories of facilities as facility is defined in rule 901:10-1-01 of the Administrative Code.

(1) The director shall develop general permits to operate that relate to the following areas:

(a) The facilities involve the same or substantially similar operations including, but not limited to, the same types of animals;

(b) The facilities manage the same types of manure storage or treatment facilities or operate with substantially similar manure management plans; or

(c) The facilities are regulated by a NPDES permit and have similar discharge characteristics and require the same operating conditions to meet either effluent limitations or water quality standards.

(2) The general permit to operate may be written to cover facilities within a geographic area, including but not limited to the following:

(a) Existing geographic or political boundaries;

(b) Any other appropriate combination of boundaries.

(B) The following are eligible for general permits to operate. Any owner or operator may apply for a general permit to operate if the owner or operator falls under one of the following categories:

(1) Construction stormwater sources;

(2) Any concentrated animal feeding facility that requires NPDES permit coverage as a concentrated animal feeding operation and is not a major concentrated animal feeding facility; or

(3) Any concentrated animal feeding facility that is not a major concentrated animal feeding facility; or

(4) Other facilities or operations that meet the criteria in paragraph (A) of this rule.

(C) If the director decides to issue a general permit to operate the director shall follow the notice procedures in Chapter 901:10-6 of the Administrative Code.

(D) No provision in any general permit to operate issued under this rule shall be interpreted as allowing the owner or operator to violate state water quality standards or other applicable environmental standards.

(E) General permits to operate will be effective for a term not to exceed five years at the end of which time the director may renew them. Public notice requirements as found in Chapter 901:10-6 of the Administrative Code shall be satisfied prior to renewal of general permits. If the director chooses not to renew a general permit to operate, all facilities or operations covered under that general permit to operate, shall be notified to submit applications for individual permits. If the director chooses to deny, modify, revoke or suspend a general permit to operate the director will afford the affected parties the opportunity to request a hearing under Chapter 119. of the Revised Code.

(1) The director may deny, modify, suspend, or revoke eligibility for or coverage under a general permit to operate in situations that include, but are not limited to the following:

(a) Noncompliance with the general permit to operate; or

(b) Noncompliance with rules of Chapter 903. of the Revised Code.

(2) The director may modify, suspend, or revoke eligibility for or coverage under a NPDES general permit to operate for the criteria set forth in paragraphs (E)(1) of this rule or in the following situations:

a) The discharging facility is not in compliance with the conditions of the general NPDES permit;

(b) New discharges which are not discharges currently covered by a NPDES general or individual permit. A general NPDES permit to operate will not be issued for new discharges associated with concentrated animal feeding facilities requiring a NPDES permit if the receiving waters are designated as outstanding national resource waters, outstanding high quality waters, superior high quality waters, or state resource waters, or to receiving waters that discharge to a water with one of these designations within two stream miles of the discharge point;

(c) A discharge exists and is a significant contributor of pollutants. The director may consider the following factors:

(i) Location of discharge with respect to waters of the State;

(ii) Size of discharge;

(iii) Quantity and nature of pollutants discharged; or other relevant factors.

(d) Conditions at the permitted NPDES operation change, altering the constituents or characteristics of the discharge such that the discharge no longer qualifies for coverage under a general permit;

(e) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general NPDES permit or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;

(f) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of effluent or effluent limitations are promulgated for the facility covered by the general permit;

(g) A determination has been made that the waters are not meeting applicable water quality standards; or and approved water quality management plan, or

(h) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit.

(3) The director may require any discharging facility authorized by a NPDES general permit to operate to apply for and obtain an individual NPDES permit to operate. Any interested person may petition the director to take action under this paragraph. Cases where an individual NPDES permit to operate may be required shall be as set forth in the criteria of paragraph (E)(2) of this rule.

(F) Each general NPDES permit to operate for NPDES operations must be approved by the United States environmental protection agency before the permit becomes effective.

(G) Only the director may modify general permits to operate. When a permit is modified, only the conditions subject to modification are reopened. The owner or operator shall be afforded the opportunity to request a hearing in accordance with Chapter 119. of the Revised Code.

901:10-4-01

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901:10-4-02 **General permit to operate coverage.**

(A) A general permit to operate as described in rule 901:10-4-01 of the Administrative Code is issued by the director for a category of facilities located at multiple sites.

(B) Each person eligible for a general permit to operate shall follow the requirements in rule 901:10-4-03 of the Administrative Code.

(C) Upon issuance of a general permit to operate and issuance of an individual certificate of coverage, the individual permit to operate shall be terminated. All previous permits issued to a facility that can be covered by a general permit to operate are revoked upon request of the owner or operator, termination of the individual permit and issuance of the certification of coverage.

(D) Any person covered under a general permit to operate may choose to pursue an individual permit for any facility covered by this rule.

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901:10-4-03 **Notification of coverage.**

(A) Certificate of coverage (COC) means a certificate issued by the director based on receipt of a notice of intent to be covered by rule 901:10-4-03 of the Administrative Code. The certificate of coverage is to be kept in the site office.

(B) An owner or operator requesting to be covered by a general permit to operate shall submit a notice of intent.

(C) Notices of intent shall be made on forms approved by the director and, where applicable to a NPDES operation, shall be considered and processed as an application for coverage under a NPDES permit.

(D) Notices of intent shall contain:

(1) The general permit to operate category under which the applicant requests to be covered;

(2) Name, address, telephone number, contact person and title of owner or operator;

(3) Location, including the latitude and longitude of the production area (entrance to production area);

(4) Topographic map of the geographic area in which the facility is located showing the specific location of the production area;

(5) Specific information about the number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing fifty-five pounds or more, swine weighing less than fifty-five pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);

(6) The type of manure storage or treatment facility (anaerobic lagoon, fabricated structure, manure storage ponds, underfloor pits, above ground storage tanks, below ground tanks, concrete pad, impervious soil pad, other) and total capacity for manure (tons/gallons);

(7) The total number of acres under control of the applicant available for land application of manure;

(8) Estimated amounts of manure generated per year (tons/gallons);

(9) Estimated amounts of manure transferred to other persons per year (tons/gallons);

(10) Identification of the permit to install number;

(11) For facilities that must seek coverage under a permit after December 31, 2006, certification that a manure management plan has been completed and will be implemented upon the date of permit coverage;

(12) The name of the receiving water(s); and

(13) Any other information deemed necessary by the director found in the general permit to operate form.

(E) Each person eligible for a general permit to operate may provide notice that the person wishes to receive an individual permit instead.

(F) The director shall notify each affected owner or operator in writing that his or her facility or operation is authorized pursuant to the general permit by issuing a certificate of coverage. The director shall maintain a list of each facility or operation authorized under each general permit to operate.

(G) Persons that receive a certificate of coverage for a category from the director will be deemed covered under that general permit to operate. Owners or operators covered under general permits to operate shall be subject to the same limits, management practices, enforcement authorities and rights and privileges specified in the general permit to operate.

