

FERTILIZER LAWS AND RULES



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of Agriculture**

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Disclaimer: All sections of the Ohio Revised Code and Ohio Administrative Code contained herein are current as of 9/30/21. Please visit <http://codes.ohio.gov/> for the current version of all laws and rules.

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905.01 Agricultural additive definitions.

As used in sections 905.01 to 905.11 of the Revised Code:

(A) "**Distributor**" means a person who offers for sale, sells, trades, or supplies an agricultural additive.

(B) "**Manufacturer**" means a person who mines, extracts, processes, refines, blends, or mixes an agricultural additive.

(C) "**Registrant**" means the manufacturer who registers an agricultural additive under sections 905.01 to 905.11 of the Revised Code.

(D) "**Agricultural additive**" means any substance or mixture that is intended to improve for agricultural production purposes the physical, chemical, or biological characteristics of soil or other growth medium or to improve otherwise crop production, plant growth, product quality, or yield prior to harvest, but excludes fertilizers, agricultural liming materials, pesticides, fertilizer pesticide mixtures, rhizobial inoculants, peat, peat moss, pine bark, gypsum, perlite, sand, unmanipulated animal or vegetable manures, mulches, and any other substances or mixtures that are excluded from this definition by rule of the director of agriculture.

(E) "**Active ingredient**" means any ingredient from which an agricultural additive derives all or part of its value or effectiveness and that is defined in the current edition of Merck's Chemical Index or recorded in Chemical Abstracts.

(F) "**Inert ingredient**" means an ingredient that is not active.

Effective Date: 11-05-1981

905.02 Selling or exchanging unregistered agricultural additive.

No distributor or manufacturer shall sell, exchange, offer for sale or exchange, or distribute for sale or exchange in this state any agricultural additive unless it has been registered by the manufacturer with the department of agriculture. Registration of an agricultural additive does not constitute a warranty by the department or the state.

Effective Date: 11-05-1981

905.03 Application for registration of agricultural additive.

(A) Each application for registration of an agricultural additive shall be accompanied by a registration fee of fifty dollars. Application shall be made on a form supplied by the director of agriculture and shall include:

- (1) The name and address of the registrant;
- (2) The additive's brand name;
- (3) The purpose or proposed use of the additive;
- (4) Directions for the additive's use;
- (5) The results or effects that can be expected when the additive is used as directed;
- (6) Evidence that the additive has been tested for efficacy in the laboratory and in the field, information describing the test methodology used, and a description of the test results;
- (7) A guaranteed analysis of:
 - (a) If a chemical product, the name and percentage of each active and inert ingredient;
 - (b) If a microbiological product, the number and kind of viable microorganisms per milliliter or, if the product is other than a liquid, per gram.

The registrant shall notify the director of any change of address within thirty days of the change; failure to notify the director constitutes grounds sufficient for the director to revoke the registration.

(B) If the director determines that the evidence submitted under division (A)(6) of this section is not sufficient proof of the additive's usefulness for agricultural production in this state, he may require the applicant to submit samples, conduct tests, or submit additional information, including conditions affecting performance, in order to evaluate its performance and usefulness.

(C) The director shall register an agricultural additive unless he determines that:

- (1) The application for registration is not complete;
- (2) The additive will not or is not likely to produce the results or effects claimed when used as directed; or
- (3) The additive is not useful for agricultural production in this state.

(D) All registrations shall expire on the thirty-first day of December and shall be renewed according to the standard renewal procedure of sections 4745.01 to 4745.03 of the Revised Code.

Effective Date: 11-05-1981

905.04 Label information.

No person shall sell, exchange, offer for sale or exchange, or distribute for sale or exchange in this state any agricultural additive unless its container is conspicuously labeled with the following information:

- (A) The additive's brand name;
- (B) Its purpose or proposed use;
- (C) The net weight of the contents of the container;
- (D) Directions for the additive's use;
- (E) The results or effects that can be expected when the additive is used as directed;
- (F) A guaranteed analysis of:
 - (1) If a chemical product, the name and percentage of each active and inert ingredient;
 - (2) If a microbiological product, the number and kind of viable microorganisms per milliliter or, if the product is other than a liquid, per gram.
- (G) The name and address of the manufacturer who registered the product;
- (H) The additive's registration number provided by the director of agriculture.

The information on the label shall correspond to the information included in the application for registration required under sections 905.02 and 905.03 of the Revised Code. The information on the label constitutes an express warranty of the results or effects shown on the label when used as directed.

Effective Date: 11-05-1981

905.05 Administrative rules.

The director of agriculture may adopt, modify, or rescind rules, in accordance with Chapter 119. of the Revised Code, to implement sections 905.01 to 905.11 of the Revised Code.

Effective Date: 11-05-1981

905.06 Information duties - investigations.

The director of agriculture shall:

- (A) Gather information on the performance of various agricultural additives, including distributors' and manufacturers' claims, the results of investigation or research on additives, and the conditions when they are useful, and make the information available to the public;
- (B) Provide and distribute, in cooperation with OSU extension , information on the use of agricultural additives;
- (C) Provide for the prompt and thorough investigation of written complaints received concerning agricultural additives.

Amended by 130th General Assembly File No. 25, HB 59, §101.01, eff. 9/29/2013.

Effective Date: 11-05-1981

905.07 Suspending or revoking of registration.

The director of agriculture or his duly authorized representative may enter any property, public or private, in order to make inspections to determine whether or not there is compliance with sections 905.01 to 905.11 of the Revised Code or if any agricultural additive is useful for agricultural production in this state. If refused entry he may apply for and the court of common pleas may issue an appropriate warrant.

The director may suspend or revoke the registration of an agricultural additive if he finds that the additive does not produce the results or effects shown on its label or that the distributor or manufacturer has violated any provision of sections 905.01 to 905.11 of the Revised Code or any rule adopted thereunder. Before he suspends or revokes the registration of an agricultural additive, he shall afford the registrant the opportunity of an adjudication hearing in accordance with Chapter 119. of the Revised Code. However he may suspend the registration before such a hearing if he believes that the use of the additive in this state endangers the public health or safety or constitutes an imminent and substantial threat to agricultural production or the public welfare.

Effective Date: 11-05-1981

905.08 Holding additives during period of suspension or revocation.

The director of agriculture may issue an order to the owner or custodian of any package or lot of an agricultural additive requiring it to be held at a designated place during the period the director has suspended or revoked the product's registration under section 905.07 of the Revised Code. The agricultural additive shall be held until the

director issues a release in writing. A release shall not be issued until the suspension or revocation of registration is terminated. No person shall violate an order to hold. Each day of violation constitutes a separate offense.
Effective Date: 11-05-1981

905.09 Injunctions.

The director of agriculture may apply to the court of common pleas for an injunction against any person who continues to sell, exchange, offer for sale or exchange, or distribute for sale or exchange an agricultural additive for which an order to hold has been issued under section 905.08 of the Revised Code or that is not registered with the department of agriculture under section 905.02 of the Revised Code. Each package, container, or lot of an agricultural additive sold, exchanged, offered for sale or exchange, or distributed for sale or exchange in violation of section 905.02, 905.04, or 905.11 of the Revised Code constitutes a separate offense.
Effective Date: 11-05-1981

905.10 Class actions.

Upon written request by the director of agriculture, the attorney general may join or bring class actions on behalf of persons who are adversely affected by the purchase of agricultural additives or who are injured by violation of sections 905.01 to 905.11 of the Revised Code.
Effective Date: 11-05-1981

905.11 False representations.

No person shall falsely represent that an agricultural additive:
(A) Can be used in lieu of another product or products, including fertilizers and agricultural liming materials, with the same or similar results;
(B) Enhances the effects or benefits of a fertilizer or agricultural liming material;
(C) Is useful and effective when used under weather conditions normal for this state or in soils in this state;
(D) Is useful when used in conjunction with a specific crop;
(E) Has sponsorship or approval that it does not;
(F) Has been tested or proven to produce the results or effects claimed;
(G) Has certain delayed or long range benefits;
(H) Product has no harmful or potentially harmful side effects.
Effective Date: 11-05-1981

905.31 Fertilizer definitions.

As used in sections 905.31 to 905.503 of the Revised Code:
(A) "**Brand name**" means a name or expression, design, or trademark used in connection with one or several grades of any type of fertilizer.
(B) "**Bulk fertilizer**" means any type of fertilizer in solid, liquid, or gaseous state, or any combination thereof, in a nonpackaged form.
(C) "**Distribute**" means to offer for sale, sell, barter, or otherwise supply fertilizer for other than manufacturing purposes.
(D) "**Fertilizer**" means any substance containing nitrogen, phosphorus, or potassium or any recognized plant nutrient element or compound that is used for its plant nutrient content or for compounding mixed fertilizers. "Fertilizer" does not include lime, limestone, marl, unground bone, water, residual farm products, and animal and vegetable manures unless mixed with fertilizer materials or distributed with a guaranteed analysis.
(E) "**Grade**" means the percentages of total nitrogen, available phosphorus or available phosphate (P₂ O₅), and soluble potassium or soluble potash (K₂O) stated in the same terms, order, and percentage as in guaranteed analysis.
(F) "**Guaranteed analysis**" means:
(1) The minimum percentages of plant nutrients claimed in the following order and form:
Total Nitrogen (N) per cent
Available phosphate (P₂ O₅) per cent
Soluble Potash (K₂ O) per cent

- (2) Guaranteed analysis includes, in the following order:
- (a) For bone and tankage, total phosphorus (P) or phosphate (P₂ O₅);
 - (b) For basic slag and unacidulated phosphatic materials, available and total phosphorus (P) or phosphate (P₂ O₅) and the degree of fineness;
 - (c) Additional plant nutrients guaranteed expressed as percentage of elements in the order and form as prescribed by rules adopted by the director of agriculture.
- (G) "**Label**" means any written or printed matter on the package or tag attached to it or on the pertinent delivery and billing invoice.
- (H) "**Manufacture**" means to process, granulate, blend, mix, or alter the composition of fertilizers for distribution.
- (I) "**Mixed fertilizer**" means any combination or mixture of fertilizer designed for use, or claimed to have value, in promoting plant growth, including fertilizer pesticide mixtures.
- (J) "**Net weight**" means the weight of a commodity excluding any packaging in pounds or metric equivalent, as determined by a sealed weighing device or other means prescribed by rules adopted by the director.
- (K) "**Packaged fertilizer**" means any type of fertilizer in closed containers of not over one hundred pounds or metric equivalent.
- (L) "**Per cent**" or "**percentage**" means the percentage of weight.
- (M) "**Person**" includes any partnership, association, firm, corporation, company, society, individual or combination of individuals, institution, park, or public agency administered by the state or any subdivision of the state.
- (N) "**Product name**" means a coined or specific designation applied to an individual fertilizer material or mixture of a fixed composition and derivation.
- (O) "**Sale**" means exchange of ownership or transfer of custody.
- (P) "**Official sample**" means the sample of fertilizer taken and designated as official by the director.
- (Q) "**Specialty fertilizer**" means any fertilizer designed, labeled, and distributed for uses other than the production of commercial crops.
- (R) "**Ton**" means a net weight of two thousand pounds.
- (S) "**Fertilizer material**" includes any of the following:
- (1) A material containing not more than one of the following primary plant nutrients:
 - (a) Nitrogen (N);
 - (b) Phosphorus (P);
 - (c) Potassium (K).
 - (2) A material that has not less than eighty-five per cent of its plant nutrient content composed of a single chemical compound;
 - (3) A material that is derived from a residue or by-product of a plant or animal or a natural material deposit and has been processed in such a way that its plant nutrients content has not been materially changed except by purification and concentration.
- (T) "**Custom mixed fertilizer**" means a fertilizer that is not premixed, but that is blended specifically to meet the nutrient needs of one specific customer.
- (U) "**Director**" or "**director of agriculture**" means the director of agriculture or the director's designee.
- (V) "**Lot**" means an identifiable quantity of fertilizer that may be used as an official sample.
- (W) "**Unit**" means twenty pounds of fertilizer or one per cent of a ton.
- (X) "**Anhydrous ammonia equipment**" means, with regard to the handling or storage of anhydrous ammonia, a container or containers with a maximum capacity of not more than four thousand nine hundred ninety-nine gallons or any appurtenances, pumps, compressors, or interconnecting pipes associated with such a container or containers. "Anhydrous ammonia equipment" does not include equipment for the manufacture of anhydrous ammonia or the storage of anhydrous ammonia either underground or in refrigerated structures.
- (Y) "**Anhydrous ammonia system**" or "**system**" means, with regard to the handling or storage of anhydrous ammonia, a container or containers with a minimum capacity of not less than five thousand gallons or any appurtenances, pumps, compressors, or interconnecting pipes associated with such a container or containers. "Anhydrous ammonia system" does not include equipment for the manufacture of anhydrous ammonia or the storage of anhydrous ammonia either underground or in refrigerated structures.

(Z) "**Agricultural production**" means the cultivation, primarily for sale, of plants or any parts of plants on more than fifty acres. "Agricultural production" does not include the use of start-up fertilizer applied through a planter.

(AA) "**Rule**" means a rule adopted under section 905.322, 905.40, or 905.44 of the Revised Code, as applicable.

(BB) "**Certificate holder**" means a person who has been certified to apply fertilizer under section 905.321 of the Revised Code and rules adopted under section 905.322 of the Revised Code.

(CC) "**Residual farm products**" has the same meaning as in section 939.01 of the Revised Code.

(DD) "**Voluntary nutrient management plan**" means any of the following:

- (1) A nutrient management plan that is in the form of the Ohio nutrient management workbook made available by the Ohio state university;
- (2) A comprehensive nutrient management plan developed by the United States department of agriculture natural resources conservation service, a technical service provider certified by the conservation service, or a person authorized by the conservation service to develop a plan;
- (3) A document that is equivalent to a plan specified in division (DD)(1) or (2) of this section, that is in a form approved by the director or the director's designee, and that contains at least all of the following information:
 - (a) Results of soil tests conducted on land subject to the plan that comply with the field office technical guide established by the conservation service and adopted by the director in rules adopted under division (E) of section 939.02 of the Revised Code and that are not older than three years;
 - (b) Documentation of the method and seasonal time of utilization and application of nutrients;
 - (c) Identification of all nutrients applied, including manure, fertilizer, sewage sludge, and biodigester residue;
 - (d) Field information regarding land subject to the plan, including the location, spreadable acreage, crops grown, and actual and projected yields.

Amended by 131st General Assembly File No. TBD, HB 64, §101.01, eff. 1/1/2016.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Amended by 129th General Assembly File No.191, HB 420, §1, eff. 3/27/2013.

Effective Date: 10-29-1996

905.32 Application for license.

(A) No person shall manufacture or distribute in this state any type of fertilizer until a license to manufacture or distribute has been obtained by the manufacturer or distributor from the department of agriculture upon payment of a five-dollar fee:

- (1) For each fixed (permanent) location at which fertilizer is manufactured in this state;
- (2) For each mobile unit used to manufacture fertilizer in this state;
- (3) For each location out of the state from which fertilizer is distributed into this state ;
- (4) For each location in this state from which fertilizer is distributed in this state.

All licenses shall be valid for one year beginning on the first day of December of a calendar year through the thirtieth day of November of the following calendar year. A renewal application for a license shall be submitted no later than the thirtieth day of November each year. A person who submits a renewal application for a license after the thirtieth day of November shall include with the application a late filing fee of ten dollars.

(B) An application for a license shall include:

- (1) The name and address of the licensee;
- (2) The name and address of each bulk distribution point in the state, not licensed for fertilizer manufacture and distribution.

The name and address shown on the license shall be shown on all labels, pertinent invoices, and bulk storage for fertilizers distributed by the licensee in this state.

(C) The licensee shall inform the director of agriculture in writing of additional distribution points established during the period of the license.

(D) All money collected under this section shall be credited to the pesticide, fertilizer, and lime program fund created in section 921.22 of the Revised Code.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Amended by 128th General Assembly File No.9, HB 1, §101.01, eff. 7/17/2009.
Effective Date: 10-29-1996; 06-20-2005

905.321 Certification required.

(A) Beginning September thirtieth of the third year after the effective date of this section, no person shall apply fertilizer for the purposes of agricultural production unless that person has been certified to do so by the director of agriculture under this section and rules or is acting under the instructions and control of a person who is so certified.

(B) A person shall be certified to apply fertilizer for purposes of agricultural production in accordance with rules. A person that has been so certified shall comply with requirements and procedures established in those rules.

(C) A person that has been licensed as a commercial applicator under section 921.06 of the Revised Code or as a private applicator under section 921.11 of the Revised Code may apply to be certified under this section, but shall not be required to pay the application fee for certification established in rules adopted under section 905.322 of the Revised Code.

Added by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

905.322 Rules and regulations regarding fertilizer application.

(A) The director of agriculture shall adopt rules in accordance with Chapter 119. of the Revised Code that do all of the following:

(1) Create a fertilizer applicator certification program pursuant to section 905.321 of the Revised Code that does all of the following:

(a) Educates an applicant for certification on the time, place, form, amount, handling, and application of fertilizer;

(b) Serves as a component of a comprehensive state nutrient reduction strategy addressing all sources of relevant nutrients;

(c) Supports generally practical and economically feasible best management practices.

(2) Establish all of the following concerning certifications that are required by section 905.321 of the Revised Code:

(a) The amount of the fee that must be submitted with an application for certification, if applicable, provided that the fee shall not exceed the fee established in rules adopted under section 921.16 of the Revised Code for a private pesticide applicator license issued under section 921.11 of the Revised Code;

(b) Information that must be included with an application for certification;

(c) Procedures for the issuance, renewal, and denial of certifications;

(d) Grounds for the denial of certifications;

(e) Requirements and procedures governing training that must be successfully completed in order for a person to be certified;

(f) Requirements for the maintenance of records by a person that is certified, including, but not limited to, the date of application of fertilizer, the place of application of fertilizer, the rate of application of fertilizer, an analysis of the fertilizer, and the name of the person applying the fertilizer. The rules shall stipulate that the records shall be maintained for not more than three years from the date of the fertilizer application and shall not be required to be submitted to the director or the director's designee, but shall be made available to the director or the director's designee for review upon request.

(3) Establish requirements and procedures with which a licensee or registrant must comply when filing an annual tonnage report under section 905.36 of the Revised Code, including the date on which the report must be filed.

(B) The director may adopt rules in accordance with Chapter 119. of the Revised Code that do all of the following:

(1) Establish criteria in accordance with which a person may be exempt from any training that is required in order to be certified under section 905.321 of the Revised Code;

(2) Specify any type of cultivation that is to be excluded from the definition of "agricultural production";

(3) Define "under the instructions and control" for the purpose of section 905.321 of the Revised Code.

