NEBRASKA ADMINISTRATIVE CODE

NEBRASKA DEPARTMENT OF ENVIRONMENT AND ENGERY

TITLE 198

Rules and Regulations Pertaining to Agricultural Chemical Containment

Effective:

April 25, 2020

NEBRASKA ADMINISTRATIVE CODE Title 198 – RULES AND REGULATIONS PERTAINING TO AGRICULTURAL CHEMICAL CONTAINMENT DEPARTMENT OF ENVIRONMENT AND ENERGY

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NEBRASKA ADMINISTRATIVE CODE Title 198 – RULES AND REGULATIONS PERTAINING TO AGRICULTURAL CHEMICAL CONTAINMENT DEPARTMENT OF ENVIRONMENTAL QUALITY

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Chapter 1 - DEFINITIONS

In addition to the definitions in Neb. Rev. Stat. § 81-1502, the following definitions apply:

- <u>001</u> Appurtenances means all valves, pumps, fittings, pipes, hoses, and metering devices which are connected to a container, or which are used to transfer a material into or out of such container.
- <u>002</u> Bulk Dry Pesticide means any pesticide, once formulated, that is in dry or solid form in an individual container of undivided quantities equal to or greater than 4,000 pounds, and that has not been combined with liquids; this includes formulations such as dusts, wettable powders, dry flowables, water-soluble powders, granules, and dry baits.
- <u>003</u> Bulk Fertilizer means any liquid fertilizer held in an individual container of undivided capacity greater than 55 U.S. gallons liquid measure.
- <u>004</u> Bulk Liquid Pesticide means any liquid pesticide held in an individual container of undivided capacity greater than 55 U.S. gallons liquid measure.
- <u>005</u> Container means any device, excluding a lagoon or pit, in which a material is stored, mixed, treated, disposed of, or otherwise handled.
- <u>006</u> Custom Applicator means any person who uses or supervises the use of pesticides or fertilizers on property other than their own or which they rent or lease and bills, charges or assesses the cost of such work.
- <u>007</u> Fertilizer means any formulation or product used as a plant nutrient which is intended to promote plant growth and contains one or more plant nutrients recognized by the Association of American Plant Food Control Officials in its official publication. Anhydrous ammonia, and unmanipulated animal and vegetable manures shall not be included in this definition for the purposes of these regulations.
- <u>008</u> Loadout Facility means a location, other than the field of application, used for the loading, unloading, handling or mixing of pesticides or fertilizers or a location used for the rinsing or washing of delivery or application equipment which is designed, constructed, and maintained to hold or confine a release of a liquid pesticide or liquid fertilizer.
- <u>009</u> Operator means the person responsible for the overall operation of a storage facility or loadout facility.
- <u>010</u> Owner means the person who owns all or part of a storage facility or loadout facility.

- 011 Pesticide is defined in Neb. Rev. Stat. § 2-2624(32).
- 012 Release is defined in Title 126, Nebraska Administrative Code.
- <u>013</u> Secondary Containment means a device or structure designed, constructed, and maintained to hold or confine a release of a liquid pesticide or liquid fertilizer from a storage facility.
- <u>014</u> Storage Facility means a location where bulk pesticide, bulk liquid pesticide, or bulk fertilizer is stored. A storage facility shall include the entire contiguous tract of land upon which bulk pesticide or bulk fertilizer is loaded, unloaded, mixed, blended, or stored.
- <u>015</u> Sump means any pit or reservoir open to visual inspection, designed to temporarily collect and contain an accumulation of rinsed or washed off material or spilled liquids, structurally sound, and compatible with the materials contained.
- <u>016</u> Totally Covered or Enclosed means protected from precipitation and any subsequent drainage so that unwanted moisture does not enter the structure.
- <u>017</u> Underground Storage means any container, combination of containers, surface impoundment, pit, pond, or lagoon, including underground pipes connected to such storage, which is used to store an accumulation of pesticide, fertilizer, fertilizer or pesticide solution, or related material and the volume of which is ten percent or more beneath the surface of the ground.

Chapter 2 - SECONDARY CONTAINMENT FACILITY; WHEN REQUIRED

<u>001</u> A secondary containment facility is mandatory when:

<u>001.01</u> bulk liquid pesticide is stored in aggregate quantities with capacity greater than 500 U.S. gallons, or when bulk dry pesticide is stored.

<u>001.02</u> bulk liquid fertilizer is stored:

<u>001.02A</u> in a container with capacity greater than 2,000 U.S. gallons;

<u>001.02B</u> in containers with an aggregate capacity greater than 3,000 U.S. gallons at any location; or

<u>001.02C</u> in quantities exceeding 25 percent of the container capacity for containers larger than 500 U.S. gallons anytime during the period November 1 through March 15.