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901:10-4-04 **Criteria for issuing and renewing NPDES general permit to operate.**

(A) Criteria for issuing and renewing a general NPDES permit to operate:

(1) If, on the basis of all information available, the director determines that:

(a) Discharges, if any, authorized by a general NPDES permit to operate will have only minimal adverse effects on the environment;

(b) The activities authorized by an individual NPDES permit are more appropriately authorized by a NPDES general permit to operate than an individual permit; and

(c) Adequate monitoring to obtain required information is provided; then

(d) The director shall issue a NPDES general permit to operate.

(2) The director shall not issue a NPDES general permit to operate or renewal thereof if the United States environmental protection agency regional administrator objects in writing to the issuance or renewal of a NPDES general permit to operate in accordance with section 402 of the Act.

(B) Permit duration. A general NPDES permit to operate shall be effective for a fixed term not to exceed five years.

(C) Fact sheets. The director shall prepare for each general NPDES permit to operate a fact sheet that sets forth the principal facts and significant factual, legal, methodological and policy questions considered in preparing the general permit.

(D) The general NPDES permit to operate shall comply with paragraphs (D)(2)(a) through (D)(2)(f) of rule 901:10-3-01 of the Administrative Code.

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901:10-4-05 **General operating permit.**

A ~~This~~ general permit to operate shall be effective from the date of issuance for a fixed term not to exceed five years. Holders of certificates of coverage under this permit shall comply with the following specified conditions and limitations.

(A) Applicability. "Concentrated animal feeding operation" or "CAFO"~~"NPDES"~~ has the same meaning as division (F) of section 903.01 of the Revised Code and refers to those operations that are subject to the federally enforceable provisions of a permit into which NPDES requirements have been incorporated. "Concentrated animal feeding facilities" or "facilities" have the same meaning as division (E) of section 903.01 of the Revised Code and refer to those facilities that are subject to permits to operate. With respect to NPDES operations, the following requirements also apply to and are enforceable pursuant to the Act and to the extent authorized by federal law:

(1) The information required for NPDES permits in rule 901:10-1-02 of the Administrative Code;

(2) The information required in rule 901:10-3-01 of the Administrative Code except where general NPDES permits are specifically excluded;

(3) A manure management plan that complies with the requirements of rules 901:10-2-08 to 901:10-2-11, 901:10-2-13 to 901:10-2-16 and rule 901:10-2-18 of the Administrative Code;

(4) Inspections required in rule 901:10-2-08 of the Administrative Code;

(5) An operating record developed in accordance with rule 901:10-2-16 of the Administrative Code with the use of forms prescribed by the director and other forms selected by the owner or operator for the facility and approved by the director. The operating record shall be maintained at the site office at all times. Upon approval of the NPDES permit, the operating record shall be deemed part of the NPDES permit;

(6) An emergency response plan containing the information required in rule 901:10-2-17 of the Administrative Code; and

(7) An annual report required in rule 901:10-2-20 of the Administrative Code.

(B) Performance Standards.

(1) Compliance is required with rules 901:10-2-08 to 901:10-2-19 of the Administrative Code.

~~(2) With respect to NPDES operations, the requirements of rules 901:10-2-08 to~~

~~rules 901:10-2-14 and rule 901:10-2-16 of the Administrative Code are also enforceable pursuant to the Act and to the extent authorized by federal law.~~

~~(3)~~(2) The facility permitted under a general ~~this~~ permit shall be effectively maintained and operated to prevent the discharge of pollutants to waters of the state. Facilities which are in compliance with their manure management plan (MMP) and a general ~~this~~ permit which unintentionally discharge as a result of the twenty-five year, twenty-four hour storm event or greater will not be considered to be in violation of this permit.

~~(4)~~(3) For new and existing facilities, the operating level of manure treatment lagoons and manure storage ponds in rule 901:10-2-06 of the Administrative Code must have at a minimum ~~the~~ containment capacity at the prospective operating level that can also contain adequate storage for a twenty-five year, twenty-four hour storm event, one foot of freeboard and any additional storage required in the MMP.

~~(5)~~(4) For new and expanding facilities, the operating level of fabricated structures in rule 901:10-2-05 of the Administrative Code must have at a minimum storage volume at the prospective operating level that can also contain adequate storage for a twenty-five year, twenty-four hour storm event and six inches of freeboard and any additional storage required in the MMP.

~~(6)~~(5) The manure management plan, the operating record and insect and rodent control plan are ~~hereby~~ incorporated by reference into a ~~this~~ general permit to operate. The permittee shall maintain compliance with an approved MMP, the operating record rules and insect and rodent control plan as required under state law.

~~(7)~~(6) A ~~This~~ facility may be expanded by not more than ten per cent in excess of the design capacity set forth in the current design capacity, provided that in no case during a five year period shall the facility's capacity be increased by more than ten per cent in the aggregate and further, that in no case shall the capacity be increased so as to exceed the number of animal units authorized in the category of the general permit.

~~(8)~~(7) New or expanding facilities are required to be inspected by the director or an authorized representative in a timely manner prior to stocking the animals.

~~(9)~~(8) A copy of the certificate of coverage ("COC")~~"COC"~~, general permit, ~~lessee and landowner agreements, any agreements for~~ distribution and utilization records, ~~methods,~~ the insect and rodent control plan, the operating record and the MMP shall be maintained at the site office where manure management

activities are being conducted for the life of the general ~~this~~ permit. These documents shall be kept in good condition and shall be maintained in an orderly fashion.

(C) Operation and maintenance requirements.

(1) The manure storage or treatment facilities and equipment shall be properly maintained at all times.

(2) The manure land application sites and setbacks as required in appendix A of rule 901:10-2-14 of the Administrative Code shall be properly maintained at all times.

(3) The phosphorus and nitrogen application rates shall be maintained as set forth in paragraphs (B) to (E) rule 901:10-2-14 of the Administrative Code. Available water capacity identified in the MMP shall be maintained in accordance with appendix B of rule 901:10-2-14 of the Administrative Code.

(4) Unless designed and permitted to do so, domestic and/or industrial wastewater from showers, toilets, sinks, etc. shall not be discharged into the manure storage or treatment facility.

(5) Disposal of dead animals shall be done in accordance with specified best management practices and rule 901:10-2-15 of the Administrative Code.

(6) All stormwater conveyances shall be inspected and maintained to keep runoff from the surrounding property and buildings and shall be diverted away from the manure treatment lagoons and/or manure storage ponds to prevent any unnecessary addition to the liquid volume in these structures unless the lagoons and/or ponds are designed for such runoff containment.

(7) A protective vegetative cover shall be maintained on all disturbed areas (manure treatment lagoon or manure storage pond embankments, berms, pipe runs, erosion control areas, etc.). Emerging vegetation such as trees, shrubs and other woody species shall not be allowed to grow on the dikes or side slopes of manure treatment lagoons or manure storage ponds. Manure treatment lagoon and manure storage pond areas are to be kept mowed and accessible unless these areas are grassed waterways or buffers that manage precipitation runoff and stormwater.

(8) Management of the manure residuals shall be in accordance with the MMP.

(9) When removal of manure residuals from the manure storage or treatment facilities is necessary, provisions must be taken to prevent damage.

(10) Solid materials including, but not limited to, bottles, light bulbs, gloves, syringes or any other solid waste from the facility shall be prevented from entering the manure storage or treatment facility.