905.323 Voluntary nutrient management plans.

- (A) (1) A person who owns or operates agricultural land may do any of the following:
- (a) Develop a voluntary nutrient management plan;
 - (b) Request any person to develop a voluntary nutrient management plan on behalf of the person who owns or operates the agricultural land;
 - (c) Request the supervisors of the applicable soil and water conservation district organized in accordance with Chapter 940. of the Revised Code to develop a voluntary nutrient management plan on the person's behalf.
- (2) A person who owns or operates agricultural land and who has developed or has had developed a voluntary nutrient management plan under division (A)(1)(a) or (b) of this section, as applicable, may request the supervisors of the applicable soil and water conservation district, the director of agriculture, or the director's designee to approve the plan. The supervisors, director, or director's designee shall approve or disapprove the plan.
- (B) If a voluntary nutrient management plan is disapproved under this section, the person who developed the plan or had it developed may request an adjudication hearing in accordance with Chapter 119. of the Revised Code.
- (C) A person whose voluntary nutrient management plan is disapproved may appeal to the court of common pleas of Franklin county.
- (D) After a voluntary nutrient management plan has been approved under this section, the person who developed the plan or had it developed shall submit the plan once every five years to the supervisors of the applicable soil and water conservation district or the director for review. If after the review the supervisors or the director determines that the plan needs to be modified, the supervisors or director shall notify the person who submitted the plan. The person then shall provide for the modification of the plan. The procedures and requirements established in divisions (A) to (C) of this section apply to a modification of the plan.
- Amended by 131st General Assembly File No. TBD, HB 64, §101.01, eff. 1/1/2016.
Added by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

905.324 Confidentiality.

- (A) Except as provided in division (B) of this section, the director of agriculture, an employee of the department of agriculture, the supervisors of a soil and water conservation district, an employee of a district, and a contractor of the department or a district shall not disclose information, including data from geographic information systems and global positioning systems, used in the development or approval of or contained in a voluntary nutrient management plan.
- (B) The director or the supervisors of a district may release or disclose information specified in division (A) of this section to a person or a federal, state, or local agency working in cooperation with the director or the supervisors in the development or approval of a voluntary nutrient management plan if the director or supervisors determine that the person or federal, state, or local agency will not subsequently disclose the information to another person who is not authorized by the person who owns or operates agricultural land to receive the information. The director or the supervisors of a district may release or disclose information specified in division (A) of this section to the extent required by the "Federal Water Pollution Control Act" as defined in section 6111.01 of the Revised Code.
- Added by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

905.325 Civil actions; affirmative defenses.

In a private civil action for claims involving or resulting from the application of fertilizer, it is an affirmative defense if all of the following apply:

- (A) The person applying the fertilizer is certified or is applying fertilizer under the instruction and control of a person who is certified under section 905.321 of the Revised Code and rules.
- (B) Records have been properly maintained for the application of fertilizer as required by rules adopted under division (A)(2)(f) of section 905.322 of the Revised Code.
- (C) The fertilizer has been applied according to and in substantial compliance with a voluntary nutrient management plan developed under section 905.323 of the Revised Code, provided that the plan has been

approved under that section or developed by the supervisors of the applicable soil and water conservation district under that section.

Added by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

905.326 Application of fertilizer in western basin.

- (A) (1) Except as provided in division (B) of this section, no person in the western basin shall surface apply fertilizer under either of the following circumstances:
- (a) On snow-covered or frozen soil;
 - (b) When the top two inches of soil are saturated from precipitation.
- (2) Except as provided in division (B) of this section, no person in the western basin shall surface apply fertilizer in a granular form when the local weather forecast for the application area contains greater than a fifty per cent chance of precipitation exceeding one inch in a twelve-hour period.
- (B) Division (A) of this section does not apply if a person in the western basin applies fertilizer under any of the following circumstances:
- (1) The fertilizer is injected into the ground.
 - (2) The fertilizer is incorporated within twenty-four hours of surface application.
 - (3) The fertilizer is applied onto a growing crop.
- (C) (1) Upon receiving a complaint by any person or upon receiving information that would indicate a violation of this section, the director or the director's designee may investigate or make inquiries into any alleged failure to comply with this section.
- (2) After receiving a complaint by any person or upon receiving information that would indicate a violation of this section, the director or the director's designee may enter at reasonable times on any private or public property to inspect and investigate conditions relating to any such alleged failure to comply with this section.
- (3) If an individual denies access to the director or the director's designee, the director may apply to a court of competent jurisdiction in the county in which the premises is located for a search warrant authorizing access to the premises for the purposes of this section.
- (4) The court shall issue the search warrant for the purposes requested if there is probable cause to believe that the person is not in compliance with this section. The finding of probable cause may be based on hearsay, provided that there is a reasonable basis for believing that the source of the hearsay is credible.
- (D) This section does not affect any restrictions established in Chapter 903. of the Revised Code or otherwise apply to those entities or facilities that are permitted as concentrated animal feeding facilities under that chapter.
- (E) As used in this section, "western basin" means land in the state that is located in the following watersheds identified by the specified United States geological survey hydrologic unit code:
- (1) St. Marys watershed, hydrologic unit code 04100004;
 - (2) Auglaize watershed, hydrologic unit code 04100007;
 - (3) Blanchard watershed, hydrologic unit code 04100008;
 - (4) Sandusky watershed, hydrologic unit code 04100011;
 - (5) Cedar-Portage watershed, hydrologic unit code 04100010;
 - (6) Lower Maumee watershed, hydrologic unit code 04100009;
 - (7) Upper Maumee watershed, hydrologic unit code 04100005;
 - (8) Tiffin watershed, hydrologic unit code 04100006;
 - (9) St. Joseph watershed, hydrologic unit code 04100003;
 - (10) Ottawa watershed, hydrologic unit code 04100001;
 - (11) River Raisin watershed, hydrologic unit code 04100002.
- (F) Notwithstanding section 905.31 of the Revised Code, as used in this section, "fertilizer" means nitrogen or phosphorous.

Added by 131st General Assembly File No. TBD, SB 1, §1, eff. 7/3/2015.

905.327 Penalty for unlawful application of fertilizer.

- (A) The director of agriculture may assess a civil penalty against a person that violates section 905.326 of the Revised Code. The director may impose a civil penalty only if the director affords the person an opportunity for

an adjudication hearing under Chapter 119. of the Revised Code to challenge the director's determination that the person violated section 905.326 of the Revised Code. The person may waive the right to an adjudication hearing.

(B) If the opportunity for an adjudication hearing is waived or if, after an adjudication hearing, the director determines that a violation has occurred or is occurring, the director may issue an order requiring compliance with section 905.326 of the Revised Code and assess the civil penalty. The order and the assessment of the civil penalty may be appealed in accordance with section 119.12 of the Revised Code.

(C) A person that has violated section 905.326 of the Revised Code shall pay a civil penalty in a n amount established in rules. Each day during which fertilizer is applied in violation of section 905.326 of the Revised Code constitutes a separate violation.

(D) The director shall adopt rules in accordance with Chapter 119. of the Revised Code that establish the amount of t he civil penalty assessed under this section. The civil penalty shall not be more than ten thousand dollars for each violation.

(E) For purposes of this section, "rule" means a rule adopted under division (D) of this section.

Added by 131st General Assembly File No. TBD, SB 1, §1, eff. 7/3/2015.

905.33 Registering custom mixed fertilizer as a specialty fertilizer.

(A) Except as provided in division (C) of this section, no person shall distribute in this state a specialty fertilizer until it is registered by the manufacturer or distributor with the department of agriculture. An application, in duplicate, for each brand and product name of each grade of specialty fertilizer shall be made on a form furnished by the director of agriculture and shall be accompanied with a fee of fifty dollars for each brand and product name of each grade. Labels for each brand and product name of each grade shall accompany the application. Upon the approval of an application by the director, a copy of the registration shall be furnished the applicant. All registrations shall be valid for one year beginning on the first day of December of a calendar year through the thirtieth day of November of the following calendar year.

(B) An application for registration shall include the following:

- (1) Name and address of the manufacturer or distributor;
- (2) The brand and product name;
- (3) The grade;
- (4) The guaranteed analysis;
- (5) The package sizes for persons that package fertilizers only in containers of ten pounds or less.

(C) (1) No person who engages in the business of applying custom mixed fertilizer to lawns, golf courses, recreation areas, or other real property that is not used for agricultural production shall be required to register the custom mixed fertilizer as a specialty fertilizer in accordance with division (A) of this section if the fertilizer ingredients of the custom mixed fertilizer are registered as specialty fertilizers and the inspection fee described in division (A) of section 905.36 of the Revised Code is paid.

(2) No person who engages in the business of blending custom mixed fertilizer for use on lawns, golf courses, recreation areas, or other real property that is not used for agricultural production shall be required to register the custom mixed fertilizer as a specialty fertilizer in accordance with division (A) of this section if the facility holds a nonagricultural production custom mixed fertilizer blender license issued under section 905.331 of the Revised Code.

(D) A person who engages in the business of applying or blending custom mixed fertilizer as described in division (C) of this section shall maintain an original or a copy of an invoice or document of sale for all fertilizer the person applies or distributes for one year following the date of the application or distribution, and, upon the director's request, shall furnish the director with the invoice or document of sale for the director's review.

(E) All money collected under this section shall be credited to the pesticide, fertilizer, and lime program fund created in section 921.22 of the Revised Code.

Amended by 128th General Assembly File No.9, HB 1, §101.01, eff. 7/17/2009.
Effective Date: 10-29-1996; 06-30-2005

905.331 Nonagricultural production custom mixed fertilizer blender license.

No person who engages in the business of blending a custom mixed fertilizer for use on lawns, golf courses, recreation areas, or other real property that is not used for agricultural production shall fail to register a specialty

fertilizer in accordance with division (A) of section 905.33 of the Revised Code unless the person has obtained an annual nonagricultural production custom mixed fertilizer blender license from the director of agriculture.

A license issued under this section shall be valid from the first day of December of a calendar year through the thirtieth day of November of the following calendar year. A renewal application for a nonagricultural production custom mixed fertilizer blender license shall be submitted to the director no later than the thirtieth day of November each year and shall include the name and address of the applicant and of the premises where the blending occurs and a one-hundred-dollar fee. A person who submits a renewal application for a license after the thirtieth day of November shall include with the application a late filing fee of ten dollars. All nonagricultural production custom mixed fertilizer blender licenses expire on the thirtieth day of November each year.

A person holding a nonagricultural production custom mixed fertilizer blender license shall pay the inspection fees described in division (A) of section 905.36 of the Revised Code for each product being blended.

All money collected under this section shall be credited to the pesticide, fertilizer, and lime program fund created in section 921.22 of the Revised Code.

Amended by 128th General Assembly File No.9, HB 1, §101.01, eff. 7/17/2009.

Effective Date: 10-29-1996; 06-30-2005

905.34 Exemption for distributor.

No distributor shall be required to obtain a license under division (A) of section 905.32 of the Revised Code to distribute fertilizer if the fertilizer is registered under division (A) of section 905.33 of the Revised Code.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 07-01-1968

905.35 Label information.

(A) No person shall distribute in this state any type of fertilizer in packages unless the packages have placed on or affixed to them in legibly written or printed form the following:

- (1) Net weight of the contents;
- (2) Brand and product name;
- (3) Name and address of the manufacturer or distributor that appears on the license or registration;
- (4) Grade expressed in whole numbers only for all mixed fertilizers except specialty fertilizers;
- (5) Guaranteed analysis.

(B) No person shall distribute any type of fertilizer in this state in bulk unless the purchaser is supplied, upon delivery, with a shipping invoice containing the following information:

- (1) Name and address of the licensee, or registrant;
- (2) Name and address of the purchaser, and county of destination;
- (3) Date of sale;
- (4) Product name;
- (5) Net weight;
- (6) Grade expressed in whole numbers only for all mixed fertilizers, and other claims, if any. The weight and grade of each material in the mixture and the total weight of the mixture may be stated in lieu of a statement of the grade of the mixture.

(C) No person shall distribute in this state any type of fertilizer in bulk unless the bulk storage is properly labeled with the information required by divisions (B)(1), (4), and (6) of this section. Shipping invoices shall be available for all bulk fertilizer stored at locations other than a place of manufacture.

(D) No person shall manufacture or distribute in this state mixed fertilizer in bulk unless the fertilizers and other materials combined to create the mixed fertilizer are uniformly mixed and present in equal percentages throughout the mixed fertilizer. The director of agriculture may take samples and use the information provided to the purchaser under division (B) of this section to analyze any mixed fertilizer in bulk and determine whether it has been uniformly mixed.

Effective Date: 10-29-1996

905.36 Inspection fees - annual statement of tonnage.

(A) A licensee or registrant shall pay the director of agriculture an inspection fee of twenty-five cents per ton for all of the following, as applicable:

(1) All fertilizer that the licensee distributes in this state to a person that has not been issued a license under section 905.32 of the Revised Code;

(2) All fertilizer that the licensee applies in this state for purposes of agricultural production and all fertilizer that is applied in this state on behalf of the licensee by an employee or contractor who is certified under section 905.321 of the Revised Code;

(3) All fertilizer that the registrant distributes in this state.

However, the inspection fee does not apply to packaged fertilizers that are in containers of ten pounds or less.

(B) Every licensee or registrant shall file with the director an annual tonnage report in accordance with rules. The report shall be filed on or before the date specified in rules. The licensee or registrant shall include with the report the inspection fee at the rate stated in division (A) of this section. For a tonnage report that is not filed or payment of inspection fees that is not made on or before the date specified in rules, a penalty of fifty dollars or ten per cent of the amount due, whichever is greater, shall be assessed against the licensee or registrant. The amount of fees due, plus penalty, shall constitute a debt and become the basis of a judgment against the licensee or registrant. For tonnage reports found to be incorrect, a penalty of fifteen per cent of the amount due shall be assessed against the licensee or registrant and shall constitute a debt and become the basis of a judgment against the licensee or registrant.

(C) No information furnished under this section shall be disclosed by any employee of the department of agriculture in such a way as to divulge the operation of any person required to make such a report. The filing by a licensee or registrant of a tonnage report required by division (B) of this section thereby grants permission to the director to verify the same with the records of the licensee or registrant.

(D) All money collected under this section shall be credited to the pesticide, fertilizer, and lime program fund created in section 921.22 of the Revised Code.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Amended by 128th General Assembly File No. 9, HB 1, §101.01, eff. 7/17/2009.

Effective Date: 10-29-1996; 06-30-2005

905.37 Statement and reports by director.

(A) The director of agriculture may distribute annual statements of fertilizer sales by grades of materials and mixed fertilizer by counties, in a manner prescribed by the director.

(B) The director may publish annually a report of the analysis of fertilizers inspected.

(C) The director may distribute a state fertilizer usage report by grade of materials and mixed fertilizers for each month.

Effective Date: 10-29-1996; 06-30-2005

905.39 Sampling and analysis.

(A) The director of agriculture shall inspect and sample any fertilizer within the state to such an extent as the director considers necessary and make an analysis where need is indicated to determine whether the fertilizer is in compliance with sections 905.31 to 905.503 of the Revised Code and rules . The director may enter upon any public or private premises or conveyances during regular business hours in order to have access to fertilizer subject to sections 905.31 to 905.503 of the Revised Code and rules .

(B) The director shall maintain the services necessary to effectively administer and enforce sections 905.31 to 905.503 of the Revised Code and rules . The methods of sampling and analysis shall be those adopted by the association of official analytical chemists or other sources prescribed by the director.

(C) The results of official analysis of any sample of fertilizer found to be in violation of any provisions of sections 905.31 to 905.503 of the Revised Code or any rule shall be forwarded to the licensee or registrant. A licensee or registrant may request a portion of any such sample, provided that the request is made not more than thirty days after the date of the analysis report.

(D) Analytical tolerances shall be governed by rules .

(E) If the director is denied access to any premises where access is sought for the purpose of inspection and sampling, the director may apply to any court of competent jurisdiction for a search warrant authorizing access to the premises for that purpose. The court, upon application, may issue the search warrant for the purpose requested.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.
Effective Date: 10-29-1996

905.40 Administrative rules.

The director of agriculture shall adopt and enforce uniform rules:

- (A) Governing the storing and handling of anhydrous ammonia that is used for agricultural purposes;
- (B) For safety in the design, construction, location, installation, or operation of anhydrous ammonia systems for agricultural use. In addition, with regard to an anhydrous ammonia system that is used for agricultural purposes, the rules shall establish standards and procedures for the approval or disapproval of the design and construction of anhydrous ammonia systems and procedures for applying for such approval, including the form of the application.
- (C) Requiring that guaranteed analysis be stated in a form other than that defined in section 905.31 of the Revised Code when another form will not impose an economic hardship on manufacturers, distributors, and users of anhydrous ammonia by reason of conflicting labeling requirements among the states.

The director shall adopt rules under this section in accordance with Chapter 119. of the Revised Code.

Amended by 129th General Assembly File No.191, HB 420, §1, eff. 3/27/2013.

Amended by 129th General Assembly File No.144, SB 309, §1, eff. 12/26/2012.

Amended by 129th General Assembly File No.125, SB 315, §101.01, eff. 9/10/2012.

Effective Date: 10-29-1996

905.41 Design and construction of storage facilities for anhydrous ammonia.

(A) A storage facility for anhydrous ammonia that is used for agricultural purposes shall be designed and constructed in accordance with rules . On and after September 10, 2012, no person shall construct a storage facility for anhydrous ammonia that is used for agricultural purposes without applying for and receiving approval of the design of the facility and approval to construct the facility from the director of agriculture in accordance with rules.

(B) Upon the submission of an application to the director for the approval of the design and construction of a storage facility for anhydrous ammonia that is used for agricultural purposes in accordance with rules , the applicant shall submit written notification of the application to all of the following:

- (1) The board of township trustees of the township or the legislative authority of the municipal corporation, as applicable, in which the storage facility is proposed to be located;
- (2) The county sheriff, or the police chief of the police department of a municipal corporation, township, or township or joint township police district, as applicable, with jurisdiction over the location where the storage facility is proposed to be located;
- (3) The fire chief of the fire department with jurisdiction over the location where the storage facility is proposed to be located.

(C) Prior to approving or disapproving a storage facility for anhydrous ammonia that is used for agricultural purposes, the director may take into consideration any past violations of an applicable state or federal law pertaining to environmental protection or the environmental laws of another country or any conviction of or guilty plea to a violation of section 901.511 of the Revised Code or a felony drug offense as defined in section 2925.01 of the Revised Code related to the use and storage of chemicals used for agriculture by the owner of the storage facility.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Added by 129th General Assembly File No.125, SB 315, §101.01, eff. 9/10/2012.

905.411 Orders prohibiting use of anhydrous ammonia equipment or system.

The director of agriculture may issue an order prohibiting the use of anhydrous ammonia equipment or an anhydrous ammonia system found not to comply with rules adopted under division (A) or (B) of section 905.40 of the Revised Code, as applicable. No person shall use the anhydrous ammonia equipment or system until a release in writing is issued by the director.

The director shall not issue a release until both of the following have occurred:

- (A) The director has inspected the anhydrous ammonia equipment or system and has found that the anhydrous ammonia equipment or system complies with rules adopted under division (A) or (B) of section 905.40 of the Revised Code , as applicable.

(B) The person in control of the anhydrous ammonia equipment or system at the time of the noncompliance has paid the director in an amount equal to all expenses incurred by the director due to the order prohibiting use of the anhydrous ammonia equipment or system.

Amended by 129th General Assembly File No.191, HB 420, §1, eff. 3/27/2013.

Renumbered from § 905.461 and amended by 129th General Assembly File No.125, SB 315, §101.01, eff. 9/10/2012.

905.42 Manufacturing or distributing substance injurious to crop growth or deleterious to soil.

No person shall manufacture or distribute in this state fertilizer containing any substance that is injurious to crop growth or deleterious to soil, provided, that the effects on plants shall not be deemed to be injurious when this is the purpose for which the substance was applied, in accordance with the label claims and recommendations.

Effective Date: 07-01-1968

905.43 Mislabeled or misrepresented fertilizer.

(A) No person shall distribute mislabeled fertilizer. A fertilizer is mislabeled if any false or misleading statement appears on or is attached to the container or on the pertinent invoice or delivery ticket, if false or misleading statements appear in any advertising material, or if the fertilizer is not uniformly mixed.

(B) No person shall sell, offer, or expose for sale less than the quantity of fertilizer that the person represents. No person shall take more than the quantity of fertilizer that the person represents when, as a buyer, the person furnishes the weight or measure by which the quantity is determined.

(C) No person shall misrepresent the price of any fertilizer or related service sold, offered, exposed, or advertised for sale by weight, measure, or count, nor represent the price in any manner calculated or tending to mislead or in any way deceive a person.

(D) No person shall distribute any fertilizer or mixed fertilizer other than by net weight, unless the director of agriculture has approved the device that is used to measure the fertilizer or mixed fertilizer.

(E) A meter may be used to deliver fertilizer by quantity if the meter bears a current, valid seal indicating it has been tested and approved by the division of weights and measures in the department of agriculture or by a sealer of weights and measures of a county or municipal corporation.

Effective Date: 10-29-1996

905.44 Administrative rules.

(A) The director of agriculture may adopt and enforce rules :

(1) Governing the storing and handling of fertilizers;

(2) For safety in the design, construction, location, installation, or operation of equipment, containment structures, and buildings for storing and handling fertilizers;

(3) Requiring that guaranteed analysis be stated in a form other than that defined in section 905.31 of the Revised Code when another form will not impose an economic hardship on manufacturers, distributors, and users of fertilizer by reason of conflicting labeling requirements among the states.

As used in division (A) of this section, "fertilizer" does not include anhydrous ammonia.

(B) The rules adopted by the director under this section shall be adopted in accordance with Chapter 119. of the Revised Code.

Amended by 129th General Assembly File No.191, HB 420, §1, eff. 3/27/2013.

Effective Date: 10-29-1996

905.45 Refusing, suspending or revoking of registration or license.

(A) The director of agriculture may do any of the following upon a finding that a registrant, licensee, certificate holder, or applicant has violated any provision of sections 905.31 to 905.503 of the Revised Code or any rules:

(1) Revoke the registration of any grade and brand name of fertilizer;

(2) Revoke any license or certificate;

(3) Suspend any registration, license, or certificate;

(4) Refuse to register any grade and brand name of fertilizer;

(5) Refuse to license or certify any applicant.

A registrant, licensee, certificate holder, or applicant shall be given an opportunity to appear at an adjudication hearing conducted in accordance with Chapter 119. of the Revised Code.

(B) The director, prior to a hearing, may deny, suspend, revoke, refuse to renew, or modify any provision of a fertilizer applicator certificate issued under section 905.321 of the Revised Code and rules if the director has substantial reason to believe the certificate holder has recklessly applied fertilizer in such a manner that an emergency exists that presents a clear and present danger to human or animal health.

The director shall provide an opportunity for a hearing without delay after such a denial, suspension, revocation, refusal to renew, or modification.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 10-29-1996

905.46 Holding fertilizer offered or exposed for sale in violation of law.

The director of agriculture may issue an order to the owner or custodian of any lot of fertilizer requiring it to be held at a designated place when the director has found the fertilizer to have been offered or exposed for sale in violation of sections 905.31 to 905.503 of the Revised Code or any rule . A fertilizer shall be held until a release in writing is issued by the director. A release shall not be issued until sections 905.31 to 905.503 of the Revised Code and rules are complied with and until all costs and expenses incurred in connection with the violation have been paid by the manufacturer, distributor, licensee, or registrant.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 10-29-1996

905.47 Condemnation procedures.

Any lot of fertilizer not in compliance with sections 905.31 to 905.503 of the Revised Code or any rule is subject to seizure on complaint of the director of agriculture to a court of competent jurisdiction in the county in which the fertilizer is located. The court upon a finding that the fertilizer is in violation of sections 905.31 to 905.503 of the Revised Code or any rule shall order the condemnation of the fertilizer, and it shall be disposed of in a manner consistent with the laws of this state. The court shall not order the condemnation of the fertilizer without first giving the manufacturer or distributor an opportunity to reprocess or relabel the fertilizer to bring it into compliance with sections 905.31 to 905.503 of the Revised Code and rules .

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 10-29-1996

905.48 Injunctions.

In addition to the remedies provided and irrespective of whether or not there exists any adequate remedy at law, the director of agriculture may apply to the court of common pleas in the county wherein any of the provisions of sections 905.31 to 905.503 of the Revised Code are being violated for a temporary or permanent injunction restraining any person from the violation.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 10-29-1996

905.49 Restrictions not applicable to certain importers and manufacturers.

Nothing in sections 905.31 to 905.503 of the Revised Code shall be considered either to restrict the distribution of fertilizers to each other by importers or manufacturers, who mix fertilizer materials for distribution, or to prevent the free and unrestricted shipment of fertilizer to manufacturers who are licensed or have registered their specialty fertilizer grades and brand names as required by sections 905.31 to 905.503 of the Revised Code.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 10-29-1996

905.50 Mislabeled fertilizer.

If the director of agriculture has taken an official sample of a fertilizer or mixed fertilizer and determined that it constitutes mislabeled fertilizer pursuant to rules , the person who labeled the fertilizer or mixed fertilizer shall pay a penalty to the consumer of the mislabeled fertilizer or, if the consumer cannot be determined with reasonable diligence or is not available, to the director to be credited to the pesticide, fertilizer, and lime program

fund created under section 921.22 of the Revised Code. The amount of the penalty shall be calculated in accordance with either division (A) or (B) of this section, whichever method of calculation yields the largest amount.

(A) (1) A penalty required to be paid under this section may be calculated as follows:

(a) Five dollars for each percentage point of total nitrogen or phosphorus in the fertilizer that is below the percentage of nitrogen or phosphorus guaranteed on the label, multiplied by the number of tons of mislabeled fertilizer that have been sold to the consumer;

(b) Three dollars for each percentage point of potash in the fertilizer that is below the percentage of potash guaranteed on the label, multiplied by the number of tons of mislabeled fertilizer that have been sold to the consumer.

(2) In the case of a fertilizer that contains a quantity of nitrogen, phosphorus, or potash that is more than five percentage points below the percentages guaranteed on the label, the penalties calculated under division (A)(1) of this section shall be tripled.

(3) No penalty calculated under division (A) of this section shall be less than twenty-five dollars.

(B) A penalty required to be paid under this section may be calculated by multiplying the market value of one unit of the mislabeled fertilizer by the number of units of the mislabeled fertilizer that have been sold to the consumer.

(C) Upon making a determination under this section that a person has mislabeled fertilizer or mixed fertilizer, the director shall determine the parties to whom the penalty imposed by this section is required to be paid and, in accordance with division (A) or (B) of this section, as applicable, shall calculate the amount of the penalty required to be paid to each such party. After completing those determinations and calculations, the director shall issue to the person who allegedly mislabeled the fertilizer or mixed fertilizer a notice of violation. The notice shall be accompanied by an order requiring, and specifying the manner of, payment of the penalty imposed by this section to the parties in the amounts set forth in the determinations and calculations required by this division. The order shall be issued in accordance with Chapter 119. of the Revised Code.

No person shall violate a term or condition of an order issued under this division.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Amended by 129th General Assembly File No. 191, HB 420, §1, eff. 3/27/2013.

Amended by 128th General Assembly File No. 9, HB 1, §101.01, eff. 7/17/2009.

Effective Date: 10-29-1996; 06-30-2005

905.501 No local regulation of fertilizers.

(A) Except as provided in division (B) of this section, whenever the director of agriculture has cause to believe that a person has violated, or is violating, sections 905.31 to 905.503 of the Revised Code or rules or an order issued under those sections or rules, the director may conduct a hearing in accordance with Chapter 119. of the Revised Code to determine whether a violation has occurred. If the director determines that a violation has occurred, the director may require the violator to pay a civil penalty in accordance with the schedule of civil penalties established in rules. Each day of violation constitutes a separate violation.

(B) A person who fails to comply with rules adopted under division (A)(2)(f) of section 905.322 of the Revised Code is not subject to division (A) of this section.

Added by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

905.502 Written notice of warning.

Nothing in sections 905.31 to 905.502 of the Revised Code or rules shall be construed to require the director of agriculture to report any findings to the appropriate prosecuting authority for proceedings in the prosecution of, or issue any order or institute any enforcement procedure for, a violation of sections 905.31 to 905.502 of the Revised Code or rules when the director believes that the public interest will be best served by a suitable written notice of warning. A person who receives a written notice of warning may respond in writing to the notice.

Added by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

905.503 No local regulation of fertilizers.

(A) As used in this section:

(1) "Political subdivision" means a county, township, or municipal corporation and any other body corporate and politic that is responsible for government activities in a geographic area smaller than that of the state.

(2) "Local legislation" includes, but is not limited to, an ordinance, resolution, regulation, rule, motion, or amendment that is enacted or adopted by a political subdivision.

(B) (1) No political subdivision shall regulate the registration, packaging, labeling, sale, storage, distribution, use, or application of fertilizer, or require a person licensed or registered under sections 905.31 to 905.99 of the Revised Code to obtain a license or permit to operate in a manner described in those sections, or to satisfy any other condition except as provided by a statute or rule of this state or of the United States.

(2) No political subdivision shall enact, adopt, or continue in effect local legislation relating to the registration, packaging, labeling, sale, storage, distribution, use, or application of fertilizers.

Renumbered from § 905.501 by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Effective Date: 10-29-1996; 09-29-2005

905.51 Liming material definitions.

As used in sections 905.51 to 905.65 of the Revised Code:

(A) "**Liming material**" means all materials, the calcium and magnesium content of which is used to neutralize soil acidity, and includes the oxide, hydrate, carbonate, and silicate forms, as defined by rule, or combinations of those forms. "Liming material" includes materials such as the following:

- (1) Limestone;
- (2) Hydrated lime;
- (3) Burnt lime;
- (4) Industrial by-product;
- (5) Marl and shell.

(B) "**Bulk**" means in a nonpackaged form.

(C) "**Label**" means any written or printed matter on the package, or tag attached thereto.

(D) "**Manufacture**" means to process, crush, grind, pelletize, or blend.

(E) "**Person**" means any partnership, association, firm, or corporation, company, society, individual or combination of individuals, institution, park, or public agency administered by the state or any subdivision of the state.

(F) "**Product name**" means a coined or specific designation applied to an individual liming material.

(G) "**Sale**" means an exchange or offer to exchange ownership, or a transfer or offer to transfer custody.

(H) "**Ton**" means a net weight of two thousand pounds.

(I) "**Metric ton**" means a measure of weight equal to one thousand kilograms.

(J) "**Pelletized lime**" means a finely ground limestone product or manufactured material that is held together in a granulated form by a water soluble binding agent and that is capable of neutralizing soil acidity.

(K) "**Water treatment lime sludge**" means lime sludge generated during the process of treating water supplies having levels of heavy metals at or below the levels permitted in standards adopted by the director of environmental protection governing the land application of lime sludge so generated.

(L) "**Distribute**" means to offer for sale, sell, barter, or otherwise supply liming material in this state.

(M) "**Official sample**" means any sample of liming material taken and designated as "official" by the director of agriculture or the director's designee.

(N) "**Effective neutralizing power**" means the neutralizing value of liming material based on the total neutralizing power and fineness that is expressed as a dry weight percentage.

(O) "**Fineness index**" means the percentage by weight of a liming material that will pass designated sieves, calculated to account for particle size distribution by adding the amounts arrived at under divisions (O)(1), (2), and (3) of this section as follows:

- (1) Two-tenths multiplied by the percentage of material passing a number eight United States standard sieve minus the percentage of material passing a number twenty United States standard sieve.
- (2) Six-tenths multiplied by the percentage of material passing a number twenty United States standard sieve minus the percentage of material passing a number sixty United States standard sieve.
- (3) One multiplied by the percentage of material passing a number sixty United States standard sieve.

Amended by 128th General Assembly File No.9, HB 1, §101.01, eff. 7/17/2009.

Effective Date: 10-29-1996

905.52 Liming material license.

(A) Except as provided in section 905.53 of the Revised Code, no person shall manufacture, sell, or distribute in this state liming material without a license to do so issued by the department of agriculture.

(B) Each such license expires on the thirty-first day of December of each year and shall be renewed according to the standard renewal procedure of sections 4745.01 to 4745.03 of the Revised Code.

(C) Each application for issuance or renewal of such a license shall:

(1) Include the name and address of the applicant and the name and address of each bulk distribution point from which the applicant's liming material will be distributed in this state;

(2) Be accompanied by a license fee of fifty dollars:

(a) For each location at which liming material is manufactured in this state;

(b) For each location out of the state from which liming material is distributed or sold in this state to nonlicensees.

(3) Be accompanied by a label for each product name and grade.

(D) The name and address of the applicant shown on the application shall be shown on all labels, pertinent invoices, and bulk storage for liming material distributed or sold by the licensee in this state.

(E) The licensee shall inform the department in writing of additional distribution points established during the period of the license.

(F) All money collected under this section shall be credited to the pesticide, fertilizer, and lime program fund created in section 921.22 of the Revised Code.

Amended by 128th General Assembly File No.9, HB 1, §101.01, eff. 7/17/2009.

Effective Date: 10-29-1996

905.53 Exemption from license requirement.

No person shall be required to obtain a license to sell or distribute liming material under section 905.52 of the Revised Code if the manufacturer of the liming material that the person distributes or sells is licensed under division (A) of section 905.52 of the Revised Code.

Effective Date: 10-29-1996

905.54 Standards of fineness.

No person shall sell or distribute any crushed or ground liming material in this state, except the oxide and hydrate forms, unless it is processed to meet the standard of fineness of one of the grades listed in this section and contains all the fines of fracture.

(A) "Superfine liming materials" shall be of such degree of fineness that not less than eighty per cent of weight passes a number one hundred United States standard sieve, not less than ninety-five per cent of weight passes a number sixty United States standard sieve, not less than one hundred per cent of weight passes a number twenty United States standard sieve, and not less than one hundred per cent of weight passes a number eight United States standard sieve.

(B) "Pulverized liming materials" shall be of such degree of fineness that not less than sixty per cent of weight passes a number one hundred United States standard sieve, not less than seventy per cent of weight passes a number sixty United States standard sieve, not less than ninety-five per cent of weight passes a number twenty United States standard sieve, and not less than one hundred per cent of weight passes a number eight United States standard sieve.

(C) "Ground liming materials" shall be of such degree of fineness that not less than forty per cent of weight passes a number one hundred United States standard sieve, not less than fifty per cent of weight passes a number sixty United States standard sieve, not less than seventy per cent of weight passes a number twenty United States standard sieve, and not less than ninety-five per cent of weight passes a number eight United States standard sieve.

(D) "Meal liming materials" shall be of such degree of fineness that not less than twenty per cent of weight passes a number one hundred United States standard sieve, not less than thirty per cent of weight passes a number sixty United States standard sieve, not less than fifty per cent of weight passes a number twenty United States standard sieve, and not less than eighty per cent of weight passes a number eight United States standard sieve.

(E) "Screened liming materials" shall be of such degree of fineness that not less than five per cent of weight passes a number one hundred United States standard sieve, not less than fifteen per cent of weight passes a number sixty United States standard sieve, not less than forty per cent of weight passes a number twenty United States standard sieve, and not less than eighty per cent of weight passes a number eight United States standard sieve.

(F) All liming products intended for pelletization shall show on the label the percentage of material passing the numbers eight, twenty, sixty, and one hundred United States standard sieves before the product is pelletized.

Effective Date: 10-29-1996

905.55 Label information.

(A) No person shall distribute or sell liming material in packages that do not bear a label in legibly written or printed form that includes the following:

- (1) Net weight of contents in pounds as determined by a sealed weighing device;
- (2) Product name and type of liming material, which shall include the grade as defined in section 905.54 of the Revised Code, for all except the oxide and hydrate forms;
- (3) Name and address of manufacturer, seller, or distributor;
- (4) Guaranteed analysis, in whole numbers only, which includes:
 - (a) The minimum percentages of weight of elemental calcium and magnesium;
 - (b) The total neutralizing power expressed as weight per cent of calcium carbonate, as determined by the methods prescribed by the association of official analytical chemists;
 - (c) The minimum percentages of weight passing through numbers eight, twenty, sixty, and one hundred United States standard sieves;
 - (d) The effective neutralizing power expressed on the basis of pounds per ton as a percentage of the fineness index, multiplied by the total neutralizing power and percentage of dry matter.

(B) No person shall sell or distribute liming material in bulk, unless the purchaser is supplied, upon delivery, with a delivery ticket containing the information required in division (A) of this section, and:

- (1) The name and address of the purchaser;
- (2) The date of sale.

(C) Shipping invoices or notices shall be available for all bulk liming material stored at locations other than a place of manufacture.

Effective Date: 10-29-1996

905.56 Annual tonnage report - inspection fee.

(A) Each licensee shall file with the department of agriculture an annual tonnage report that includes the number of net tons of liming material sold or distributed to a non-licensee in this state, by county, by oxide and hydrate forms, and by grade as defined in section 905.54 of the Revised Code, within forty days after the thirty-first day of December of each calendar year. The inspection fee at the rate stated in division (B) of this section shall accompany this report.

(B) Each licensee who sells or distributes more than twenty-five hundred tons of agricultural liming material in this state shall pay to the department an inspection fee. The inspection fee is one fourth of one cent for each ton in excess of twenty-five hundred tons, as reported in the tonnage report required by division (A) of this section. The maximum inspection fee is three hundred dollars.