(11) The owner or operator must have at all times: (a) adequate manure application and handling equipment on site; (b) an ~~a lease or contractual~~ agreement to acquire or have use of the necessary equipment; (c) ~~a contract with~~ a third party applicator capable of providing adequate manure application equipment; or (d) a distribution and utilization plan. The equipment must be capable of land applying the manure on the sites specified in the MMP, including compliance with the agronomic rate, available water capacity for the land application sites and incorporation of manure, where required. Records shall be maintained~~, as required,~~ in the operating record as required in rule 901:10-2-16 of the Administrative Code

(D) Monitoring and reporting requirements.

(1) Manure treatment and storage facilities under the control of the owner or operator shall be inspected for evidence of erosion, leakage, damage or discharge. A written chronological record of maintenance and repairs shall be maintained in the operating record and be made readily available during a scheduled inspection of the facility. These records shall also be made available at the request of the director. All repairs shall be completed promptly. The department shall inspect any major structural repairs.

(2) If not already installed at a ~~this~~ facility, a liquid level board or staff gauge or other appropriate device, as approved by the director, shall be installed within sixty days of issuance of the COC under a ~~this~~ general permit to monitor manure levels. This board or gauge or other appropriate device, as approved by the director, shall have readily visible permanent markings indicating the summation of the residual manure volume and minimum storage or treatment design volume and shall be designated as the "stop pumping" elevation. The liquid level board, staff gauge or other appropriate device, as approved by the director, shall also indicate the elevation corresponding to the summation of the maximum storage volume, residual solids minimum storage, volume, runoff and wash down volumes and manure volume and shall be designated as "start pumping" elevation. Where manure storage ponds are utilized, only a gauge with visible permanent markings indicating when the pump-out begins and freeboard elevations need be installed. Caution must be taken not to damage the integrity of the liner when installing the gauge. Levels shall be

recorded in the operating record that must be maintained at the facility, in compliance with the MMP.

(3) Soil testing shall be conducted as described in the MMP on each land application site receiving manure. The results of these tests shall be maintained in the operating record by the owner or operator for a minimum of five years and shall be made available to the director.

(4) An analysis of the manure from the manure storage or treatment facility shall be conducted initially after issuance of the COC and thereafter as described in the MMP. This analysis shall include the parameters listed in the MMP.

(5) Proper records, including maintenance, repairs and the operating record, shall be maintained on site and in chronological and legible form for a minimum of five years. These records shall be readily available for inspection in the operating record.

(E) Emergency response plan.

An emergency response plan must be developed that shall include the following:

(1) The names and telephone numbers of persons who are identified by the owner or operator as responsible for implementing the plan;

(2) Areas of the facility where potential spills can occur and their accompanying surface and subsurface drainage points;

(3) Procedures to be followed in the event of a spill, including an actual or imminent discharge to waters of the state:

(a) Actions to contain or manage the spill or discharge;

(b) Identification of proper authorities to be contacted;

(c) Actions to mitigate any adverse effects of a spill or discharge; and

(d) Identification of equipment and cleanup materials to be used in the event of a spill or discharge.

(4) Procedures for reporting.

(a) The owner or operator shall report by telephone to the department as soon as possible, but in no case more than twenty-four hours following first knowledge of the occurrence of the following:

(i) The time at which the discharge or spillage occurred, if known, and or was discovered;

(ii) The approximate amount and characteristics of the discharge or spillage;

(iii) The receiving waters affected by the discharge or spillage;

(iv) The circumstances that created the discharge or spillage;

(v) The names and telephone numbers of the persons who have knowledge of these circumstances;

(vi) Those steps being taken to clean up the discharge or spillage; and

(vii) The names and telephone numbers of the persons responsible for the cleanup.

(5) For any emergency that requires immediate reporting after normal business hours, the owner or operator shall contact the Ohio department of agriculture's emergency telephone number.

(6) If applicable, the owner or operator shall notify the appropriate local authorities.

(7) The owner or operator shall also file a written report of the occurrence in letter form within five days following first knowledge of the occurrence unless waived by the director permitting an extension of time. This report shall outline the actions taken or proposed to be taken to correct the problem and to ensure that the problem does not recur.

(F) Inspections.

Any duly authorized officer, employee or representative of the department may inspect the permitted site at any reasonable time upon presentation of credentials and in accordance with reasonable and appropriate biosecurity measures, for the purpose of determining compliance with this permit; may inspect or obtain a copy of any records that must be kept under the terms and conditions of this permit; and

may obtain samples of the manure, soil, groundwater or surface water.

(G) General conditions.

(1) In addition to the general conditions set forth in this paragraph, the owner or operator of an NPDES operation shall comply with the standard terms and conditions set forth in rule 901:10-3-10 of the Administrative Code.

(2) Upon reasonable cause to believe that any activities pursuant to this permit may cause or contribute any manure, directly or indirectly, to be intermixed with the waters of the state, the department may require any monitoring (including but not limited to groundwater, surface water and soil) necessary to determine the source, quantity, quality and effect of such waste upon the waters of the state. Such monitoring, including its scope, frequency, duration and any sampling, testing and reporting systems, shall meet all applicable requirements, including records maintained in the operating record. The ~~Upon receipt and or review of the general permit to operate, the~~ director has the ability to determine that an individual NPDES or general NPDES permit may be required.

(3) Failure to abide by the conditions and limitations contained in this permit and any COC issued under a general ~~this~~ permit may subject the owner or operator to an enforcement action in accordance with Ohio law and may include the requirement to obtain an individual permit, the addition of manure storage or treatment facilities or the addition of land application sites.

(4) The issuance of a COC under a ~~this~~ permit does not excuse the owner or operator from the obligation to comply with all applicable statutes, rules, regulations, or ordinances (local, state and federal).

(5) If animal production is to be suspended or terminated, the owner or operator is responsible for developing, implementing and completing a closure plan in accordance with rule 901:10-2-18 ~~901:10-2-17~~ of the Administrative Code which will eliminate the possibility of an illegal discharge, pollution and the potential for environmental degradation to waters of the state and shall be in accordance with applicable closure standards in effect when the closure plan is developed and implemented.

~~(6) Closure shall also include notifying the department.~~

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901:10-5-01 **Complaints for nuisances.**

(A) If a person is aggrieved or adversely affected by an alleged nuisance related to concentrated animal feeding facilities or major concentrated animal feeding facilities then a complaint may be submitted to the director of the Ohio department of agriculture alleging that a nuisance exists.

(B) The complaint may be made orally or in writing.

(1) Complaint in writing: If the complaint is made in writing, the person making the complaint must sign and date the complaint. In addition, the following shall be included:

(a) The address of the facility.

(b) A description of the nature of the complaint.

(2) Oral Complaint: If a complaint is made orally to the director or to one of the director's representatives the following shall be included:

(a) The address of the facility.

(b) A description of the nature of the complaint.

(c) The name and address of the person reporting the oral complaint is optional so that the person reporting the oral complaint may be notified of the dismissal of the complaint or notified if the director determines that the owner or operator is not in compliance and that the director is proceeding in accordance with sections 903.16 or 903.17 of the Revised Code, or both sections as applicable.