(C) If a tonnage report is not filed, or if the inspection fee is not paid within ten days after the due date, a penalty of ten per cent of the amount due, with a minimum penalty of ten dollars, shall be assessed against the licensee. The amount of fee due, plus penalty, shall constitute a debt and shall become the basis of a judgment against the licensee. Such remedy is in addition to the remedy provided in section 905.62 of the Revised Code.

(D) The director of agriculture may inspect the inventories, books, and records of any licensee in order to verify a tonnage report. If the director finds that a tonnage report is erroneous, the director may adjust the inspection fee, may assess any balance due against the licensee, and may impose a penalty not to exceed ten per cent of the balance due, or may refund any overpayment.

(E) All money collected under this section shall be credited to the pesticide, fertilizer, and lime program fund created in section 921.22 of the Revised Code.

Amended by 128th General Assembly File No.9, HB 1, §101.01, eff. 7/17/2009.

Effective Date: 10-29-1996

905.57 Confidentiality of information.

(A) All information furnished to or procured by the director of agriculture under section 905.56 of the Revised Code is for the exclusive use and information of the director in the discharge of his official duties and is not open to the public nor to be used in any court in any action or proceeding therein unless the director is a party to such action or proceeding, but such information may be consolidated in statistical tables and published by the director in statistical form, without disclosing details of information furnished by any particular person.

(B) No person shall willfully divulge any information secured while in the employ of the department of agriculture, with respect to the transactions, property, files, records, or papers of the department, or with respect to the business of any manufacturer, seller, or distributor of agricultural liming material to any person other than the director or the superior of such employee, or when called upon to testify in an action or proceeding to which the director is a party.

Effective Date: 01-01-1968

905.58 Annual statement of liming material sales.

(A) The director of agriculture shall prepare an annual statement of liming material sales, by county and by grade, as defined in section 905.54 of the Revised Code, in a manner prescribed by the director.

(B) The director shall publish an annual report of the director's analysis of liming material that the director has inspected.

Effective Date: 10-29-1996

905.59 Sampling and analysis.

(A) The director of agriculture may inspect, sample, and analyze any liming material utilized within the state to such extent as the director considers necessary to determine whether the liming material is in compliance with sections 905.51 to 905.65 of the Revised Code, and the rules adopted under such sections. The director may enter into an agreement with a person that is not a department of agriculture employee that authorizes that person to perform the inspections, sampling, and analysis of liming material. If the director enters into an agreement, the director shall annually audit the records relating to the inspections, sampling, and analysis performed by the person.

(B) The director or a person who has entered into an agreement with the director under division (A) of this section may enter upon any public or private premises or means of conveyance at any reasonable time to have access to liming material subject to sections 905.51 to 905.65 of the Revised Code, and the rules adopted under such sections.

(C) The methods of sampling and analysis of liming materials shall be those adopted by the association of official analytical chemists or as prescribed by the director.

(D) The results of the official analysis of any sample of liming material that is found to be in violation of sections 905.51 to 905.65 of the Revised Code, or any regulation adopted under such sections, shall be forwarded to the licensee. A licensee may request a portion of any such sample if the request is made not more than thirty days after the date of the analysis report.

(E) Analytical tolerances shall be governed by rules adopted by the director, subject to Chapter 119. of the Revised Code. Effective Date: 9-30-2021

905.60 Mislabeled liming material.

(A) No person shall sell or distribute mislabeled liming material.

(B) A liming material is mislabeled if any false or misleading statement appears on its label or its pertinent invoice or delivery ticket, or if false or misleading statements appear in any advertising matter.

Effective Date: 10-29-1996

905.61 Administrative rules.

The director of agriculture may, subject to Chapter 119. of the Revised Code, adopt, amend, and enforce rules and regulations to implement sections 905.51 to 905.65, inclusive, of the Revised Code. No person shall violate any rule or regulation adopted by the director pursuant to sections 905.51 to 905.65, inclusive, of the Revised Code.

Effective Date: 01-01-1968

905.62 Revocation and suspension of license or refusal to license.

The director of agriculture may revoke any license, suspend any license, or refuse to license any applicant for a violation of sections 905.51 to 905.65, inclusive, of the Revised Code or any regulations promulgated under such sections.

Effective Date: 01-01-1968

905.63 Order to hold material.

(A) The director of agriculture may order the owner or custodian of any lot of liming material to hold it at a designated place when the director has found the liming material to have been offered or exposed for sale in violation of sections 905.51 to 905.65 of the Revised Code or any rule adopted thereunder.

(B) Such liming material shall be held until the director releases it in writing. A release shall not be issued until sections 905.51 to 905.65 of the Revised Code and the rules adopted under those sections are complied with and until all expenses incurred by the department of agriculture in connection with the violation have been paid by the manufacturer, seller, or distributor.

Effective Date: 10-29-1996

905.64 Condemnation order.

Any lot of liming material not in compliance with sections 905.51 to 905.65 of the Revised Code, or any rules adopted under those sections, is subject to seizure on the complaint of the director of agriculture to a court of competent jurisdiction in the county in which the liming material is located. If the court finds that the liming material is in violation of sections 905.51 to 905.65 of the Revised Code or any rule adopted under those sections, it shall order the condemnation of the liming material. The court shall not order the condemnation of the liming material without first giving the manufacturer, seller, or distributor an opportunity to reprocess or relabel the liming material to bring it into compliance with sections 905.51 to 905.65 of the Revised Code and the rules adopted under those sections.

Effective Date: 10-29-1996

905.65 Injunction.

In addition to the remedies provided and irrespective of whether or not there exists any adequate remedy at law, the director of agriculture may apply to the court of common pleas in the county wherein sections 905.51 to 905.65, inclusive, of the Revised Code are being violated for a temporary or permanent injunction restraining any person from such violation.

Effective Date: 01-01-1968

905.99 Penalty.

(A) Except as provided in division (B) of this section, whoever violates this chapter or rules adopted under it is guilty of a misdemeanor of the third degree on a first offense, a misdemeanor of the second degree on a second offense, and a misdemeanor of the first degree on a third or subsequent offense.

(B) A person who fails to comply with rules adopted under division (A)(2)(f) of section 905.322 of the Revised Code is not subject to division (A) of this section.

Amended by 130th General Assembly File No. TBD, SB 150, §1, eff. 8/21/2014.

Amended by 129th General Assembly File No.191, HB 420, §1, eff. 3/27/2013.

Effective Date: 10-29-1996

901:5-1-01 Labeling requirements for fertilizer.

(A) No manufacturer or distributor of fertilizer shall use any term which is defined in the official publication of the association of American plant food control officials as adopted in rule 901:5-1-02 on the label of any fertilizer unless the fertilizer complies with the standard for such terms which are stated in said publication.

(B) No manufacturer or distributor of a fertilizer shall include the name of any plant nutrient element:

(1) Other than nitrogen, phosphorus and potassium on the label of a fertilizer other than a specialty fertilizer, unless the percentage guaranteed equals or exceeds the percentage required in the following table:

ELEMENT	MINIMUM PERCENTAGE REQUIRED
Calcium (Ca)	1.00
Magnesium (Mg)	0.50
Sulfur (S)	1.00
Boron (B)	0.02
Chlorine (Cl)	0.10
Cobalt (Co)	0.0005
Copper (Cu)	0.05
Iron (Fe)	0.10
Manganese (Mn)	0.05
Molybdenum (Mo)	0.0005
Nickel	0.0010
Sodium (Na)	0.10
Zinc (Zn)	0.05

(2) Which is not named in paragraph (B)(1) of this rule on the label of any such fertilizer.

(C) Each manufacturer or distributor of any fertilizer which bears on its label the name of any element which is listed in paragraph (B) of this rule, shall:

- (1) List each element which is mentioned on the label and the percentage guarantee in the same order in which such elements are listed in paragraph (B) of this rule;
- (2) Furnish the director of agriculture the label and directions for use of any fertilizer for which the director requests such information;
- (3) Include warning or caution statements on the label for any fertilizer which contains:
 - (a) Three one-hundredths per cent or more of boron in water soluble form;
 - (b) One one-thousandths per cent or more of molybdenum.

Effective: 11/26/2018

Five Year Review (FYR) Dates: 9/10/2018 and 11/16/2023

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 2/20/69

901:5-1-02 Definitions.

As used in this Chapter:

(A) All terms which are defined in section 905.31 of the Revised Code are incorporated into this Chapter.

(B) The terms which are defined in the official publication of the association of American plant food control officials (2017) are hereby incorporated into this Chapter. Interested individuals may locate a copy of the official publication by visiting www.aapfco.org.

Replaces: 901:5-1-02

Effective: 11/26/2018

Five Year Review (FYR) Dates: 11/16/2023

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.31

Prior Effective Dates: 2/20/1969, 1/21/1982

901:5-1-03 [Rescinded].

Effective: 11/26/2018
 Five Year Review (FYR) Dates: 9/10/2018
 Promulgated Under: 119.03
 Statutory Authority: 905.44
 Rule Amplifies: 905.44
 Prior Effective Dates: 02/20/1969

901:5-1-04 Requirements for sales of fertilizer from bulk storage facilities.

- (A) No person shall distribute any fertilizer from any bulk storage facility unless such facility provides access for sampling each fertilizer stored therein.
- (B) No person shall distribute a fertilizer from any bulk storage facility to more than one consumer unless he:
 - (1) Labels the area where the fertilizer is stored to show the grade of the fertilizer;
 - (2) Shows the grade of the fertilizer on each invoice for shipments therefrom;
- (C) Each manufacturer or distributor of fertilizer shall include the date of delivery on each shipping invoice or delivery ticket for each shipment of bulk fertilizer to an individual who is not licensed pursuant to ORC 905.32.

Effective: 11/26/2018
 Five Year Review (FYR) Dates: 9/10/2018 and 11/16/2023
 Promulgated Under: 119.03
 Statutory Authority: 905.44
 Rule Amplifies: 905.35, 905.43, 905.44
 Prior Effective Dates: 02/20/1969, 08/04/2013

901:5-1-05 Weighing of fertilizer and requirements for shipping invoice.

- (A) No person shall distribute any fertilizer other than by net weight unless the director has approved the device which is used to measure the fertilizer.
- (B) A meter may be used to deliver fertilizer by volume provided that each individual meter so used has been tested and approved by the director.
- (C) Each distributor shall include on the shipping invoice or delivery ticket for any fertilizer which is delivered by volume:
 - (1) Volume of fertilizer delivered;
 - (2) The calculated net weight derived from the volume delivered; and
 - (3) The conversion factor used to derive the calculated net weight from the volume delivered.

Effective: 11/26/2018
 Five Year Review (FYR) Dates: 9/10/2018 and 11/16/2023
 Promulgated Under: 119.03
 Statutory Authority: 905.44
 Rule Amplifies: 905.35, 905.43, 905.44
 Prior Effective Dates: 02/20/1969, 01/21/1982

901:5-1-06 What constitutes mislabeled fertilizer.

- (A) Fertilizer material is mislabeled if the director of agriculture determines after analysis of said fertilizer material that the percentage of total nitrogen, available phosphoric acid (P₂O₅), or soluble potash (K₂O) in the fertilizer is below the allowances permitted in the table found in paragraph (B) of this rule:

(B)

Per cent allowances of fertilizer materials.

Guarantee per cent	Nitrogen (N)	Available phosphate (P ₂ O ₅)	Soluble potash (K ₂ O)
04 or less	0.49	0.37	0.41
05	0.51	0.67	0.43
06	0.52	0.67	0.47
07	0.54	0.68	0.53
08	0.55	0.68	0.60
09	0.57	0.68	0.65

10	0.58	0.68	0.70
12	0.61	0.69	0.79
14	0.63	0.70	0.87
16	0.67	0.70	0.94
18	0.70	0.71	1.01
20	0.73	0.72	1.08
22	0.75	0.72	1.15
24	0.78	0.73	1.21
26	0.81	0.73	1.27
28	0.83	0.74	1.33
30	0.86	0.75	1.39
32	0.88	0.76	1.44
34		0.79	1.46
36		0.83	1.49
38		0.86	1.51
40		0.90	1.54
42		0.93	1.56
44		0.96	1.58
46		1.00	1.61
48		1.07	1.66
50		1.10	1.68
52		1.10	1.68
54			1.70
56			1.73
58			1.75
60			1.78
62			1.80

For N guarantees above 32% the allowance shall be 0.88.

For P2O5 guarantees above 52% the allowance shall be 1.10.

For K2O guarantees above 62% the allowance shall be 1.80.

For guarantees not listed, calculate the appropriate allowance by interpolation.

(C) Any mixture of fertilizers is mislabeled if the director determines after analysis of the mixture that:

(1) The percentage of total nitrogen, available phosphoric acid (P2O5), or soluble potash (K2O) in the mixture is more than ten per cent below the percentage guaranteed or more than two percentage points below the percentage guaranteed, whichever is the smaller; or

(2) The total of the percentages determined for the three primary plant nutrients is less than ninety-seven per cent of the sum of the guarantees for these three nutrients.

Effective: 11/26/2018

Five Year Review (FYR) Dates: 9/10/2018 and 11/16/2023

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.35, 905.43, 905.44

Prior Effective Dates: 02/20/1969, 08/04/2013

901:5-2-01 Definitions.

As used in rules 901:5-2-01 to 901:5-2-11 of the Administrative Code:

- (A) "**ASTM A 53**" means the American society for testing and materials ("ASTM international") standard number A 53, November, 2005, containing standard specification for pipe, steel, black and hot-dipped, zinc-coated, welded and seamless, published by ASTM international, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959.
- (B) "**ASTM A 312**" means the American society for testing and materials ("ASTM international") standard number A 312, May, 2006, containing standard specification for seamless, welded, and heavily cold worked austenitic stainless steel pipes.
- (C) "**ASTM D 2241-05**" means the American society for testing and materials ("ASTM international") standard number D 2241-05, August, 2005, containing standard specification for polyvinyl chloride (PVC) pressure-rated pipe.
- (D) "**ASTM D 3350-05**" means the American society for testing and materials ("ASTM international") standard number D 3350-05, October, 2005, containing standard specification for polyethylene plastics pipe and fittings materials.
- (E) "**ASTM F 442**" means the American society for testing and materials ("ASTM international") standard number F 442, November, 2005, containing standard specification for chlorinated polyvinyl chloride (CPVC) plastic pipe.
- (F) "**ASTM F 714-05**" means American society for testing and materials ("ASTM international") standard number F 714-05, April, 2005, containing standard specification for polyethylene plastic pipe based on outside diameter.
- (G) "**ASTM F 2164-02**" means American society for testing and materials ("ASTM international") standard number F 2164-02, April, 2002, containing standard practice for field leak testing of polyethylene (PE) pressure piping systems using hydrostatic pressure.
- (H) "**NIST**" means the "National institute of standards and technology" 100 Bureau Drive, Stop 1070, Gaithersburg, MD 20899-1070.
- (I) "**API 650 standard**" means the American petroleum institute standard number 650; tenth edition, November, 1998, containing standards for the design and construction of welded steel tanks for oil storage, published by the "American Petroleum Institute, 1220 L. Street, Northwest, Washington, D.C. 20005-4070 .
- (J) "**API 653 standard**" means the American petroleum institute standard number 653; tenth edition, November, 1998, containing standards for the alteration or reconstruction of welded steel tanks for oil storage.
- (K) "**Authorized inspector**" means an employee of an authorized inspection agency who is certified by the American petroleum institute under appendix D - authorized inspector certification, of the API 653 standard.
- (L) "**Authorized inspection agency**" means:
- (1) An insurance company licensed in the state of Ohio to write property and liability insurance for owners of permanent storage vessels erected on site;
 - (2) An independent organization that contracts for inspection services on permanent storage vessels erected on site; and
 - (3) Any governmental entity having regulatory authority over permanent storage vessels erected on site.
 - (4) An owner or operator of a permanent storage vessel erected on site that has on staff an authorized inspector who has autonomous authority within the organization in the performance of his duties as an authorized inspector.
- (M) "**Appurtenances**" means plumbing, pumps, valves, gauges, fittings, seals, hoses, metering devices, mixing containers, and portable manufacturing units which are connected to a permanent storage vessel, or which are used to transfer bulk liquid fertilizer into or out of a permanent storage vessel.
- (N) "**Baseline inspection**" means an internal and external inspection done in accordance with the API 653 standard establishing the condition of a permanent storage vessel erected on site and used to determine the vessel's suitability for the storage of liquid fertilizer.
- (O) "**Dimension ratio**" or "**DR**" means the dimension ratio is equal to the average outside diameter divided by minimum wall thickness.
- (P) "**Director**" means the director of the Ohio department of agriculture or an authorized representative .

(Q) "**Discharge**" means the unintentional spilling or leaking, without regard to cause, of bulk liquid fertilizer outside a secondary containment facility; and the unintentional spilling or leaking, due to a mechanical or structural failure within a secondary containment facility.

(R) "**Generally accepted engineering standards and practices**" means the usual and customary principles and methods employed by engineers for the analysis, design and construction of permanent storage vessels and piping systems. Such standards and practices shall include, where applicable, the standards of American petroleum institute, American water works association, plastic pipe institute, American society of mechanical engineers, American society for testing and materials international, and American national standards institute.

(S) "**Erected on site**" means the construction or reconstruction of a permanent storage vessel at the site where it is in use.

(T) "**Liquid fertilizer**" means any fluid containing plant nutrients used to improve the quality or quantity of plant growth but does not include anhydrous ammonia.

(U) "**Hydrostatic Testing**" means testing for leaks by pressurizing the piping with water or fertilizer at a pressure higher than normal operating pressure.

(V) "**Permanent storage vessel**" means a tank having a capacity of more than five thousand gallons or a combination of tanks at one location having an aggregate capacity of more than five thousand gallons, used or intended to be used for storage of liquid fertilizer for more than an aggregate of thirty days in any calendar year.

(W) "**Pit storage**" means any structure used for the storage of bulk liquid fertilizer which uses an impermeable lining material and earthen walls, in the form of a pit, trench, dike, or other excavation, either alone or in conjunction with any other structure, to store bulk liquid fertilizer.

(X) "**Secondary containment facility**" means a permanent dike enclosing the area around one or more permanent storage vessels, for the purpose of containing within its perimeter the contents of the permanent storage vessel in the event of a discharge and includes the surface area enclosed within the dike.

(Y) "**Standard dimension ratio**" or "**SDR**" means the dimension ratio is equal to the average outside diameter divided by minimum wall thickness.

(Z) "**Storage facility**" means any premises where one or more permanent storage vessels are located.

R.C. 119.032 review dates: 11/09/2011 and 11/09/2016

Promulgated Under: 119.03

Statutory Authority: 905.44, 905.40

Rule Amplifies: 905.31

Prior Effective Dates: 1/1/91, 11/12/01

901:5-2-02 Compliance with design requirements.

After the effective date of rules 901:5-2-01 to 901:5-2-08 of the Administrative Code:

(A) No person shall construct or cause to be constructed any new permanent storage vessel unless:

- (1) The plans and specifications for the secondary containment facility have first been approved by the director of agriculture;
- (2) It meets the design requirements of paragraph (A) of rule 901:5-2-03 of the Administrative Code;
- (3) It is sited within a secondary containment facility which meets the design requirements of paragraph (C) of rule 901:5-2-03 of the Administrative Code;
- (4) It complies with all applicable zoning regulations, building standards, and fire codes.

(B) The director shall notify each applicant within thirty days after receipt of the construction plans for new storage vessels as to approval or disapproval of the submitted construction plans;

(C) All permanent storage vessels, appurtenances, and secondary containment facilities either existing or under construction at the effective date of rules 901:5-2-01 to 901:5-2-07 of the Administrative Code shall meet the requirements of paragraphs (A)(2) and (A)(3) of this rule by January 1, 1996;

(D) No person shall put any newly constructed permanent storage vessel into service, or continue in service past January 1, 1996 any permanent storage vessel either existing or under construction at the effective date of these rules unless the permanent storage vessel, its appurtenances and secondary containment facilities meet the requirements of paragraphs (A)(2) and (A)(3) of this rule;

(E) No person shall continue in service any pit storage structure past January 1, 1996 unless it meets all of the following:

- (1) It is constructed with a second impermeable lining material between the earthen walls, the ground, and the impermeable material in direct contact with the liquid fertilizer;
- (2) It is constructed with a tiled drainage field between the second impermeable liner and the impermeable liner in direct contact with the liquid fertilizer, and the drain field empties into a sump equipped with a pump;
- (3) The pump automatically empties the sump and either returns any leakage to the pit or to a tank built to the same standards required for primary storage vessels.

(F) No person shall construct or cause to be constructed any new pit storage facilities. Any pit storage structures remaining in service under paragraph (E) of this rule will be taken out of service permanently at the end of the useful life of the current primary liner.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 1/1/1991, 9/16/1991

901:5-2-03 Design requirements - bulk liquid fertilizer storage.

(A) Permanent storage vessels:

- (1) Shall be constructed entirely of materials recommended by the manufacturer or specified in applicable standards for use with the type of liquid to be stored in the vessel;
- (2) Shall be designed according to generally accepted engineering standards and practices for liquid storage vessels and shall take into consideration the full hydrostatic head pressure, pressure buildup from pumps and compressors, and other mechanical stresses to which the storage vessel may be subject in the foreseeable course of operation;
- (3) Shall be equipped with a lockable liquid level gauging device unless another means of reliably and readily measuring the liquid level of the vessel has been approved by the director;
- (4) Shall be secured as necessary to prevent flotation or instability as a result of liquid accumulation within the secondary containment facility;
- (5) Shall have stenciled on them in a location clearly visible in letters no less than four inches in height the design capacity of the vessel and the identity of its contents;
- (6) Shall be equipped with a lockable shutoff valve.

(B) Appurtenances of permanent storage vessels:

- (1) All appurtenances necessary for loading and unloading shall be located within a secondary containment facility or have their own means of secondary containment; except hoses and permanent above-ground piping meeting the requirements of paragraphs (C)(1)(a) to (C)(1)(e) of rule 901:5-2-11 of the Administrative Code. However, the pipe specified in paragraph (C)(1)(e) of rule 901:5-2-11 of the Administrative Code does not have to be coated and wrapped.
- (2) All hoses used for loading and unloading shall be equipped with shut-off valves at each end;
- (3) All pipes and hoses shall be adequately supported to prevent sagging and shall be protected against risk of damage by vehicles engaged in loading and unloading;
- (4) All appurtenances shall be made entirely of materials recommended by the manufacturer or specified in applicable standards for use with the type of liquid they will carry and the type of materials used in the vessels and other appurtenances.

(C) Secondary containment facilities for permanent storage vessels:

- (1) Shall have a volumetric capacity of not less than ten per cent greater than the volume of the largest storage vessel within the secondary containment facility. Volumetric capacity shall be calculated by multiplying the surface area enclosed by the dike by the height of the dike minus the volume of the portions of the other permanent storage vessels within the dike which would be submerged;
- (2) The base of any permanent storage vessel over fifteen feet in height shall be no less than four feet from the inside base of the secondary containment facility dike;
- (3) The dike and surface area enclosed within it shall be constructed of materials compatible with the material they are to contain, be designed to withstand a full hydrostatic head of any discharged liquids, have a resistance to vertical and horizontal liquid movement that does not exceed a rate of 1×10^{-5}

centimeters per second (thirty-five hundredths of an inch per day) for the liquids they are to contain and have no open drains.

(D) Notwithstanding the provisions of rule 901:5-2-02 of the Administrative Code, an owner of a permanent storage vessel existing on the effective date of this rule, other than one erected on site, which is located on a farm shall have until January 1, 2007 to comply with the requirements of paragraphs (C)(1), (C)(2), and (C)(3) of this rule.

R.C. 119.032 review dates: 11/09/2011 and 11/09/2016

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.40

Prior Effective Dates: 1/1/91, 11/12/01

901:5-2-04 Inspection, maintenance alteration, repair and reconstruction.

(A) Every owner of one or more permanent storage vessels shall:

(1) Once each week:

- (a) Check all liquid level gauging equipment to ensure it is functioning properly;
- (b) Check roof drains for obstructions;
- (c) Check vents and pressure-relief devices for obstructions;
- (d) Check electrical grounding lines and connections for integrity;
- (e) Visually inspect the dike of the secondary containment facility for erosion, cracks and deterioration;
- (f) Check and record the liquid level of each permanent storage vessel when it contains any product;

(2) Once each month:

- (a) Visually inspect all exterior surfaces, welds, rivets/bolts, and foundations of permanent storage vessels;
- (b) Inventory all spill control equipment and emergency response equipment.

(3) Once every twelve months, for vessels built to the API 650 standard, inspect the exterior of storage vessels in accordance with the API 653 inspection check list, or if the vessel is built to exceed the API 650 standard, in accordance with the inspection protocols and standards submitted pursuant to paragraph (A)(1)(b)(ii) of rule 901:5-2-10 of the Administrative Code:

(4) For permanent storage vessels other than those erected on site, once every five years inspect the interior of the storage vessel in accordance with the API 653 inspection checklist.

(5) For permanent storage vessels equipped with a bladder, the bladder shall be inspected:

- (a) Within two years of the effective date of this rule if the bladder was installed prior to the effective date of this rule, and every five years thereafter; or,
- (b) For bladders installed after the effective date of this rule, two years after installation and every five years thereafter;
- (c) Notwithstanding paragraphs (A)(5)(a) and (A)(5)(b) of this rule, whenever a bladder is repaired, altered, or replaced it shall be inspected two years after repair, alteration, or replacement and every five years thereafter.

(B) Every owner of one or more permanent storage vessels shall:

- (1) Maintain the permanent storage vessels, secondary containment facilities, and hoses, pipes, and fittings to the extent necessary to ensure they are free from rust, corrosion, galling, cracking, or any other structural deterioration or damage which affects their strength or watertight integrity. All valves, pumps and other mechanical appurtenances shall be maintained in working order;
- (2) Grade and drain permanent storage vessel foundations to insure that moisture and debris do not accumulate at the base of the vessel;
- (3) For all permanent storage vessels set on a concrete foundation, seal the vessel floor and foundation interface to provide a moisture barrier;

(C) All welded repairs to permanent storage vessels shall be made in accordance with the vessel's original design specifications. When the original design specifications are unknown, weld repairs shall be made in accordance with API 653 and shall comply with the impact toughness requirements of API 650;

(D) All materials used in the repairs of permanent storage vessels shall conform to the vessel's original design specifications. When the original design specifications are unknown, the repair material shall conform to the requirements of API 653 and the impact toughness requirements of API 650.

(E) All stress analysis of a permanent storage vessel done to determine the safety of a vessel shall be done using a specific gravity of 1.50. A lower specific gravity may be used only if use of the vessel is limited to the storage of liquid fertilizers with a specific gravity which does not exceed the actual specific gravity used in the stress analysis.

(F) All permanent storage vessels erected on site that are dismantled and reconstructed at a different site shall be dismantled and reconstructed in accordance with the API 653 standard.

R.C. 119.032 review dates: 03/27/2013 and 03/27/2018

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 1-1-91; 11-12-01; 11/21/2007

901:5-2-05 Operations.

(A) During all operations involving the transferring or mixing of liquid fertilizer carried on at a storage facility, a suitable means of containment including, but not limited to, collection pans, pads, and dikes shall be placed under each valve, coupling, and pump located outside a secondary containment facility. Each collection device must be able to contain any foreseeable leaks or spills which may occur during transferring or mixing of liquid fertilizer.

(B) An individual familiar with the operation of the mechanical appurtenances in use at the facility and familiar with the procedures to be used for control and recovery of discharges shall be present during all transfer and mixing operations.

(C) All transfer and mixing operations shall be stopped in the event a discharge occurs and may not be resumed until the cause of the discharge is corrected and all discharges are recovered.

(D) All wash water and rinsates from equipment cleaning and fertilizer handling or any other operation carried on at a storage facility shall be collected using a containment method, device, or structure adequately sized to prevent spillage onto unprotected areas. No collected liquid or material shall be discharged to any watercourse, storm sewer, field tile, or sanitary sewer. All rainwater collected within the diked area must be shown not to be in violation of current water quality standards before it can be disposed of through field tile, sewer, or any watercourse.

(E) All permanent storage vessels which are or will be out of service for more than six months due to deterioration or leaks, or out of service for more than two years for any reason shall be thoroughly cleaned, all hatches shall be left open, and valves and connections shall be severed and sealed.

(F) No permanent storage vessel shall be filled with any liquids other than those which are compatible with the materials used in the construction of the permanent storage vessel nor filled beyond the capacity for which it is designed, taking into account the density of the liquid being stored and thermal expansion during storage.

(G) Non-pressurized nurse tanks shall not be used for storage of liquid fertilizer for more than thirty consecutive days.

(H) No person shall fill or cause to be filled any permanent storage vessel which fails to meet the requirements of Chapter 901:5-2 of the Administrative Code.

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Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 1-1-91; 11-12-01

901:5-2-06 Control and recovery of discharges.

(A) Every owner of a permanent storage vessel:

(1) Shall prepare a written discharge response plan for the storage facility. The operator shall keep the plan current at all times. A copy of the plan shall be kept readily available at the storage facility and at the nearest local office from which the storage facility is administered, and shall be available for inspection and copying by the department. The plan shall include:

- (a) The identity and telephone number of the persons or agencies who are to be contacted in the event of a discharge, including persons responsible for the stored fertilizer;
 - (b) An identification of each type of liquid bulk fertilizer stored at the storage facility;
 - (c) An identification, by location, of every storage container located at the storage facility, and the type of liquid bulk fertilizer stored in each storage container;
 - (d) For each type of liquid bulk fertilizer stored at the facility, the procedures to be used in controlling and recovering, or otherwise responding to a discharge;
 - (e) Procedures to be used in disposing of a recovered discharge;
- (2) Shall have available at each facility:
- (a) Ready access to pumps and recovery containers of sufficient size and capacity to recover any discharges;
 - (b) A sufficient quantity of absorbent materials suitable for the control and cleanup of smaller discharges;
- (3) Shall train a suitable number of persons employed at the facility in discharge response procedures in accordance with the plan required under paragraph (A) of this rule.

(B) Discharges at a storage facility shall be promptly recovered, to the maximum extent practical. Pumps, recovery equipment, and recovery containers shall be readily available.

(C) Spills which occur outside containment structures shall be reported by telephone to the national response center and the Ohio environmental protection agency office of emergency management immediately after the discharge is discovered. All applicable local, state, and federal spill reporting requirements shall be met.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

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Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 1-1-91; 11-12-01

901:5-2-07 Required records.

(A) The following records shall be prepared and maintained on file at every storage facility, or at the nearest local office from which the storage facility is administered:

- (1) A record of all discharges at the storage facility, including the date and time of discharge, the type of liquid bulk fertilizer discharged, the volume of the discharge, the cause of the discharge, any action taken to control or recover the discharge, and the method of disposal of any recovered discharge. The discharge record shall be completed on the day the discharge is discovered and shall be promptly updated to show measures taken to control, recover, use, or dispose of the discharge;
- (2) A record of the liquid level of each permanent storage vessel measured in compliance with paragraph (A)(1)(f) of rule 901:5-2-04 of the Administrative Code;
- (3) A record of all repairs and maintenance work performed on each permanent storage vessel and secondary containment facility. The record shall note the date and nature of the repair or maintenance work done.

(B) In addition to the records required under paragraph (A) of this rule; whenever a permanent storage vessel erected on site, its appurtenances or secondary containment facility, is evaluated, altered, or reconstructed the following information shall be made a part of the record maintained at the storage facility or the nearest local office from which the storage facility is administered.

- (1) Calculations used for:
 - (a) Component evaluation for integrity including brittle fracture considerations;
 - (b) Re-rating of tank capacities (including liquid levels); and,
 - (c) Repair and alteration considerations.
- (2) Construction and repair drawings.
- (3) Any additional support data used, including but not limited to:
 - (a) Inspections (including component thickness readings);
 - (b) Material test reports/certification;
 - (c) Tests performed/results;
 - (d) Radiographs;

- (e) Brittle fraction considerations;
- (f) Original tank construction data;
- (g) Location and identification;
- (h) Description of the tank (diameter, height);
- (i) Design conditions (liquid level, specific gravity, allowable stress, unusual design load);
- (j) Shell material and thickness by course;
- (k) Tank perimeter evaluations;
- (l) Construction completion record;
- (m) Basis for hydrostatic test exemption.

(C) All records required by this rule shall be maintained for a period of five years.

(D) The owner of an underground piping system shall maintain the following records for the life of the piping system and make them available for inspection and copying by the department upon request. The records shall include:

- (1) Type of pipe and design or working pressure;
- (2) Method for blinding off the test section and air bleed method, if applicable;
- (3) A record of each hydrostatic test conducted, which shall include all of the following:
 - (a) The name of the system's owner and operator;
 - (b) The location address of the system;
 - (c) The name and business address of the person performing the hydrostatic test;
 - (d) The date, start and stop times for each test;
 - (e) The identity of each specific pipe on which said test is performed;
 - (f) Test pressures and adjustments made during test;
 - (g) Length of each pipe tested;
 - (h) Amount of pressure lost;
 - (i) Damage caused by test and location of damage;
 - (j) Type of liquid used; and
 - (k) Proof of calibration of test gauge.
- (4) A label shall be kept adjacent to the pressure application tap, which shall show the:
 - (a) Test interval required (i.e. twice per calendar year, at a minimum of six month intervals); and
 - (b) The hydrostatic test pressure.

R.C. 119.032 review dates: 11/09/2011 and 11/09/2016

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Statutory Authority: 905.44

Rule Amplifies: 905.40

Prior Effective Dates: 1/1/91, 11/12/01

901:5-2-08 Dry fertilizer storage and handling.

(A) Dry fertilizer materials and nonliquid fertilizer shall, if stored for more than thirty days in any calendar year, be stored inside a structure or device having a roof or cover, sidewalls, and a base sufficiently impermeable to prevent contact with precipitation and surface water.

(B) Dry fertilizer materials and nonliquid fertilizer stored for thirty days or less in any calendar year may be stored outdoors provided they are placed on a ground cover sufficiently impermeable to prevent contact with precipitation and surface water and completely covered with a waterproof tarpaulin.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 1/1/91

901:5-2-09 Existing permanent storage vessels erected on site.

(A) Neither the owner nor any other person shall use a permanent storage vessel erected on site and existing on the effective date of this rule to hold liquid fertilizer unless the provisions of this rule have been complied with.

(B) Owners of existing permanent storage vessels erected on site shall, no later than January 1, 2003, have a baseline inspection done on each vessel by an authorized inspector to determine if the vessels comply with the API 650 standard.

(1) The baseline inspection report for each existing permanent storage vessel erected on site that complies with the API 650 standard shall be kept on the property where the vessel is located.

(2) The baseline inspection report for each existing permanent storage vessel erected on site that does not comply with the API 650 standard shall be kept on the property where the vessel is located. The owner shall also notify the department of agriculture of the non-compliance and provide the department with a copy of the baseline inspection report.

(C) Owners of an existing permanent storage vessel erected on site that does not comply with the API 650 standard shall not continue to use the vessel for the storage of liquid fertilizer unless within sixty days of date of issuance of the base line inspection report:

(1) They obtain written verification from an authorized inspector stating that, based upon generally accepted engineering standards and practices, the vessel is safe to continue to be used in its present condition for the storage of liquid fertilizer; or,

(2) They obtain written verification from an authorized inspector stating that, based upon generally accepted engineering standards and practices, the vessel is safe to continue in use for the storage of liquid fertilizer if the vessel is used in compliance with restrictions or limitations specified by the authorized inspector in his written verification; or,

(3) They obtain written verification from an authorized inspector listing, based upon generally accepted engineering standards and practices, the repairs or modifications that are necessary to make the vessel safe for the storage of liquid fertilizer and any measures, limitations, or restrictions which are necessary to make the vessel safe to continue in use while the vessel undergoes repair or modification.

Owners shall provide the department with a copy of each written verification issued.

(D) After the initial base line inspection is issued for an existing permanent storage vessel erected on site, a new base line inspection shall be done every ten years to determine compliance with this rule. If an authorized inspector determines that a shorter inspection interval is necessary, subsequent base line inspections shall be conducted in accordance with that interval.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 11/12/01

901:5-2-10 New permanent storage vessels erected on site.

(A) After January 1, 2002, no person shall either erect on site or cause to be erected on site a new permanent storage vessel unless;

(1) It is built to:

(a) The API 650 standard; or

(b) Exceed the API 650 standard. If the vessel is to be built to exceed the API 650 standard, plans and specifications for the vessel shall be submitted to the director prior to installation of the vessel. The plans and specifications submitted under this section shall include documentation prepared by a professional engineer registered under Chapter 4733. of the Revised Code of the following:

(i) That the permanent storage vessel to be installed exceeds the API 650 standard; and

(ii) The inspection schedule, protocol, and standards against which the integrity of the permanent storage vessel shall be measured during those inspections over the lifetime of the vessel; and

(iii) The protocol and specifications required for proper repairs to the permanent storage vessel;

(2) The storage vessel and appurtenances meet the requirements of paragraphs (A) and (B) of rule 901:5-2-03 of the Administrative Code;

(3) It is sited within a secondary containment facility, which meets the requirements of paragraph (C) of rule 901:5-2-03 of the Administrative Code;

(4) The plans and specifications for the secondary containment facility have first been approved in accordance with rule 901:5-2-02 of the Administrative Code by the director of agriculture; and,

(5) It complies with all applicable zoning regulations, building standards, and fire codes; and, any permits required by state or federal law have been issued.