(C) After receiving a written, signed and dated complaint, the director shall cause an investigation to be conducted to determine if the owner or operator of the facility or major concentrated animal feeding facility is complying with a permit or review compliance certificate.

(D) After receiving an oral complaint the director may cause an investigation to be conducted to determine if the owner or operator of the facility or major concentrated animal feeding facility is complying with a permit or review compliance certificate.

(E) If, upon completion of the investigation, the director determines that the owner or operator is in compliance with a permit or review compliance certificate, the director shall dismiss the complaint and notify the complainant and the owner or operator of the dismissal.

(F) If the director determines that the owner or operator is not in compliance with a permit or review compliance certificate, the director shall proceed in accordance with section 903.16 or section 903.17 of the Revised Code, or both sections as applicable.

(G) If the director determines that any person owning or operating a facility is managing the facility in accordance with a permit or review compliance certificate currently approved by the director, the person shall be considered in compliance with the state rules. In a private civil action for nuisances involving activities conducted under this chapter, it is an affirmative defense if the person owning, operating or otherwise responsible for or in control of a concentrated animal feeding facility is operating under and in compliance with an approved permit or review compliance certificate.

Compliance with a NPDES permit during its term constitutes compliance, for purposes of enforcement, with sections 301, 302, 306, 307, 318, 402, and 405(a)-(b) of the Act. However, a NPDES permit may be modified and reissued, or terminated during its term for cause as set forth in rules 901:10-1-03, 901:10-1-09, and 901:10-5-03 of the Administrative Code. Issuance of a NPDES permit does not convey any property rights of any type , or any exclusive privilege.

901:10-5-01

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901:10-5-02 **Right to enter property for investigations and inspections.**

(A) Investigations and inspections.

(1) The director at reasonable times has the authority to enter the premises of an applicant for permit or the permit premises to make investigations and inspections including, but not limited to, the sampling of discharges and the inspection of discharge monitoring equipment, or to otherwise execute duties that are necessary for the administration and enforcement of this chapter.

(2) The director at reasonable times may examine and copy any records pertaining to discharges that are subject to rule or any records that are required to be maintained by the terms and conditions of a permit or review compliance certificate issued under rule 901:10-1-07 of the Administrative Code.

(3) If refused entry, the director may apply for and the court of common pleas having jurisdiction may issue an appropriate warrant.

(4) Any person to whom a permit or review compliance certificate has been issued is prohibited from refusing entry to the director or purposely hindering the director in the exercise of any authority granted as described in this rule.

(B) Biosecurity.

(1) Biosecurity refers to the policies and measures taken for protecting the food supply and agricultural resources from contamination.

(2) Upon entering the property of a facility, the inspector or investigator shall identify himself or herself with proper identification to prove that he or she is an agent of the Ohio department of agriculture.

(3) If an inspection is conducted prior to the application for a review compliance certificate or a permit under this chapter, the inspector or investigator shall notify the owner or operator in advance. The purpose of the notice is to inform the owner or operator of an inspection so that the inspector or investigator may be informed of the facility biosecurity procedures, if any. The director has the authority to authorize unannounced inspections or follow-up inspections of a facility as deemed necessary.

(4) If an owner or operator wants the Ohio department of agriculture to comply with its biosecurity plan, the owner or operator must submit its plan with the

application for the permit to operate. If not, the department will act in accordance with its biosecurity policy.

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901:10-5-03 **Enforcement procedures.**

(A) Applicability. This rule applies to facilities, major concentrated animal feeding facilities, and facilities operated pursuant to review compliance certificates. The term facility is used to denote all types of facilities.

(B) An agent or employee of the department shall conduct inspections and determine if the owner or operator is not in compliance with sections 903.02, 903.03, or 903.04 of the Revised Code, the terms and conditions of a permit to install, permit to operate or review compliance certificate issued for the facility, including the requirements established under paragraph (C) of section 903.06 or paragraph (A) of section 903.07 of the Revised Code, paragraph (B) of section 903.08 of the Revised Code, rule 901:10-1-10 (D) of the Administrative Code, the terms and conditions of a NPDES permit, the NPDES provisions of a permit to operate, or rules adopted under paragraph (F) of section 903.10 of the Revised Code. Violations shall be described in an inspection report.

(C) Upon observation by an agent or employee of the department during an inspection, through notification by another agency or through a written complaint from a person, the director will initiate an investigation in order to determine if there is a violation of Chapter 903. of the Revised Code and the rules adopted thereunder. Violations shall be described in an inspection report.

(D) If the inspection report indicates a violation, the director shall do the following:

(1) Evaluate the facts established by the inspection report.

(2) Issue a "notice of deficiencies resulting in noncompliance" in writing and via certified mail to the owner or operator that he or she has a period of time to complete actions to correct the violations. The period of time and the actions required shall be determined and specified by the director in the notice.

(3) After the time period specified in the notice has elapsed, the director shall re-inspect the facility. If the director determines that the owner or operator is still not in compliance, the director shall issue a notice of an opportunity for an adjudication hearing; or

(4) After the time period specified in the notice issued pursuant to section 903.17 of the Revised Code to an owner or operator of a point source has elapsed and the director's duly authorized representative has inspected the point source and determined that the owner or operator is still not in compliance, then the director shall issue a notice of violation to require corrective actions.

(5) The director shall afford the owner or operator an opportunity for an adjudication hearing under Chapter 119. of the Revised Code to challenge the director's determination that the owner or operator is not in compliance, that an order be issued or the permit suspended or revoked or the imposition of the civil penalty.

(6) The owner or operator may waive the right to an adjudication hearing.

(E) Penalties. Penalties assessed by the director shall be commensurate with the nature and degree of the violation. Penalties shall be assessed in accordance with rule 901:10-5-04 of the Administrative Code.

(F) Appeals from an order by the director.

(1) Civil penalties. Any party adversely affected by an order of the director issued pursuant to an adjudication hearing conducted in accordance with Chapter 119. of the Revised Code may appeal the order in accordance with section 119.12 of the Revised Code.

(2) Permitting actions.

(a) A permit applicant or permit holder adversely affected by an order of the director whether or not issued pursuant to an adjudication hearing conducted in accordance with Chapter 119. of the Revised Code issuing, denying, suspending, modifying, or revoking a permit may appeal the order to the environmental review appeals commission under sections 3745.04 to 3745.06 of the Revised Code.

(b) Any person adversely affected by an order of the director issuing, denying, modifying, suspending or revoking a permit who filed comments or participated in a public meeting on a draft permit may appeal the order to the environmental review appeals commission under sections 3745.04 to 3745.06 of the Revised Code.

(c) Any person adversely affected by an order of the director issuing, denying, modifying, suspending or revoking a permit who failed to file comments or participate in a public meeting on a draft permit may appeal the order to the environmental review appeals commission under sections 3745.04 to 3745.06 of the Revised Code to the extent the draft permit differs from the final permit.

(3) Review compliance certificate. Any party adversely affected by an order of the director issued pursuant to an adjudication hearing conducted in accordance with Chapter 119. of the Revised Code denying a review compliance certificate may appeal the order to the environmental review appeals commission under sections 3745.04 to 3745.06 of the Revised Code.