(B) The director shall notify each applicant within thirty days after receipt of the plans and specifications for the containment facility that they have either been approved or disapproved.

(C) Before the vessel may be used for liquid fertilizer storage the owner shall obtain a written verification from an authorized inspector stating that the vessel, as installed, is in compliance with the paragraph (A)(1) of this rule.

The written verification shall be kept on the property where the vessel is located and a copy shall be submitted to the Ohio department of agriculture.

(D) For permanent storage vessels:

(1) Built to API 650 standards, after the date an initial written verification of compliance is issued for a new permanent storage vessel erected on site the vessel shall be reinspected every ten years in accordance with and shall comply with the requirements of:

(a) Paragraph (B) of rule 901:5-2-09 of the Administrative Code; or,

(b) If a permanent storage vessel erected on site does not meet the API 650 standard, the owner of the vessel shall obtain from the authorized inspector written verification indicating non-compliance and listing each item not in compliance with the API standard 650. The owner shall notify the department of the non-compliance and neither the owner nor any other person shall use the vessel to hold liquid fertilizer until the vessel is brought into compliance and a written verification is issued by an authorized inspector stating the vessel is in compliance with the API 650 standards. When a written verification of compliance is issued it shall be kept on the property where the vessel is located.

(2) Built to exceed API 650 standards, after the date an initial written verification of compliance is issued for a new permanent storage vessel erected on site, the vessel shall be reinspected in accordance with the schedule, protocol and standards for inspection submitted pursuant to paragraph (A)(1)(b)(ii) of this rule. If the vessel does not meet the standard to which it was built, the owner of the vessel shall obtain from the authorized inspector written verification indicating that non-compliance and listing each item not in compliance with the standard documented under paragraph (A)(1)(b) of this rule. The owner shall notify the department of the non-compliance and neither the owner nor any other person shall use the vessel to hold liquid fertilizer until the vessel is brought into compliance and a written verification is issued by an authorized inspector stating the vessel is in compliance with the standards under which it was built. When a written verification of compliance is issued it shall be kept on the property where the vessel is located. If an authorized inspector determines that a shorter inspection interval is necessary, subsequent inspections shall be conducted in accordance with that interval.

R.C. 119.032 review dates: 03/27/2013 and 03/27/2018

Promulgated Under: 119.03

Statutory Authority: 905.44

Rule Amplifies: 905.44

Prior Effective Dates: 11-12-01; 11/21/2007

901:5-2-11 Underground piping systems for loading and unloading liquid fertilizer.

The owner or operator of an underground piping system is responsible for and shall ensure that all new underground liquid fertilizer piping systems comply with this rule and shall maintain all records required by paragraph (D) of rule 901:5-2-07 of the Administrative Code.

If the underground piping system is to be used and designed as pressure piping without secondary containment, a professional engineer must certify, by letter to the department, that the underground piping system as designed meets the following requirements:

(A) All underground piping systems in place prior to the effective date of this rule shall be permitted to continue in operation until such time that any underground component of the system requires repair, upgrade, modification

or replacement, at which time the entire underground portion of the system shall comply with the requirements of this rule.

(1) All systems, whether existing or new, shall comply with this rule by January 1, 2012.

(B) The department shall be notified by the owner prior to:

(1) Beginning construction of a new liquid fertilizer underground piping system; or

(2) Conducting repair, upgrade, modification or replacement of any existing fertilizer underground piping system.

(C) All underground piping systems shall be constructed as follows:

(1) Piping is permitted without secondary containment provided that one of the following ASTM international standards are met:

(a) The piping is made of 304 or 316 stainless steel pipe per ASTM A 312 minimum schedule 10; or

(b) Chlorinated poly vinyl chloride (CPVC) plastic pipe per ASTM F 442 and the DR not to exceed 17; or

(c) High density polyethylene (HDPE) plastic pipe per ASTM D 3350-05 with a DR not to exceed 17; or

(d) Polyvinyl chloride (PVC) plastic pipe per ASTM D 2241-05 and DR not to exceed 17; or

(e) Carbon steel pipe per ASTM A 53 minimum schedule 40, coated and wrapped; or

(f) Carbon steel pipe per ASTM A 53 minimum schedule 80, unprotected.

(2) All appurtenances shall be made of materials recommended by the manufacturer or materials specified in applicable standards for the type of liquid carried.

(3) Generally accepted engineering standards and practices, as defined in paragraph (R) of rule 901:5-2-01 of the Administrative Code, shall be followed for any pipe material used. Such standards and practices shall also be followed with regard to the trench, soil, backfill, pipe design, connections, secondary containment, supports, and adaptations to facilities for hydrostatic testing.

(4) The underground piping system shall be constructed so that hydrostatic testing can be performed.

(D) Hydrostatic testing:

(1) Hydrostatic testing shall be done to ensure the integrity of any underground piping system.

(2) Hydrostatic testing shall be conducted twice per calendar year at a minimum of six month intervals; or

(3) Hydrostatic testing shall be conducted upon request of the department if the department has reason to believe that the system has been compromised.

(4) The method of hydrostatic testing for all underground piping system materials shall be ASTM F 2164-02, unless the owner or operator has certification from a professional engineer that the standard used meets or exceeds ASTM F 2164-02.

(a) If the system fails to meet the requirements set forth in ASTM F 2164-02, then the owner or operator must report said failure to the department within forty-eight hours upon finding such failure; and

(b) The system must be repaired, modified or replaced immediately.

(5) A calibrated test gauge must be used for testing.

(a) Certification of the test gauge must be traceable to the standards of NIST.

(6) The pressure application tap and pressure gauge taps for hydrostatic testing must be labeled as such.

(E) Pneumatic or pressurized air testing is prohibited.

(F) If the underground piping system does not meet the requirements as set forth in this rule secondary containment is required. Secondary containment shall be a pipe within a pipe that drains into a sump collection that can be inspected for leakage. The secondary collection and sump shall be protected against the collection of rainwater, runoff, and groundwater; and

(G) The transfer pipe must be one identified in the ASTM standards referenced in paragraphs (C)(1)(a) to (C)(1)(f) of this rule.

(H) All materials incorporated or referenced in this rule can be found in rule 901:5-2-01 of the Administrative Code.

R.C. 119.032 review dates: 11/09/2011 and 11/09/2016

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Statutory Authority: 905.44

Rule Amplifies: 905.40

Prior Effective Dates: 11/24/2006

901:5-3-01 Definitions.

As used in rules 901:5-3-01 to 901:5-3-14 of the Administrative Code:

(A) "**Ammonia**" means anhydrous ammonia for use as a fertilizer through a system as defined in paragraph (S) of this rule;

(B) "**Approved**" means:

- (1) Listed by a recognized testing laboratory, or
- (2) Recommended by the manufacturer as suitable for use with anhydrous ammonia and so marked, or
- (3) Accepted by the director of agriculture;

(C) "**Appurtenance**" means any equipment which is essential to the operation of a system, including, but not limited to, pumps, compressors, safety devices, liquid level gages, valves, pressure gages, fittings, meters and dispensing devices.

(D) "**ASME**" means "American Society of Mechanical Engineers";

(E) "**ANSI**" means "American National Standards Institute, Inc";

(F) "**ASTM**" means "American Society Testing Materials";

(G) "**NFPA**" means "National Fire Protection Association";

(H) "**Capacity**" means the total volume of the container measured in U.S. water gallons, unless otherwise specified;

(I) "**Code**" means the "Unfired Pressure Vessel Code of the American Society of Mechanical Engineers" ("Section VIII of the ASME Boiler Construction Code"), 1952, 1956, 1959, 1962, 1968 and 1971 editions, and the joint code of the "American Petroleum Institute" and the "American Society of Mechanical Engineers" (API-ASME "Code") 1951 edition, and subsequent amendments to or later editions of the same, as adopted;

(J) "**Container**" means all vessels, tanks, cylinders, or spheres used for transportation, storage or application of anhydrous ammonia;

(K) "**Cylinder**" means a container of one thousand pounds water capacity or less;

(L) "**Design pressure**" is identical to the term "maximum allowable working pressure" used in the "Code";

(M) "**DOT regulations**" refers to hazardous materials regulations of the U.S. department of transportation ("Title 49~Transportation, Code of Federal Regulations" for shipping containers);

(N) "**Farm equipment**" means a farm wagon-type tank vehicle of not over three thousand water gallons capacity, used as a field storage "nurse tank" supplying the fertilizer to a field applicator and moved on highways only for bringing the fertilizer from a local source of supply to farms or fields or from one farm or field to another;

(O) "**Filling density**" means the per cent ratio of the weight of the gas in a container to the weight of water at sixty degrees Fahrenheit that the container will hold. One pound H₂O = 27.737 cubic inches at sixty degrees Fahrenheit. For determining the water capacity of the tank in pounds, the weight of a gallon (two hundred thirty-one cubic inches) of water at sixty degrees Fahrenheit in air shall be 8.32828 pounds;

(P) "**Gas**" means anhydrous ammonia in either the gaseous or liquefied state;

(Q) "**Gas mask**" means gas masks approved by the bureau of mines, U.S. department of interior;

(R) The abbreviations "**psig**" and "**psia**" refer to pounds per square inch gage and pounds per square inch absolute, respectively;

(S) "**Systems**" as used in these standards refers to an assembly of equipment consisting essentially of the container or containers with a minimum capacity of five thousand gallons, appurtenances, pumps, compressors, and interconnecting piping; but excludes equipment for:

- (1) Manufacturing anhydrous ammonia; or
- (2) Underground or refrigerated storage;

(T) The terms "**charging**", "**filling**", and "**transferring**" are used interchangeably and have the same meaning;

(U) "**New system**" includes any system which is altered to change either the stationary storage capacity, product flow rate, or piping design;

(V) "**Safety relief valve**" refers to an automatic spring loaded or equivalent type pressure activated device for gas or vapor service characterized by pop action upon opening, sometimes referred to as a pop valve;

(W) "**Hydrostatic relief valve**" refers to an automatic pressure activated valve for liquid service characterized by throttle or slow weep opening (non-pop action);

(X) An approved instrument evaluation includes hydrostatic, ultrasonic or an x-ray.

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Prior Effective Dates: 11/18/1978

901:5-3-02 Approval of systems.

(A) No person shall:

- (1) Construct a new stationary ammonia system before the director of agriculture approves the location and design of the system;
- (2) Operate a stationary ammonia system before the director approves the system as to design, construction and operation;
- (3) Continue to operate a stationary system after the director determines that continued operation would be a distinct hazard to persons or adjoining property;
- (4) Install a used container in a stationary system until he has delivered to the director:
 - (a) A copy of the manufacturer's data report for the container including the design pressure determined by the ASME code in effect at the time of manufacture and evidence of inspection by an Ohio commission inspector;
 - (b) A report of inspection made by a representative of the director; and if he deems it necessary,
 - (c) A report of an approved instrument evaluation of the container made by a qualified inspection firm under the supervision of a representative of the director.

(B) The director shall:

- (1) Furnish forms for applications for approval of each site plan and design for any system;
- (2) Notify each applicant within thirty days after receipt of his application whether or not the application is approved;
- (3) Assign a permanent registration number to each system.

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Rule Amplifies: 905.40

Prior Effective Dates: 11/18/1978

901:5-3-03 Requirements for new construction and original test of containers (including skid containers).

(A) Containers used with systems covered in rules 901:5-3-12 to 901:5-13-14 of the Administrative Code shall be registered with the "National Board of Unfired Vessels" and shall be constructed and tested in accordance with the latest edition (and subsequent amendments thereto) of the "Unfired Pressure Vessel Code" of the ASME except that construction under "Table UW 12" at a basic joint efficiency of under eighty per cent is not authorized.

Containers built according to the code do not have to comply with paragraphs UG 125 to UG 128, and paragraphs UG 132 and UG 133;

(B) Containers exceeding thirty-six inches in diameter or two hundred fifty gallons capacity shall be constructed to comply with one or more of the following additional requirements:

- (1) Shall be stress relieved after fabrication in accordance with the code, or
- (2) Cold formed heads, when used, shall be stress relieved, or
- (3) Hot formed heads shall be used;

(C) Welding to the shell, head, or any other part of the container subject to internal pressure shall be done in compliance with the code under which the container was fabricated and permanently stamped with the welder's ASME and certification number and date, or, in lieu of the permanent stamping by the welder, a record shall be kept by the manufacturer of welders and welding operators employed on each joint which shall be available to the inspector. Other welding is permitted only on saddle plates, lugs, or brackets attached to the container by the container manufacturer;

(D) All containers shall be inspected by a person having a current certificate of competency from the "National Board of Boiler and Pressure Vessel Inspectors". A report from an Ohio commission inspector shall also be required.

(E) The provisions of paragraph (A) shall not be construed as prohibiting the continued use or reinstallation of containers constructed and maintained in accordance with all prior editions of the "Unfired Pressure Vessel Code" of the ASME or any revisions thereof in effect at the time of fabrication.

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Rule Amplifies: 905.40

Prior Effective Dates: 11/18/1978

901:5-3-04 Markings on containers and systems.

(A) Container nameplates must be legible, permanently attached to the container and accessible for inspection. Container nameplates shall include markings as prescribed in paragraph (B) unless the container has been issued special permit DOT SP13554 by the United States department of transportation.

(B) Each container covered in rules 901:5-3-12 to 901:5-3-14 of the Administrative Code shall be marked as follows:

- (1) With a marking which indicates compliance with the rules of the code under which the container is constructed;
- (2) With a notation on the container nameplate when the container is designed for underground installation;
- (3) With the name and address of the supplier of the container or the trade name of the container and with the date of fabrication;
- (4) With the water capacity of the container in pounds at sixty degrees Fahrenheit or gallons, U.S. standard;
- (5) With the design pressure in pounds per square inch gage;
- (6) With the wall thickness of the shell and heads;
- (7) With marking indicating the maximum level to which the container may be filled with liquid anhydrous ammonia at temperatures between twenty degrees Fahrenheit and one hundred degrees Fahrenheit except on containers provided with fixed maximum level indicators, such as fixed length dip tubes, or containers that are filled by weight. Markings shall be in increments of not more than ten degrees Fahrenheit;
- (8) With the outside surface area in square feet;
- (9) With minimum temperature for which the container is designed;
- (10) Marking specified on container shall be on the container itself or on a nameplate permanently affixed thereto;

(C) All main operating valves on permanently installed containers having a capacity of over three thousand water gallons shall be identified to show whether the valve is in liquid or vapor service. The method of identification shall be legend or color code as specified in:

- (1) Legend: The legend "LIQUID" (or "LIQUID VALVE"), or "VAPOR" (or "VAPOR VALVE"), as appropriate, shall be placed on or within twelve inches of the valve by means of a stencil, tag, or decal;
- (2) Color code: Liquid valves shall be painted Omaha orange or equivalent and vapor valves shall be painted safety yellow or equivalent. The legend "OMAHA ORANGE LIQUID", or "SAFETY YELLOW VAPOR" shall be displayed in one or more conspicuous places at each permanent storage location. The legend shall have letters at least two inches high and shall be placed against a contrasting background.

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Rule Amplifies: 905.40

Prior Effective Dates: 11/18/78, 06/21/07, 01/07/2008

901:5-3-05 Location of containers.

- (A) Consideration shall be given to the physiological effects of ammonia as well as to adjacent fire hazards in selecting the location for a storage container. Containers shall be located outside of any building or in a building or section thereof especially approved for this purpose;
- (B) Containers shall be located at least fifty feet from a dug well or other sources of potable water supply;
- (C) The location of permanent storage containers shall be outside densely populated areas;
- (D) Container locations shall comply with the following table:

Minimum distance (feet) from Container to:			
Nominal Capacity of Container (Gallons)	Line of Adjoining Property which may be built upon, Highways & Mainline of Railroad	Place of Public Assembly	Institution Occupancy
Over 500 to 2,000	25	150	200
Over 2,000 to 30,000	50	300	500
Over 30,000 to 100,000	50	450	750
Over 100,000	50	600	1,000

(E) Storage areas shall be kept free at all times of readily ignitable materials such as, but not limited to, waste, weeds and long dry grass.

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Prior Effective Dates: 11/18/1978

901:5-3-06 Container appurtenances.

- (A) All appurtenances shall be designed for not less than the maximum working pressure of that portion of the system on which they are installed. All appurtenances shall be fabricated from materials proved suitable for anhydrous ammonia service;
- (B) All connections to containers except safety relief devices, gaging devices, or those fitted with a no. 54 drill size orifice shall have shut-off valves located as close to the container as practicable;
- (C) Excess flow valves where required by these rules shall close automatically at the rated flows of vapor or liquid as specified by the manufacturer. The connections and line including valves and fittings being protected by an excess flow valve shall have a greater capacity than the rated flow of the excess flow valve;
- (D) Liquid level gaging devices that require bleeding of the product to the atmosphere and which are so constructed that outward flow will not exceed that passed by a no. 54 drill size opening need not be equipped with excess flow valves;
- (E) Openings from container or through fittings attached directly on container to which pressure gage connections are made need not be equipped with excess flow valves if such openings are not larger than no. 54 drill size;
- (F) Excess flow and back pressure check valves where required by these rules shall be located inside of the container or at a point outside as close as practicable to where the line enters the container. In the latter case, installation shall be made in such manner that any undue stress beyond the excess flow or back pressure check valve will not cause breakage between the container and the valve;
- (G) Excess flow valves shall be designed with a by-pass not to exceed a no. 60 drill size opening to allow equalization of pressures;
- (H) Shut-off valves provided with an excess flow valve shall be designed for proper installation in a container connection so that the excess flow valve will close should the shut-off valve break;
- (I) All excess flow valves shall be plainly and permanently marked with the name or trade-mark of the manufacturer, the catalog number, and the rated capacity.

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Prior Effective Dates: 11/18/1978

901:5-3-07 Piping, tubing and fittings.

- (A) All piping, tubing and fittings shall be made of material suitable for anhydrous ammonia service;
- (B) All piping, tubing and fittings shall be designed for a pressure not less than the maximum pressure to which they may be subjected in service;
- (C) All piping shall be well supported and provision shall be made for expansion and contraction;
- (D) Piping used in systems shall be at least ASTM "A-53 Grade B" seamless electric resistance welded. Such pipe shall be at least "Schedule 40" when joints are welded, or welded and flanged. Such pipe shall be at least "Schedule 80" when joints are threaded. Brass, copper, or galvanized steel pipe or tubing shall not be used;
- (E) All metal flexible connections for permanent installations shall have a minimum working pressure of two hundred fifty psig (safety factor of four). For temporary installations, hose meeting the requirements of rule 901:5-3-08 of the Administrative Code shall be used;
- (F) Cast iron fittings shall not be used but this shall not prohibit the use of fittings made specifically for ammonia service of ductile iron such as "Specification ASTM A47" or "ASTMA395";
- (G) Provisions shall be made for expansion, contraction, jarring, vibration, and for settling;
- (H) Adequate provisions shall be made to protect all exposed piping from physical damage that might result from moving machinery, the presence of automobiles or trucks, chemical corrosion or any other undue strain that may be placed upon the piping;
- (I) Joint compounds shall be resistant to ammonia. Teflon ammonia resistant tape can be used;
- (J) After assembly, all piping and tubing shall be tested and proved to be free from leaks at a pressure not less than the normal operating pressure of the system.