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901.)-5-04 **Civil penalties.**

(A) Civil penalty rules applicability. For purposes of this rule, facility means facilities as defined in rule 901:10-1-01 of the Administrative Code, or facilities operated pursuant to a review compliance certificate or major concentrated animal feeding facility as that term is defined in paragraph (N) in section 903.01 of the Revised Code.

(B) Consolidation. Each and every day of violation of any rule or statute of Chapter 903. of the Revised Code is a separate and distinct offense, and in cases of continuing violations, each day's continuance is a separate and distinct violation unless otherwise determined by the department or unless the violations are of sections 903.06(C) or 903.07(A) of the Revised Code. Proceedings for the assessment of multiple civil penalties for multiple violations against an owner or operator may be consolidated into a single proceeding.

(C) Hearing procedures. All adjudication hearings concerning violations cited in accordance with section 903.16 and section 903.17 of the Revised Code shall be conducted in accordance with Chapter 119. of the Revised Code. The director may consider the factors listed in paragraph (D)(1) of this rule in the adjudication hearing as presented by the parties.

(D) Civil penalty assessment.

The amount of a civil penalty shall be determined by the reasonable exercise of the director's discretion in considering the following factors

(1) The economic benefit (if any) resulting from the violation.

(2) The economic impact on the violator.

Comment: In considering economic impact, the director may consider such factors as cost of repairs, construction, installation including, but not limited to, installation of equipment, monitoring devices and related operational costs.

(3) Acts of nature or acts of third parties that resulted in or contributed to violations.

(4) Any history of such violations, including recalcitrance resulting in costs incurred by the director to enforce any previously issued final orders of the director.

(5) Any good-faith efforts to comply with applicable requirements.

(6) Any supplemental environmental projects that may be undertaken by the owner or operator to off-set some of the amount of civil penalty payable to the livestock management fund if the director finds that any project may enhance the owner's or the operator's compliance by undertaking a project that is beyond any work or activities required by law or if the director agrees that any proposed supplemental environmental projects will enhance the environment.

(7) The seriousness or magnitude of the violation or violations.

(8) The gravity of effect of the violation or violations.

(9) Such other matters as justice requires.

(E) Penalty matrix.

(1) Applicability. The director may use the penalty matrix contained in this paragraph to modify a penalty amount derived from paragraph (D) of this rule by following this procedure:

(a) Determine the magnitude or seriousness of the violation as specified in paragraph (E) (2) (a) of this rule;.

(b) Determine the gravity of effect pertinent to the violation as specified in paragraph (E) (2) (b) of this rule; and

(c) Determine whether the violation is the first violation or past violation, and modify the penalty amount by reference to the appropriate matrix contained in paragraphs (F) to (K) of this rule.

(2) Penalty matrix.

(a) Categories of magnitude or seriousness.

(i) Category I (major):

(a) A violation of a department order issued as part of or in connection with a formal enforcement action;

(b) Failure to provide access to premises or records when required by statute, rule or order;

(c) Any discharge of manure that enters the waters of the state, either without a permit or from a point source not authorized by a permit unless the discharge has been reported as an emergency in accordance with rule 901:10-2-17 of the Administrative Code or

unless discharge is an agricultural stormwater discharge as defined in rule 901:10-1-01 (C);

(d) Submitting records, reports or application forms which are false, misleading, or fraudulent;

(e) Failure to provide notification of a known spill or upset condition that results in a non-permitted discharge into waters of the state;

(f) Failure to comply with division (A) of section 903.07 of the Revised Code;

(g) The presence of insects or rodents indicating a failure to comply with the insect and rodent control plan approved by the director in accordance with rule 901:10-2-19 of the Administrative Code.

(h) Failure to apply for applicable permits or review compliance certificate;

(i) Installing or operating facilities regulated under Chapter 903 of the Revised Code prior to issuance of applicable permits;

(j) Failure to provide corrections specified by the director's designated representatives on any applicable permits or review compliance certificate; or

(k) Upon completing construction authorized by a permit to install, failure to comply with paragraph (B)(2) of rule 901:10-2-01 of the Administrative Code.

(ii) Category II (moderate):

(a) Failure to submit a plan or report if required by permit or rule;

(b) Placing manure such that manure is likely to enter the waters of the state by any means;

(c) Any violation of a department rule or order that is not classified elsewhere in these rules as major or minor or any failure to operate in accordance with approved best management practices;

(d) Failure to maintain the freeboard requirements of approved best management practices; or

(e) Failure to comply with the insect and rodent control plan approved by the director in accordance with rule 901:10-2-19 of the Administrative Code.

(iii) Category III (minor):

(a) Any violation of record keeping requirements in approved best management practices.

(b) Failure to maintain records in accordance with rule 901:10-2-16 of the Administrative Code.

(b) Gravity. The gravity of effect of the violation shall be determined by consideration of the individual or cumulative possibility of harm to the public health or the environment caused by a violation or violations. Gravity of effect shall be classified as high, medium or low. The existence of one or more factors determined to be high level shall result in the gravity of effect considered to be of high level. Lacking any factor determined to be of high level, the existence of one or more factors of medium level shall result in the gravity of effect to be considered to be of medium level. Lacking any factor of high or medium level shall result in the gravity being of low level:

(i) Gravity of effect high level:

(a) Significant risk of injury or actual injury to wildlife; or

(b) Surface or groundwater contamination of a level that poses a significant risk of harm to public health or the environment; or

(c) High risk of or actual zoonotic disease transmission as determined by the director upon consultation with federal, state or local health agencies.

(ii) Gravity of effect medium level:

(a) Surface or groundwater contamination that causes short-term impact but does not meet the criteria of high level gravity of effect yet exceeds the definition of low gravity of effect and does not pose a significant threat to human health or the environment; or

(b) Insect and rodent populations in exceedance of target levels posing potential off-site impacts or posing a lower risk of zoonotic disease transmission.

(iii) Gravity of effect low level:

(a) Surface water contamination not found or not found at a level in excess of applicable water quality standards.

(b) Insect and rodent populations not found off-site but not in compliance with the approved plan for the facility.

(F) Civil penalty matrix for first violation of Chapter 903. of the Revised Code except violations of requirements for insect and rodent control plans which shall be assessed in accordance with division (B)(2) of section 903.16 of the Revised Code or violations of requirements for certified livestock managers which shall be assessed in accordance with division (B)(3) of section 903.16 of the Revised Code shall be assessed per day per violation.

	Gravity of effect		
Magnitude of Violation	High	Medium	Low
Category I (Major)	Up to and including $10,000	Up to $3,200	Up to $1,600
Category II (Moderate)	Up to $2,400	Up to $1,600	Up to $800
Category III (Minor)	Up to $1,000	Up to $500	Up to $200

(G) Civil penalty matrix in the event of past violations of Chapter 903. of the Revised Code (except violations of requirements for insect and rodent control plans which shall be assessed in accordance with division (B)(2) of section 903.16 of the Revised Code or violations of requirements for certified livestock managers which shall be assessed in accordance with division (B)(3) of the Revised Code) shall be assessed per day per violation.