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901:5-3-08 Hose specification.

- (A) Hose used in ammonia service and subject to container pressure shall conform to the joint "Rubber Manufacturers Association" and "The Fertilizer Institute" "Hose Specifications for Anhydrous Ammonia" "Standard No. M-5";
- (B) Hose subject to container pressure shall be designed for a minimum working pressure of three hundred fifty psig and a minimum burst pressure of one thousand seven hundred fifty psig. Hose assemblies, when made up, shall be capable of withstanding a test pressure of five hundred psig;
- (C) Hose and hose connections located on the low pressure side of flow control or pressure reducing valves on devices discharging to atmospheric pressure shall be designed for the maximum low side working pressure. All connections shall be designed, constructed, and installed so that there will be no leakage when connected;
- (D) Where liquid transfer hose is not drained of liquid upon completion of transfer operations, such hose shall be equipped with an approved shut-off valve at the discharge end.
- (E) On all hose one-half inch outside diameter and larger, used for the transfer of anhydrous ammonia liquid or vapor, there shall be etched, cast, or impressed at no less than five-foot intervals the following information:
"Anhydrous Ammonia"
xxx psig (Maximum working pressure)
Manufacturer's Name or Trademark
Year of Manufacture
- (F) All hose shall be replaced five years after date of manufacture or after evidence of damage.

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901:5-3-09 Safety relief devices.

(A) Every container used in systems covered by rules 901:5-3-12 to 901:5-3-14 of the Administrative Code shall be provided with one or more safety relief valves of the spring-loaded or equivalent type. The discharge from safety relief valves shall be vented away from the container, upward and unobstructed to the atmosphere. All safety relief valve discharge openings shall have suitable raincaps that will allow free discharge of the vapor and prevent the entrance of water. Provision shall be made for draining condensate which may accumulate. The rate of the discharge shall be in accordance with the provisions of Appendix A, ANSI K 61.1 -1972;"

(B) Container safety relief valves shall be set to start-to-discharge as follows, with relations to the design pressure of the container:

Containers	Minimum	Maximum
ASME-U-68, U-69	95%	100%
ASME-U-200, U-201	95%	100%
ASME 1952, 1956, 1962, 1965, 1968 or 1971	95%	100%
API-ASME	95%	100%

(C) Safety relief devices used in systems covered by rules 901:5-3-12 to 901:5-3-14 of the Administrative Code shall be constructed to discharge at not less than the rates required in paragraph (A) before the pressure is in excess of one hundred twenty per cent of the maximum permitted start-to-discharge pressure setting of the device;

(D) Safety relief valves shall be so arranged that the possibility of tampering will be minimized. If the pressure setting adjustment is external, the relief valves shall be provided with means for sealing the adjustment;

(E) Shut-off valves shall not be installed between the safety relief valves and the containers or systems described in rules 901:5-3-12 to 901:5-3-14 of the Administrative Code except that a shut-off valve may be used where the arrangement of this valve is such as always to afford required capacity flow through the relief valves.

Note: The above exception is made to cover such cases as a threeway valve installed under two safety relief valves, each of which has the required rate of discharge and is so installed as to allow either of the safety valves to be closed off, but does not allow both safety valves to be closed off at the same time. Another exception to this may be where two separate relief valves are installed with individual shut-off valves. In this case, the two shut-off valve stems shall be mechanically interconnected in a manner which will allow full required flow of one safety relief valve at all times. Still another exception is a safety relief valve manifold which allows one valve of two, three, four or more to be closed off and the remaining valve or valves will provide not less than the rate of discharge shown on the manifold nameplate.

(F) Safety relief valves shall have unrestricted access to the vapor space of the container;

(G) Each safety relief valve used with systems described in rules 901:5-3-12 to 901:5-3-14 of the Administrative Code shall be plainly and permanently marked as follows:

- (1) With the letters "AA" or the symbol "NH₃";
- (2) The pressure in pounds per square inch gage (psig) at which the valve is set to start-to-discharge;
- (3) The rate of discharge of the valve in cubic feet per minute of air at sixty degrees Fahrenheit and atmospheric pressure (14.7 psia);
- (4) The manufacturer's name or trademark and catalog number and date of manufacture shall be required on all newly installed relief valves. For example, a safety relief valve marked "AA-250-4200" (air) means that this valve is suitable for use on an anhydrous ammonia container; that it is set to start-to-discharge at two hundred fifty psig; and that its rate of discharge is four thousand two hundred cubic feet per minute of air;

(H) The flow capacity of the safety relief valve shall not be restricted by any connection to it on either the upstream or downstream side;

(I) The manufacturer or supplier of a safety relief valve manifold shall publish complete data showing the flow rating through the combined assembly of the manifold with safety relief valves installed. The manifold flow rating

shall be determined by testing the manifold with all but one valve discharging. If one or more openings have restrictions not present in the remaining openings, the restricted opening or openings or those having the lowest flow shall be used to establish the flow rate marked on the manifold nameplate. The marking shall be similar to that required in paragraph (G) for individual valves;

(J) A hydrostatic relief valve shall be installed between each pair of shut-off valves in the liquid ammonia piping or hose where liquid may be trapped so as to relieve into the atmosphere at a safe location, or shut-off valves with internal relief shall be used;

(K) Discharge from safety relief devices shall not terminate in or beneath any building.

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901:5-3-10 Safety.

(A) Personnel required to handle ammonia shall be trained in safe operating practices and the proper action to take in the event of emergencies. Personnel shall be instructed to use the equipment listed in paragraph (C) in the event of an emergency.

(B) If a leak occurs in an ammonia system, the personnel trained for and designated to act in such emergencies shall:

- (1) See that persons not required to deal with an emergency are evacuated from the contaminated area;
- (2) Put on a suitable gas mask;
- (3) Wear gauntlet type plastic or rubber gloves and wear plastic or rubber suits in heavily contaminated atmospheres;
- (4) Shut off the appropriate valves and take all feasible measures to resist the flow of ammonia;
- (5) Seek professional assistance, such as a fire department, when necessary to control and/or stop an anhydrous ammonia leak.

(C) All storage systems shall have on hand, as a minimum, the following equipment for emergency and rescue purposes:

- (1) One full face gas mask with unused anhydrous ammonia refill canisters, with valid expiration date;
- (2) One pair of protective gloves;
- (3) One pair of protective boots;
- (4) One protective slicker and/or protective pants and jacket;
- (5) Easily accessible shower and/or at least one hundred fifty gallons of clean water in an open top container;
- (6) Tight fitting vented goggles or one full face shield;
- (7) Where several persons are usually present, additional safety equipment shall be required.

(D) Each piece of farm equipment transporting anhydrous ammonia shall carry a container of at least five gallons of water and shall be equipped with rubber gloves and either a full face gas mask, or a pair of tight-fitting goggles, or one full face shield. The driver shall be instructed in their use and the proper action to take to provide for his safety.

(E) If a leak occurs in transportation equipment and it is not practical to stop the leak, the driver should move the vehicle to an isolated location away from populated communities or heavily traveled highways.

(F) If liquid ammonia contacts the skin or eyes, the affected area should be promptly and thoroughly flushed with water for at least fifteen minutes. Do not use neutralizing solutions or ointments on affected areas. Persons exercising control over liquid ammonia shall be responsible for being certain that a physician is consulted for persons who have accidental exposure to liquid ammonia.

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901:5-3-11 Filling and transfer to systems.

(A) Filling densities

(1) The filling densities of containers shall not exceed the following:

		Aboveground	Underground
(a)	Uninsulated	56%	58%
(b)	Insulated	57%	

(2) If containers are to be filled according to liquid level by any gaging method other than a fixed length dip tube gage, each container should have a thermometer well so that the internal liquid temperature can be easily determined and the amount of liquid and vapor in the container corrected to a sixty degrees Fahrenheit basis.

(B) Transfer of liquids

(1) Anhydrous ammonia shall always be at a temperature suitable for the material of construction and design of the receiving containers;

(2) At least one attendant shall supervise the transfer of liquids from the time the connections are first made until they are finally disconnected;

(3) Flammable gases or gases which will react with ammonia (such as air) shall not be used to unload tank cars or transport trucks;

(4) Containers shall be charged or used only upon authorization of the owner;

(5) Containers shall be gaged and charged only in the open atmosphere or in buildings approved for that purpose;

(6) Pumps used for transferring ammonia shall be recommended and labeled for ammonia service by the manufacturer.

(a) Pumps shall be designed for at least two hundred fifty psig working pressure;

(b) Positive displacement pumps shall have installed, off the discharge port, a constant differential relief valve or a bypass valve discharging into the suction post of the pump through a line of sufficient size to carry the full capacity of the pump at relief valve setting, which setting and installation shall be according to pump manufacturer's recommendations;

(c) On the discharge side of the pump, before the relief valve line, there shall be installed a pressure gage graduated from zero to four hundred psig;

(d) Systems piping shall contain shut-off valves located as close as practicable to pump connections;

(7) Compressors used for transferring ammonia shall be recommended and labeled for ammonia service by the manufacturer;

(a) Compressors shall be designed for at least two hundred fifty psig working pressure. Crank cases of compressors not designed to withstand system pressure shall be protected with a suitable safety relief valve;

(b) Systems piping shall contain shut-off valves located as close as practicable to compressor connections;

(c) A safety relief valve large enough to discharge the full capacity of the compressor shall be connected to the discharge before any shut-off valve;

(d) Compressors shall have pressure gages at suction and discharge graduated from zero to four hundred psig;

(e) Adequate means, such as a drainable liquid trap, shall be provided on the compressor suction to minimize the entry of liquid into the compressor;

(f) Where necessary to prevent contamination, an oil separator shall be provided on the discharge side of the compressor.

(8) Loading and unloading systems shall be protected by suitable devices to prevent emptying of the storage container or the container being loaded or unloaded in the event of severance of the hose. Backflow check valves or properly sized excess flow valves shall be installed where necessary to provide such protection. In the event that such valves are not practical, remotely operated shut-off valves may be installed;

(9) Meters used for the measurement of liquid anhydrous ammonia shall be recommended and labeled for ammonia service by the manufacturer;

(a) Liquid meters shall be designed for a minimum working pressure of two hundred fifty psig;

(b) The metering system shall incorporate devices that will prevent the inadvertent measurement of vapor.

(10) No transfer shall be made directly from a motor transport which exceeds three thousand water gallons in capacity to application equipment;

(C) Tank car unloading points and operations

(1) Provisions for unloading tank cars shall conform to the regulations of the U.S. department of transportation;

(2) Unloading operations shall be performed by reliable persons properly instructed and made responsible for careful compliance with all applicable procedures;

(3) Caution signs shall be so placed on the track or car as to give necessary warning to persons approaching car from open end or ends of siding and shall be left up until after car is unloaded and disconnected from discharge connections. Signs shall be of metal or other suitable material, at least twelve by fifteen inches in size and bear the words "STOP - Tank Car Connected" or "STOP - Men At Work", the word "STOP" being in letters at least four inches high and the other words in letters at least two inches high. The letters shall be white on a blue background;

(4) The track of a tank car siding shall be substantially level;

(5) Brakes shall be set and wheels chocked on all cars being unloaded;

(6) Tank cars of anhydrous ammonia shall be unloaded only at approved locations meeting the requirements of rules 901:5-3-01 to 901:5-3-12 of the Administrative Code.

(D) Liquid level gaging device.

(1) Each container except those filled by weight shall be equipped with an approved liquid level gaging device;

(2) All gaging devices shall be arranged so that the maximum liquid level to which the container is filled is readily determined;

(3) Gaging devices that require bleeding of the product to the atmosphere such as the rotary tube, fixed tube, and slip tube devices, shall be designed so that the maximum opening of the bleed valve is not larger than no. 54 drill size unless provided with an excess flow valve;

(4) Gaging devices shall have a design pressure equal to or greater than the design pressure of the container on which they are installed;

(5) Fixed liquid level gages shall be so designed that the maximum volume of the container filled by liquid shall not exceed eighty-five per cent of its water capacity. The coupling into which the fixed liquid level gage is threaded must be placed at the eighty-five per cent level of the container. If located elsewhere, the dip tube of this gage must be installed in such a manner that it cannot be readily removed;

(6) Gage glasses of the columnar type shall be restricted to stationary storage installations. They shall be equipped with shut-off valves having metallic handwheels, with excess-flow valves, and with extra heavy glass adequately protected with a metal housing applied by the gage manufacturer. They shall be shielded against the direct rays of the sun.

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901:5-3-12 Systems utilizing stationary, pier-mounted or skid-mounted storage.

(A) Container valves and accessories, filling and discharge connections

(1) Each filling connection shall be provided with combination back-pressure check valve and excess flow valve; one double or two single back-pressure check valves; or a positive shut-off valve in conjunction with either an internal back-pressure check valve or an internal excess flow valve.

(2) All vapor and liquid connections, except safety-relief valves and those specifically exempt in rule 901:5-3-06 of the Administrative Code shall be equipped with approved excess flow valves; or in lieu

thereof, may be fitted with approved quick-closing internal valves which, except during operating periods, shall remain closed.

(3) Each storage container shall be provided with a pressure gage graduated from zero to four hundred psig. Gages shall be designated for use in ammonia service.

(4) All containers shall be equipped with an approved vapor return valve.

(5) All containers shall be equipped with a fixed maximum liquid level gage.

(B) Safety relief devices

Every container shall be provided with one or more safety relief valves of spring-loaded or equivalent type and shall comply with the following:

(1) The discharge from safety relief valves shall be directed away from the container upward and unobstructed to the open air. Vent pipes shall not be restrictive or smaller in size than the safety relief valve outlet connection. All safety relief valve discharges shall have suitable rain caps that will allow free discharge of the vapor and prevent the entrance of water. Suitable provision shall be made for draining condensate which may accumulate;

(2) If desired, vent pipes from two or more safety relief devices located on the same unit, or similar lines from two or more different units, may be run into a common header, provided the cross-sectional area of such header is at least equal to the sum of the cross-sectional areas of the individual vent pipes.

(C) Installation of storage containers

(1) Containers shall be provided with substantial reinforced concrete footings and foundations or structural steel supports mounted on reinforced concrete foundations. In either case, the reinforced concrete foundations or footings shall extend below the established frost line and shall be of sufficient width and thickness to support the total weight of the containers and contents adequately. The foundation shall maintain the lowest point of the tank at not less than eighteen inches above the ground. Floating type foundations shall also be acceptable providing the foundations are designed to adequately support the tank, contents and pumping equipment.

(2) Horizontal aboveground containers shall be mounted on foundations in such a manner as to permit expansion and contraction. Every container shall be supported so as to prevent the concentration of excessive loads on the supporting portion of the shell. The bearing afforded by the saddles shall extend over at least one third of the circumference of the shell. Suitable means for preventing corrosion shall be provided on that portion of the container in contact with the foundations or saddles.

(3) Distance between containers shall be at least five feet, end to end or side to side.

(4) Only two supports shall be used per container.

(D) Marking of containers

(1) Aboveground uninsulated containers shall have a reflective surface maintained in good condition. White is recommended for painted surfaces, but other light reflecting colors are acceptable.

(2) Each container or group of containers shall be marked on at least two sides with the words "Anhydrous Ammonia" in sharply contrasting colors with letters not less than four inches high.

(E) Marking of appurtenances

(1) All container openings, except safety relief valves, liquid level gaging devices, and pressure gages shall be identified by legend or color code as specified in paragraphs (C)(1) and (2) of rule 901:5-3-04 of the Administrative Code.

(2) Instructions for loading and unloading procedures shall be required at all installations.

(F) Protection of container appurtenances

(1) Valves and other appurtenances shall be protected against physical damage. Main container shut-off valves shall be kept closed and locked when the installation is unattended. If the facility is protected against tampering by fencing or other suitable means, valve locks are not required.

(2) Storage containers need not be grounded.

(G) Identification

(1) A sign shall be displayed in a conspicuous place stating the name, address, and phone number of the nearest representative, agent, or owner of the storage system, an emergency phone number and the phone number of the nearest fire department.

(2) A plant registration number assigned by the Ohio department of agriculture shall be prominently displayed with the information required in paragraph (G)(1).

(H) Electrical equipment and wiring

- (1) Electrical equipment and wiring for use in ammonia installations shall be general purpose or weather resistant as appropriate.
- (2) Where concentrations of ammonia in air in excess of sixteen per cent by volume are likely to be encountered, electrical equipment and wiring shall be a type specified by and be installed in accordance with "National Electrical Code", "NFPA 70 (ANSI-C1)", for "Class I, Group D" locations.

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901:5-3-13 Systems mounted on farm equipment for the delivery of ammonia.

(A) Design and construction of containers

Containers shall be designed and constructed in accordance with rule 901:5-3-03 of the Administrative Code;

(B) Mounting containers

- (1) A suitable "stop" or "stops" shall be mounted on farm equipment or on the container in such a way that the container shall not be dislodged from its mounting due to the farm equipment coming to a sudden stop. Back slippage shall also be prevented by proper methods;
- (2) A suitable "hold-down" device shall be provided which will anchor the container to the farm equipment at one or more places on each side of the container;
- (3) When containers are mounted on four-wheel farm equipment, care shall be taken to insure that the weight is distributed evenly over both axles;
- (4) When the cradle and the container are not welded together, suitable material shall be used between them to eliminate metal-to-metal friction.

(C) Container appurtenances

- (1) All containers shall be equipped with a fixed maximum liquid level gage;
- (2) All containers with a capacity exceeding two hundred fifty gallons shall be equipped with a pressure gage having a dial graduated from zero to four hundred psig;
- (3) The filling connection shall be fitted with combination back-pressure check valve and excess flow valve; one double or two single back-pressure check valves; or a positive shut-off valve in conjunction with either an internal back-pressure check valve or an internal excess flow valve;
- (4) All containers with a capacity exceeding two hundred fifty gallons shall be equipped for spray loading or with an approved vapor return valve;
- (5) All vapor and liquid connections, except safety relief valves and those specifically exempt in rule 901:5-3-03 of the Administrative Code, shall be equipped with approved excess flow valves or may be fitted with quick-closing internal valves which, except during operating periods, shall remain closed;
- (6) Fittings shall be protected from physical damage by means of a rigid guard designed to withstand static loading in any direction equal to twice the weight of the container and lading using a safety factor of two based upon the ultimate strength of the material used. If the guard is fully enclosed, the safety relief valves shall be properly vented through the guard;
- (7) If a liquid withdrawal line is installed in the bottom of a container, the connections thereto, including hose, shall not be lower than the lowest horizontal edge of the farm equipment axle;
- (8) Provision shall be made to secure both ends of the hose while in transit.