	Gravity of effect		
Magnitude of Violation	High	Medium	Low
Category I (Major)	Up to $10,000	Up to $6,000	Up to $3,200
Category II (Moderate)	Up to $6,000	Up to $3,200	Up to $1,600
Category III (Minor)	Up to $3,000	Up to $1,600	Up to $400

(H) Civil penalty matrix for insect and rodent control plans. As set forth in division (D) of section 903.10 of the Revised Code, the director may use this penalty matrix to assess a preliminary penalty amount for enforcement of section 903.06 of the

Revised Code and shall exercise reasonable discretion in accordance with paragraph (D) of this rule.

Concentrated animal feeding facility - civil penalty matrix for insect and rodent control first violation per seven days.

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	Gravity of Effect		
Magnitude of Violation	High	Medium	Low
Category I (Major)	Up to $5,000	Up to $2,500	Up to $1,000
Category II (Moderate)	Up to $2,500	Up to $1,500	Up to $500
Category III (Minor)	Up to $1,000	Up to $500	Up to $200

(I) Concentrated animal feeding facility - civil penalty matrix for insect and rodent control in the event of past violations per seven days.

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	Gravity of effect		
Magnitude of Violation	High	Medium	Low
Category I (Major)	Up to $10,000	Up to $5,000	Up to $2,000
Category II (Moderate)	Up to $5,000	Up to $2,500	Up to $1,000
Category III (Minor)	Up to $2,000	Up to $1,000	Up to $500

(J) Major concentrated animal feeding facility - civil penalty matrix for insect and rodent control first violation per seven days.

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	Gravity of effect		
Magnitude of Violation	High	Medium	Low
Category I (Major)	Up to $12,500	Up to $7,500	Up to $4,000
Category II (Moderate)	Up to $7,500	Up to $4,500	Up to $2,500
Category III (Minor)	Up to $4,000	Up to $2,500	Up to $1,500

(K) Major concentrated animal feeding facility - civil penalty matrix for insect and rodent control in the event of past violations per seven days.

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	Gravity of effect		
Magnitude of Violation	High	Medium	Low
Category I (Major)	Up to $25,000	Up to $15,000	Up to $7,500
Category II (Moderate)	Up to $15,000	Up to $9,000	Up to $4,500
Category III (Minor)	Up to $7,500	Up to $4,500	Up to $2,500

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901:10-5-05 **Emergency enforcement and cost recovery.**

(A) If the director determines that an emergency exists requiring immediate action to protect the public health or safety or the environment, the director may issue an order without notice or adjudication hearing stating the existence of the emergency and requiring that action be taken that is necessary to meet the emergency. The order shall take effect immediately. A person to whom the order is directed shall comply immediately. A danger to public health, safety or the environment may include, but is not necessarily limited to, the following situations:

(1) When discharge threatens public or private drinking water supplies;

(2) When discharge threatens a primary contact recreation resource water;

(3) When the discharge directly causes flooding of residential housing, commercial property or industrial property, where direct use of the property would be hazardous to public health; and/or

(4) Other situations as determined by the director upon consultation with state and/or local environmental protection or health agencies.

(B) Following receipt of the emergency order, the owner or operator shall comply with the order. The order shall take affect immediately, however, the owner or operator shall be afforded the opportunity for a hearing in accordance with paragraph (C) of this rule.

(C) On application to the director, the owner or operator shall be afforded an adjudication hearing in accordance with Chapter 119. of the Revised Code as soon as possible and not later than thirty days after application. The director's order is appealable in accordance with section 119.12 of the Revised Code. The applicant shall provide the following information to the director in writing or by telephone:

(1) A statement requesting an adjudication hearing;

(2) The date when the order was issued; and

(3) The business or home address and phone number where the owner, operator or representative can be reached during business hours.

(D) On the basis of the hearing, the director or his designee shall continue, revoke or modify the order. If the owner or operator does not request a hearing, the emergency order may remain in effect for one hundred twenty days after its issuance. An order

issued following an adjudicatory hearing shall not be considered an emergency order. The appeal provisions described in paragraph (C) of this rule shall apply.

(E) A person responsible for causing or allowing an unauthorized release, spill or discharge of manure is liable to the director for any costs incurred in investigating, mitigating, minimizing, removing, abating the spill, release or discharge or other acts or events that resulted in the emergency and the emergency order. If no attempt is made to repay the director for costs incurred or damages assessed within that time, the director may request the attorney general to bring a civil suit against the person responsible to recover costs and any assessed damages. Reimbursed costs shall be deposited into the livestock management fund.

(F) Livestock management fund. Funds deposited in the livestock management fund created under section 903.19 of the Revised Code shall be used for paying the costs for emergency actions. In addition to paying the costs incurred by the director under section 903.18 of the Revised Code, the director may make disbursements from the fund for any costs incurred by the department in investigating, mitigating, minimizing, removing, abating the release, spill or discharge or other acts or events that resulted in the emergency or the emergency order.

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901:10-6-01 **Notice.**

(A) Notice by publication.

(1) Notices in general. All notices required or authorized by section 903.09 of the Revised Code shall be published once in a newspaper having general circulation in the county in which the facility is located or proposed to be located. Publication shall be done at least thirty days prior to a public meeting, provided that publication shall be done at least forty-five days prior to a public meeting for any draft permit to install or draft NPDES permit subject to an antidegradation review. Public notice is complete upon publication.

[Comment: Public notice will be given for any draft general permit to be issued by the director. Since general permits are written to cover categories of discharges within a geographic or political area, the director may give one or more notices in newspapers of general circulation for those geographic or political areas identified in the general permit.]

(2) Additional requirements for NPDES information. The department shall publish a public notice within thirty days regarding receipt of a NPDES permit application and permit to install for which an antidegradation review is applicable or an application for a no potential to discharge determination.

(a) The purpose of public notice for a draft permit to install and a draft NPDES permit for which an antidegradation review is applicable shall be: to inform other potentially affected persons; to allow for inspection and review of the applications; to indicate whether any of the exclusions or waivers within the antidegradation rules apply to the applications; to instruct interested persons to contact the director within thirty days if they want to be on the interested parties mailing list as described in rule 901:10-6-05 of the Administrative Code for that particular permit to install or NPDES permit application; and to advertise the date, time, and place of any public meeting required under division (C) of section 903.09 of the Revised Code.

(b) The purpose of public notice for a request for a no potential to discharge determination shall be to describe the facility or activity; to summarize the factual basis for granting the no potential to discharge; and to describe procedures for reaching a final decision to grant a no potential to discharge determination.

(3) The department shall give public notice of the issuance of a review compliance certificate issued pursuant to division (F) of section 903.04 of the Revised Code

only to persons who own property that is contiguous to the facility for which the review compliance certificate is issued.

(4) The director shall publish notice of the issuance of a final permit once in a newspaper of general circulation in the county in which the facility is located.

(5) The director shall give public notice of the proposed action to deny, suspend, or revoke a permit to install, permit to operate, or NPDES permit, or for any actions pursuant to section 903.17 of the Revised Code.

(B) Notice by mail.

(1) The director shall mail notice of the issuance of a draft permit and a copy of the draft permit to the applicant or owner or operator and to the board of county commissioners of the county, the board of township trustees of the township, the local board of health and the local soil and water conservation district in which the facility is located or proposed to be located. The director shall also notify owners or operators of public water systems as that term is defined in section 6109.01 of the Revised Code that have a surface water intake structure located within ten miles downstream of the facility or proposed facility described in the draft permit.

(2) In addition, if an antidegradation review of a NPDES permit application indicates the potential to lower water quality, the director shall provide notice by mail to the Ohio department of natural resources, the United States fish and wildlife service, any affected local areawide planning agencies and the Ohio department of development.

(3) The director shall mail notice of the proposed action to deny, suspend, or revoke a permit to install, permit to operate, or NPDES permit to the applicant or owner or operator and a copy of the proposed action to the board of county commissioners of the county and the board of township trustees of the township in which the facility is located or proposed to be located. The director shall also provide notice of the proposed action to deny, suspend, or revoke a NPDES permit to any other persons that are entitled to notice under the Federal Water Pollution Control Act.

(4) Notices shall be mailed by certified mail, return receipt requested, to the person subject thereto. Notices shall state the time and method by which the applicant or permit holder may request public meeting. A statement as to when a final permit will be issued may accompany draft permits.

(a) If a draft permit or proposed action is issued with an effective date and the permit is later signed by the director without being changed further, the department need not, at the time of entry, provide notice or a copy of the permit to the person subject thereto.

(b) If a draft permit or proposed action is issued without an effective date, and the department later assigns an effective date without changing the action further, the department shall mail notice to the person subject thereto informing the person of the effective date.

(5) If the applicable law grants a right to appeal the final permit or order of the director to the environmental review appeals commission, mailings required by this paragraph shall be accompanied by a notice stating the time and method by which the appeal must be filed.

(C) Failure of the director to provide notice of a public meeting shall invalidate a permit only if the failure is raised by and was relied upon to the detriment of a person that is entitled to appeal the permit. Notice of a public meeting is not required for the modification of a permit made with the consent of the permittee for the correction of typographical errors.

(D) The director may also hold a public meeting at the director's discretion, whenever, for example, such a public meeting might clarify one or more issues involved in the permit decision.

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901:10-6-02 **Contents of public notices.**

(A) Applicability. This rule applies to public notices for the issuance of or proposed actions to deny, suspend, modify, or revoke permits to install, permits to operate, and NPDES permits. This rule applies to the issuance of final orders pursuant to section 903.17 of the Revised Code. In addition, this rule applies to public notices for the receipt of applications for NPDES permits including notification of the public of an applicable antidegradation review under section 6111.12 of the Revised Code and to public notices for the receipt of an application for a request for a no potential to discharge determination to be made by the director. Public notices shall include the following information:

(1) The name, address and telephone number of the office of the Ohio department of agriculture where department files and records pertaining to the proposed action or issuance are located and may be inspected and copied and instructions for persons desiring to obtain additional information, including the NPDES mailing list provided for in rule 901:10-6-05 of the Administrative Code

(2) The name and address of the applicant.

(3) A brief description of the applicant's activities or operations.

(4) The location of the facility and a short description of any discharge indicating whether any discharge is a new or an existing discharge.

(5) A concise statement of the draft permit or the proposed action.

(6) A statement:

(a) That any person may submit a written statement within thirty days of appearance of public notice in a newspaper in the affected county and that any person has a right to provide a statement for the record at the public meeting if a meeting is scheduled; and

(b) That if significant public interest is shown, one public meeting shall be held prior to issuance of any final permit.

(7) In addition, if the public notice is for an NPDES permit application or a draft permit on an NPDES permit the public notice shall contain the following information:

(a) For a NPDES permit and permit to install application subject to an antidegradation review:

(i) A statement summarizing the receipt of an application for an NPDES permit where an antidegradation review is required;

(ii) The date of issuance of the draft permit; and

(iii) A statement on the applicability of an antidegradation review in section 6111.12 of the Revised Code to indicate whether waivers or exclusions of the policy apply or to indicate an evaluation of issues related to lower water quality.

(iv) A statement that the draft permit shall become final on an effective date or event specified therein, unless:

(a) A public meeting is requested;

(b) The director amends or withdraws the draft permit; or

(c) The draft NPDES permit has been disapproved by the United States environmental protection agency in accordance with rule 901:10-3-06 of the Administrative Code.

(b) For a request for a no potential to discharge determination a fact sheet which includes:

(i) A brief description of the type of facility or activity which is the subject of the no potential to discharge determination;

(ii) A brief summary of the factual basis upon which the request is based for granting the no potential to discharge determination; and

(iii) A description of the procedures for reaching a final decision of the no potential to discharge determination.

(B) Notice of NPDES permit applications to government agencies. The notice required by paragraph (A) of rule 901:10-6-01 of the Administrative Code to be given to state and governmental agencies shall include:

(1) The information required in this rule and may include a copy of such public notices.

(2) A statement that:

(a) An affected state or agency, unless covered by (B)(2)(b) of this rule, may submit written recommendations to the director and to the regional administrator of the United States environmental protection agency which the director may incorporate into the NPDES permit if issued, and that if the recommendation of the state or agency is not incorporated in the final permit, a written explanation of the director's reasons for not accepting the recommendation will be provided for that state or agency and the regional administrator of the United States environmental protection agency; and

(b) If an Army Corps of Engineers district engineer submits written recommendations to the director advising that anchorage and navigation of any of the waters of the United States would be substantially impaired by the granting of the NPDES permit, the director shall propose to deny the NPDES permit in accordance with section 903.09(F) of the Revised Code, and the applicant shall be so notified. If the Army Corps of Engineers district engineer advised the director that imposing specified conditions upon the permit is necessary to avoid any substantial impairment of anchorage or navigation, then the director shall include the specified conditions in the permit.

(3) A copy of the fact sheet and a statement that a copy of the application for an NPDES permit or of the draft NPDES permit, including all ancillary papers, will be provided upon request.

(C) The notice required by paragraph (B) of this rule shall also be given, when applicable, to:

(1) Any agency responsible for an areawide waste treatment management plan pursuant to division (B) of section 208 of the Federal Water Pollution Control Act.

(2) Any agency responsible for the preparation of a plan pursuant to an approved continuing planning process under division (E) of section 303 of the Federal Water Pollution Control Act.

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901:10-6-03 **Coordination of federal water pollution control act permit program with agencies of the United States.**

(A) Upon the director's issuance of a draft permit for an application to issue or modify a permit, the department shall transmit by certified mail a copy of the permit application and the draft NPDES permit to the regional administrator of the United States environmental protection agency, unless by written agreement the regional administrator has waived the right to receive, review, object, or comment upon a draft permit. If the regional administrator makes timely objection in writing to the issuance of the NPDES permit as being outside the requirements of the Federal Water Pollution Control Act, the permit shall not become final. The director may issue an amended draft permit after consideration of written comments or recommendations of the regional administrator, or may withdraw a draft permit.