(D) Marking of container

There shall appear on each side and on the rear end of the container in letters at least four inches high, the words "ANHYDROUS AMMONIA".

(E) Marking of appurtenances

- (1) All container openings, except safety relief valves, liquid level gaging devices, and pressure gages shall be identified by legend or color code as specified in rule 901:5-3-04 of the Administrative Code;
- (2) Instructions for loading and unloading procedures shall be required on all containers.

(F) Farm equipment

- (1) Any farm equipment shall be securely attached to the vehicle drawing it by means of drawbars supplemented by suitable safety chains;
- (2) Any farm equipment shall be constructed so that it will follow substantially in the path of the towing vehicle and will prevent the towed farm wagon from slipping or swerving dangerously from side to side and shall display a slow moving vehicle emblem;
- (3) Each piece of farm equipment transporting anhydrous ammonia shall carry a container of at least five gallons of water and shall be equipped with rubber gloves and either a full face mask, or a pair of tight-fitting goggles, or one full face shield. The driver shall be instructed in their use and the proper action to take to provide for his safety.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

Promulgated Under: 119.03

Statutory Authority: 905.40

Rule Amplifies: 905.40

Prior Effective Dates: 11/18/1978

901:5-3-14 Systems mounted on farm equipment for the application of ammonia.

(A) Design and construction of containers

The minimum design and construction for containers shall be in accordance with rule 901:5-3-03 of the Administrative Code.

(B) Mounting of containers

All containers shall be securely mounted.

(C) Container valves and appurtenances

- (1) Each container shall have a fixed maximum liquid level gage;
- (2) The filling connection shall be fitted with combination back-pressure check valve and excess flow valve; one double or two single back-pressure check valves; or a position shut-off valve in conjunction with either an internal back-pressure valve or an internal excess-flow valve;
- (3) An excess-flow valve is not required in the vapor connection, provided the controlling orifice is not in excess of seven-sixteenths of an inch in diameter and the valve is a hand-operated (attached hand wheel or equivalent) shut-off valve. To assist in filling applicator tanks, it is permissible to bleed vapors to the open air, providing the preceding requirements are met;
- (4) Metering devices may be connected directly to the tank withdrawal valve. A union type connection is permissible between the tank valve and metering device. Remote mounting of metering devices is permissible using hose which meets with the specifications required by rule 901:5-3-08 of the Administrative Code. When the applicator tank is trailed and the metering device is remotely mounted, such as on the tractor tool bar, an automatic break-a-way type, self-closing, coupling must be used;
- (5) No excess-flow valve is required in the liquid withdrawal line provided the controlling orifice between the contents of the container and the outlet of the shut-off valve does not exceed seven-sixteenths of an inch in diameter.

(D) Safety equipment

Each piece of farm equipment transporting anhydrous ammonia shall carry a container of at least five gallons of water and shall be equipped with rubber gloves and either a full face mask, or a pair of tight-fitting goggles, or one full face shield. The driver shall be instructed in their use and the proper action to take to provide for his safety.

(E) Marking of container

There shall appear on the rear and both sides of the container in letters at least four inches high the words "ANHYDROUS AMMONIA."

(F) Marking of appurtenances

- (1) All container openings, except safety relief valves, liquid level gaging devices, and pressure gages shall be identified by legend or color code as specified in rule 901:5-3-04 of the Administrative Code;
- (2) Instructions for loading and unloading procedures shall be required on all containers.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

Promulgated Under: 119.03

Statutory Authority: 905.40

Rule Amplifies: 905.40

Prior Effective Dates: 11/18/1978

901:5-4-01 Definitions.

- (A) "**Agricultural nutrient training**" means the educational programs which satisfy the requirements of rule 901:5-4-03 of the Administrative Code and which have been approved by the director.
- (B) "**Agricultural production**" means the cultivation, primarily for sale, of plants or any parts of plants on more than fifty acres. "Agricultural production" does not include the use of start-up fertilizer applied through a planter.
- (C) "**Applicator**" means an individual who has applied fertilizer.
- (D) "**Certificate Holder**" means a person who has been certified to apply fertilizer under section 905.321 of the Revised Code and rules adopted in this chapter.
- (E) "**Director**" means the director of the Ohio department of agriculture or an authorized representative thereof.
- (F) "**Department**" means the Ohio department of agriculture.
- (G) "**Farm operator**" means a person who owns, leases, rents, or otherwise controls the land which has had fertilizer applied to it.
- (H) "**Fertilizer**" means any substance containing nitrogen, phosphorus, or potassium or any recognized plant nutrient element or compound, which is used for its plant nutrient content or for compounding mixed fertilizers. Fertilizer does not include lime, limestone, marl, unground bone, water, residual farm products, and animal and vegetable manures unless mixed with fertilizer materials or distributed with a guaranteed analysis.
- (I) "**Fertilizer application records**" means the records required to be created and maintained in accordance with paragraph (A) of rule 901:5-4-04 of the administrative code.
- (J) "**Fertilizer certificate**" means the certificate issued to a person who has been certified to apply fertilizer by the Ohio department of agriculture under Chapter 905. of the Revised Code and the rules adopted under this chapter.
- (K) "**Immediate family member**" means an individual's spouse, parents, children, grandparents, siblings, grandchildren, brother-in-law, sister-in-law, daughter-in-law, son-in-law, mother-in-law, father-in-law, step-parents, step-children, step-siblings, or a legal guardian.
- (L) "**Under the instructions and control**" means that a certificate holder has instructed an applicator as to when, where, and how to apply fertilizer and is located within twenty-five miles distance or two hours time from the applicator at the time of application of fertilizer.

Cite as Ohio Admin. Code 901:5-4-01

Effective: 12/13/2014

Five Year Review (FYR) Dates: 12/13/2019

Promulgated Under: 119.03

Statutory Authority: 905.321, 905.322

Rule Amplifies: 905.321, 905.322

901:5-4-02 Fertilizer applicator certification.

- (A) Beginning September 30, 2017, no person shall apply fertilizer for the purposes of agricultural production unless either of the following applies:
 - (1) That person has been issued a fertilizer certificate by the director; or
 - (2) That person is acting under the instructions and control of a certificate holder and is either:
 - (a) An immediate family member of the certificate holder; or
 - (b) An individual employed by the same business or farm as the certificate holder .
- (B) An applicant shall be issued a fertilizer certificate if the applicant has satisfied the requirements set out in Chapter 905. of the Revised Code and the rules adopted thereunder, and the following have been received by the director:
 - (1) The fee as set forth in paragraph (D) of this rule;
 - (2) A completed formal application; and
 - (3) Certificate showing that the applicant has successfully completed a fertilizer education course as set forth in rule 901:5-4-03 of the Administrative Code.
- (C) A completed formal application on a form prescribed by the director shall include the following:
 - (1) Name of the applicant;
 - (2) Address of applicant;

- (3) Applicant's date of birth;
- (4) Name of employer, if applicable;
- (5) Address of employer, if applicable;
- (6) Phone number of the applicant; and either
- (7) Pesticide applicator license number, if applicable; or
- (8) The last four digits of the applicant's social security number.

(D) The initial fee and the renewal fee for a fertilizer certificate shall be thirty dollars per certification period. These fees are non-refundable. These fees are not applicable to the following individuals:

- (1) A person who holds a valid and current commercial applicator license under section 921.06 of the Revised Code; and,
- (2) A person who holds a valid and current private applicator license under section 921.11 of the Revised Code.

(E) Except for as provided below, the certification period for certificate holders shall commence on the first day of April and shall expire the last day of March of the third year following issuance of the certificate.

- (1) The certification period for certificate holders who hold a valid and current commercial applicator license under section 921.06 of the Revised Code shall commence on the first day of October and shall coincide with the certification period associated with their commercial applicator license.
- (2) The certification period for certificate holders who hold a valid and current private applicator license under section 921.11 of the Revised Code shall commence on the first day of April and shall coincide with the certification period associated with their private applicator license.

(F) Certificate holders who have completed the renewal education requirements found in paragraph (C) of rule 901:5-4-03 of the Administrative Code but have failed to complete the renewal application process prior to the expiration of their certificate may renew their certificate within one hundred and eighty days after the date of expiration without having to comply with the education requirements of a new applicant found in paragraph (B) of rule 901:5-4-03 of the Administrative Code.

Cite as Ohio Admin. Code 901:5-4-02

Effective: 10/1/2017

Five Year Review (FYR) Dates: 12/13/2019

Promulgated Under: 119.03

Statutory Authority: 905.321, 905.322

Rule Amplifies: 905.321, 905.322

Prior Effective Dates: 12/13/2014

901:5-4-03 Education requirements.

(A) Each applicant for a fertilizer certificate shall successfully complete a department approved agricultural nutrient training course which, at a minimum, educates the applicant on the following:

- (1) The proper times to apply fertilizer, including time of day and time of season;
- (2) The proper place to apply fertilizer;
- (3) The form of fertilizer that should be applied;
- (4) The proper amount of fertilizer to be applied;
- (5) The storage and handling of fertilizer; and
- (6) The proper fertilizer application techniques.

(B) Each applicant for an initial fertilizer certificate shall complete one of the following educational requirements, if applicable, within twelve months prior to applying for certification:

- (1) A minimum of three hours of agricultural nutrient training as set forth in this rule.
- (2) Individuals whom have demonstrated that they possess adequate knowledge of the fertilizer training requirements set forth in this rule by successfully passing a fertilizer examination approved by the department within twelve months of applying for certification.

(C) Each applicant whom possesses a valid and current fertilizer certificate and wishes to renew their certificate shall complete one of the following educational requirements:

- (1) One hour of agricultural nutrient training as set forth in this rule.

(2) Individuals may demonstrate that they possess adequate knowledge of the fertilizer training requirements set forth in this rule by successfully passing a fertilizer examination approved by the department within twelve months of applying for certification.

(3) Individuals whom have obtained their fertilizer certificate within twelve months of applying for a renewal certificate are not required to complete the renewal educational requirements found in paragraphs (C)(1) and (C)(2) of this rule.

(D) Opportunity to take a fertilizer applicator course will be provided at such times and places as approved by the director in consideration of the number and location of requests for courses.

(E) The following individuals are exempted from the education requirements found in this rule:

(1) Individuals whom have provided evidence that they have completed the training provided in accordance with the "certified crop advisor" program conducted by the "American society of agronomy."

(2) Individuals who hold a valid and current livestock managers certification under section 903.07 of the Revised Code.

Cite as Ohio Admin. Code 901:5-4-03

Effective: 10/1/2017

Five Year Review (FYR) Dates: 12/13/2019

Promulgated Under: 119.03

Statutory Authority: 905.321, 905.322

Rule Amplifies: 905.321, 905.322

Prior Effective Dates: 12/13/2014

901:5-4-04 Recordkeeping.

(A) All fertilizer certificate holders shall maintain fertilizer application records. For each application of fertilizer applied for the primary purpose of agricultural production, the certificate holder or the applicator acting under their instructions and control shall document the following information within twenty-four hours of application:

(1) The date of the application of fertilizer;

(2) The place of application of fertilizer;

(3) The number of acres applied;

(4) The rate of application of fertilizer;

(5) The total amount of fertilizer applied, by weight or volume;

(6) An analysis of the fertilizer applied;

(7) The name of the individual who applied the fertilizer;

(8) The name of the certificate holder, if applicable;

(9) The soil conditions at the time of the application;

(10) The type of application method (soil injected, incorporated, surface, etc.);

(11) The weather conditions at the time of application, including temperature and precipitation;

(12) The weather forecast for the day following application; and

(13) For surface application only, whether the land at the time of application was frozen and/or snow covered.

(B) All individuals acting under the instructions and control of a certificate holder shall transmit all fertilizer application records to the certificate holder within ten days of application.

(C) Fertilizer application records shall be maintained for a period of three years. If applicable, the employer of a certificate holder may elect to maintain the fertilizer application records. If elected, the employer shall maintain the fertilizer application records for a period of three years even if the employee-employer relationship has ended. The employer must make the records available to the certificate holder and the department of agriculture, upon request.

(D) All fertilizer certificate holders shall transmit all fertilizer application records to the farm operator within thirty days of application.

(E) Fertilizer certificate holders are not required to submit these records to the director, but the records shall be made available to the director or the director's designee for review upon request.

Cite as Ohio Admin. Code 901:5-4-04

Effective: 10/1/2017

Five Year Review (FYR) Dates: 12/13/2019

Promulgated Under: 119.03
Statutory Authority: 905.321, 905.322
Rule Amplifies: 905.321, 905.322
Prior Effective Dates: 12/13/2014

901:5-4-05 Criteria for decision-making.

The director may deny, suspend, or revoke a fertilizer applicator certificate if the certificate holder or certificate applicant has:

- (A) Provided false or misleading information on the application for or renewal application of the fertilizer applicator certificate;
- (B) Failed to provide the fee as required in paragraph (D) of rule 901:5-4-02 of the Administrative Code;
- (C) Failed to complete the fertilizer applicator education course as outlined in rule 901:5-4-03 of the Administrative Code;
- (D) Recklessly applied fertilizer in such a manner that an emergency exists that presents a clear and present danger to human or animal health;
- (E) Failed to maintain records as required in rule 901:5-4-04 of the Administrative Code; and
- (F) A history of violations of the rules of this chapter.

Effective: 12/13/2014

Five Year Review (FYR) Dates: 12/13/2019

Promulgated Under: 119.03

Statutory Authority: 905.321, 905.322

Rule Amplifies: 905.321, 905.322

901:5-4-06 Annual tonnage report.

As required in section 905.36 of the Revised Code all licensees and registrants shall file their annual tonnage report on or before the thirtieth day of November of each calendar year on a form prescribed by the director of agriculture.

Effective: 2/7/2015

Five Year Review (FYR) Dates: 02/07/2020

Promulgated Under: 119.03

Statutory Authority: 905.321, 905.36

Rule Amplifies: 905.321, 905.36

901:5-4-07 Civil Penalties.

(A) Minor violations are events of noncompliance with section 905.326 of the Revised Code that occur only when all of the following parameters are met:

- (1) The nutrient value of the fertilizer application is less than ten thousand pounds of nitrogen or six thousand pounds of phosphorous;
- (2) The fertilizer application does not pose a significant risk of harm to public health or the environment;
- and
- (3) The fertilizer application has not resulted in any discharge of fertilizer that enters the water of the state.

(B) Major violations are events of noncompliance with section 905.326 of the Revised Code that occur only when any of the following parameters are met:

- (1) The nutrient value of the fertilizer application is equal to or more than ten thousand pounds of nitrogen or six thousand pounds of phosphorous;
- (2) The fertilizer application poses a significant risk of harm to public health or the environment;
- (3) The fertilizer application has resulted in a discharge of fertilizer that enters the water of the state.

(C) Failure to take corrective action as specified by the director or the director's designated representative for any minor violation may be considered a major violation of this rule.

(D) The director may assess a civil penalty for a minor violation of up to two thousand dollars for each day of noncompliance with section 905.326 of the Revised Code.

(E) The director may assess a civil penalty for a major violation of up to ten thousand dollars for each day of noncompliance with section 905.326 of the Revised Code.

(F) All money paid under divisions (D) and (E) of this rule shall be deposited into the agricultural pollution abatement fund.

Effective: 1/31/2016

Five Year Review (FYR) Dates: 01/31/2021

Promulgated Under: 119.03

Statutory Authority: 905.327

Rule Amplifies: 905.326, 905.327

901:5-5-01 Definitions.

When used in applying for licenses to manufacture, sell or distribute agricultural liming material or in advertisements, labels, or invoices for such materials:

(A) "**Calcitic limestone**" means a product composed chiefly of calcium carbonate with lesser amounts of magnesium carbonate.

(B) "**Director**" or "**director of agriculture**" means the director of the Ohio department of agriculture or his/her designee.

(C) "**Dolomitic limestone**" means a product composed chiefly of carbonates of calcium and magnesium in unimolar proportions.

(D) "**Marl**" means a granular or loosely consolidated earthy material composed largely of shell fragments and calcium carbonate.

(E) The "**carbonate form**" of agricultural liming material means the product resulting from the grinding or the crushing of calcitic or dolomitic limestone.

(F) The "**hydrate form**" of agricultural liming material means the product composed chiefly of calcium and magnesium hydroxides.

(G) The "**oxide form**" of agricultural liming material means the product resulting from burning calcitic or dolomitic limestone, is composed chiefly of calcium oxide with lesser amounts of magnesium oxide, and is commonly called "burned lime".

(H) The "**silicate form**" of agricultural liming material means the fused product composed chiefly of calcium and magnesium silicates, and is commonly called "slag".

(1) "Air cooled slag" means the material resulting from solidification of molten slag under atmospheric conditions.

(2) "Granulated slag" means the glassy granular material formed when molten slag is rapidly chilled, as by immersion in water.

(I) "**Waste lime**" or "**by-product lime**" means any industrial waste or by-product containing calcium or calcium and magnesium in forms that will neutralize soil acidity.

Effective: 10/11/2018

Five Year Review (FYR) Dates: 7/26/2018 and 10/11/2023

Promulgated Under: 119.03

Statutory Authority: 905.61

Rule Amplifies: 905.61

Prior Effective Dates: 4/29/1968

901:5-5-02 Tolerances.

Agricultural liming material is mislabeled if the director of agriculture determines after analysis, that:

(A) The total neutralizing power of the agricultural liming material is more than five percentage points below the guaranteed neutralizing power; or

(B) The sum of the percentages of calcium and magnesium is more than five percentage points below the sum of the guaranteed percentages for calcium and magnesium; or

(C) The amount of material which passes through any sieve size is more than five percentage points below the percentage guaranteed for that sieve size.

Effective: 10/11/2018

Five Year Review (FYR) Dates: 7/26/2018 and 10/11/2023

Promulgated Under: 119.03

Statutory Authority: 905.61

Rule Amplifies: 905.61
Prior Effective Dates: 4/29/1968

901:5-5-03 [Rescinded] Sample analysis.

Effective: 10/11/2018
Five Year Review (FYR) Dates: 7/26/2018
Promulgated Under: 119.03
Statutory Authority: 905.61
Rule Amplifies: 905.61
Prior Effective Dates: 4/29/1968

901:5-5-04 Sampling.

(A) When samples are collected, samples must be taken which represent an average of all parts in a given lot of bulk agricultural liming material and shall avoid surface material, modified or contaminated material, or material from the bottom of the pile of such material.

(B) The director shall not take samples from broken or damaged bags of agricultural liming material.

R.C. 119.032 review dates: 05/17/2013 and 05/17/2018

Promulgated Under: 119.03

Statutory Authority: 905.61

Rule Amplifies: 905.61

Prior Effective Dates: 4/29/1968