(1) The director shall also transmit to the regional administrator of the United States environmental protection agency a copy of any significant comments presented in writing pursuant to the public notice of a draft permit and a summary of any significant comments presented at any public meeting on any permit if:

(a) The regional administrator requests this information;

(b) The proposed permit contains requirements significantly different from those contained in the draft permit; or

(c) Significant comments objecting to the draft permit have been presented at the public meeting or in writing pursuant to the public notice. This does not apply to permits which by written agreement the regional administrator has waived the right to review and for which the United States environmental protection agency has not otherwise requested a receipt.

(2) Immediately following final issuance or modification or renewal of a permit under division (D) of section 903.09 of the Revised Code, the department shall transmit by first class mail a copy to the regional administrator.

(B) At the time of issuance of public notice of an application for issuance or modification of a permit pursuant to division (A) of section 903.09 of the Revised Code, for a discharge for which a fact sheet is prepared pursuant to rule 901:10-6-05 of the Administrative Code, the department shall transmit a copy of the fact sheet to the district engineer of the United States army corps of engineers for the district in which the discharge is located, unless by written agreement the district engineer has waived his right to receive a fact sheet for the discharge.

(C) The department shall, on or before the date of newspaper publication of a NPDES permit, provide the information specified in rule 901:10-6-02 of the Administrative Code to any state, interstate, federal, or local government agency having jurisdiction over waters that may be affected by the discharge to waters of the state.

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901:10-6-04 **Public meetings.**

(A) Not later than thirty days after public notice of a draft permit, draft permit modification, a proposed action to deny, suspend, or revoke a permit, or any request for a no potential to discharge determination, any person may file a request for a public meeting. This paragraph does not apply to amended draft actions or to a NPDES permit application where an antidegradation review is required.

(B) Public meetings and antidegradation review and NPDES permits.

(1) Within ninety days of receipt of the application for any permit to install with a NPDES permit, the director shall hold a public meeting where an antidegradation review is required for any category three wetland, a designated outstanding national resource water, outstanding high quality water, state resource water or superior high quality water. The public meeting shall be for the purpose of evaluating issues related to lower water quality.

(2) Within ninety days of receipt of the application, the director shall hold a public meeting for any permit to install application and any NPDES permit application where the application indicates that an antidegradation review is required for general high quality waters other than category three wetlands and for limited quality waters, and the director also determines that there is significant public interest. This meeting is held concurrently with the meeting for the draft permit.

(C) If the director determines that there is significant public interest as described in paragraph (D) of this rule in a draft permit to install, permit to operate, NPDES permit, or modification of any permit, in the antidegradation review described in paragraph (B)(2) of this rule, in the request for a no potential to discharge determination, or any proposed action to deny, suspend, or revoke a permit, or where required to do so by statute or rule, the director shall hold one public meeting in the county where the facility is located or in a contiguous county. In consideration of an application for issuance of a permit, the director may hold one public meeting prior to issuance of a permit. When allowed by the antidegradation policy, the director shall hold the public meeting on antidegradation issues concurrently with any public meeting held for the draft permit.

[Comment: The director may take other, reasonable steps to inform the public about draft permits, including fact sheets, brochures or other informal sessions with the public and the permittee.]

[Comment: The director may include representatives from other government departments, offices and agencies to participate in public meetings and otherwise invite these persons to provide pertinent information to the public.]

(D) Significant public interest means statements made in writing by twenty or more persons expressing interest in the draft permit before the director or in the antidegradation review and requesting a public meeting. Significant public interest may also include expressed interest by one or more public officials.

(E) Public notice of the public meeting shall be published at least thirty days prior to the public meeting in a newspaper of general circulation and shall include:

(1) The address and telephone number of the office at the Ohio department of agriculture where department files and records pertaining to the proposed action or issuance are located and may be inspected and copied and instructions for persons desiring to obtain additional information, including the NPDES mailing list.

(2) The name and address of the applicant.

(3) The location of the facility and a short description of each existing or proposed discharge point and the name(s) of the receiving water(s).

(4) The date of issuance of the notice of the draft permit.

(5) The time, date, and location of the public meeting if applicable.

(6) A concise statement of the issues raised by those requesting a public meeting.

(7) A statement:

(a) That any interested person may appear and present written and/or oral statements, in person or by a representative.

(b) That the purpose of the meeting is to obtain additional information that will be limited to the criteria that are applicable to the permit application that is the subject of the public meeting and will be considered by the director prior to the director's taking final action on the draft permit under consideration.

(F) In any public meeting, the director may appoint a presiding officer to conduct the meeting. The officer shall state at the beginning of the meeting the manner in which the meeting will be conducted, time limits for testifying, and any other procedures for conducting the meeting. Procedures and time limits may vary according to the number of people wishing to testify, the time the meeting starts, weather conditions and other situations affecting the length of the meeting. On the date and at the time

and place specified in the notice, the public meeting shall be held at which any person:

(1) May appear and be heard in person or by a representative, or both;

(2) May present statements orally or in writing, or both. All comments whether written or oral shall be considered equally in making a final decision, provided that comments are submitted with the name and address of the person presenting the statements for the record.

(G) Any person requesting time to make an oral comment at the meeting must register their name and address prior to the beginning of the meeting. Persons shall be called to provide a statement for the record in the order of registration, unless the presiding officer determines otherwise.

(H) Information presented by any person shall be limited to the criteria and information that are applicable to the permit application that is the subject of the public meeting. The officer may rule out of order any person who does not address comments to the matter that is the subject of the public meeting.

(I) Persons attending the public meeting are authorized to tape or videotape the proceedings provided the following requirements are met:

(1) The hearing officer is notified at least twenty-four hours prior to the start of the public meeting unless prior notice is waived by the hearing officer; and

(2) The public meeting is not interrupted or disturbed.

(J) A transcript, recording or other complete record shall be made of the public meeting. Statements presented at a public meeting held pursuant to this rule shall be considered by the director, who may issue a final permit, as permitted by law. No final permit shall be issued until after the director has considered the report of the presiding officer. The report shall briefly describe and respond to all significant comments on the draft permit or, in the case of a NPDES permit with antidegradation applicability, the permit application, raised during the public comment period, including the public meeting. The report shall specify which provisions, if any, of the draft permit have been changed in the final permit and the reasons for the change.

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901:10-6-05 **NPDES fact sheets.**

(A) A fact sheet shall be prepared prior to issuance of a draft NPDES permit and NPDES permit modifications. The fact sheet shall include such information as may be required by federal statute or rule and may also include such additional information as the department deems desirable.

(B) The department shall maintain a mailing list of persons or groups requesting fact sheets and of persons or organizations who have expressed an interest in or may, by the nature of their purposes, their activities or their members, be affected by or have an interest in obtaining fact sheets for any of the following:

(1) Any specified NPDES permits under section 903.08 of the Revised Code;

(2) Any antidegradation reviews associated with NPDES permits; and

(3) Any specified proceedings relating to applications for the specified NPDES permits or any antidegradation reviews or additional copies of fact sheets prepared, or other information desired.

(C) All notices required or authorized for actions on NPDES permits or NPDES permit modifications shall be mailed to all persons on the mailing list of subscribers maintained for the issuance of NPDES permits.

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Rule Amplifies:	903.01, 903.02, 903.04, 903.07, 903.08, 903.081, 903.082, 903.09, 903.10
Prior Effective Dates:	07/02/2002