<u>002</u> A container designed and used for the storage of ammonium nitrate fertilizer is exempted from the requirements in <u>001</u> above provided the concentration of the ammonium nitrate is such that the temperature at which it freezes is 120 degrees Fahrenheit or higher, the container was in use prior to November 14, 1992, and a monitoring or leak detection system approved by the Department is in place prior to January 1, 1999.

<u>003</u> The Department may consider, on a case-by-case basis, the need for secondary containment directly under a container having a capacity of 100,000 U.S. gallons or more and in use prior to November 14, 1992. In such cases, the owner or operator of the container is to conduct an environmental evaluation and economic assessment of compliance with these regulations and identify possible alternatives to be considered by the Department. When compliance with the regulations produces serious hardship without equal or greater benefits to the public, the Department may approve an alternative which demonstrates technical practicability and economic reasonableness.

<u>004</u> A container designed and used for transportation of a bulk liquid pesticide or bulk fertilizer is exempted from the requirements in <u>001</u> above as long as any storage is solely incidental to the loading or unloading of the container and the container is not connected to a chemigation system. A container with a capacity of 275 U.S. gallons or less which is sealed, and remains sealed at the facility, may be excluded from the aggregate capacities in <u>001</u> above provided storage is solely incidental to the transfer of the container.

<u>005</u> A container or containers with an aggregate capacity of 6,000 U.S. gallons or less which is used at the application site as part of the normal application associated with activities in that field any time during the period March 15 through October 1 may be excluded from the aggregate capacities in <u>001.02</u> above. For a container to be excluded from the aggregate capacities, the container and appurtenances are to be:

<u>005.01</u> located a minimum of 500 feet from surface waters of the state and a minimum of 100 feet from any well;

005.02 located in that field for a period not to exceed 21 consecutive days;

<u>005.03</u> positioned on relatively level terrain to maintain tank stability;

<u>005.04</u> inspected for leakage and soundness immediately prior to the initial use each year; and

<u>005.05</u> structurally sound, free of obvious defects, and compatible with the fertilizer placed in the container. Leaky or faulty containers and appurtenances are to be repaired or replaced at the time of detection.

 $\underline{006}$ A container used in the application of a bulk liquid pesticide or bulk fertilizer through a chemigation system will be considered part of the aggregate capacity stipulated in $\underline{001.02}$ above for the purposes of these regulations.

<u>007</u> Storage and handling of anhydrous ammonia, dry fertilizer and unmanipulated animal and vegetable manures is exempt from the requirements of these regulations. Storage of anhydrous ammonia is regulated by Title 153 - NAC.

Chapter 3 - LOADOUT FACILITY; WHEN REQUIRED

- <u>001</u> All mixing, loading and unloading of bulk liquid pesticides or bulk fertilizers at a bulk liquid pesticide or bulk fertilizer storage facility and all draining, rinsing and washing of applicator and transportation equipment will be performed within a loadout facility under the following conditions:
 - <u>001.01</u> When secondary containment is to be installed pursuant to Chapter 2 for bulk liquid pesticide stored in aggregate quantities greater than 500 U.S. gallons or for bulk liquid fertilizer stored in aggregate quantities greater than 3,000 U.S. gallons;
 - <u>001.02</u> When a custom applicator uses pesticides from original containers greater than three U.S. gallons in capacity;
 - <u>001.03</u> When a custom applicator uses pesticide or fertilizer mixtures in individual quantities greater than 100 U.S. gallons; or
 - <u>001.04</u> When bulk fertilizer or bulk liquid pesticide is loaded or unloaded from a rail car.
- <u>003</u> A loadout facility is not needed under the following conditions:
 - $\underline{003.01}$ When loadout activities are conducted at the application site as part of the normal application; or
 - <u>003.02</u> When custom applicator loadout activities are conducted no more than fourteen days in a calendar year at any one location, the custom applicator has a loadout facility at a primary operating location, and all other requirements are met. This fourteen day allowance does not apply to loadout facilities required in conjunction with secondary containment specified in <u>001.01</u> above or to loadout facilities specified in <u>001.04</u> above.

Chapter 4 - SECONDARY CONTAINMENT FACILITY, LOADOUT FACILITY; LOCATION

- <u>001</u> A new secondary containment facility or loadout facility, except at an operation in existence prior to November 14, 1992, will not be allowed to be located:
 - 001.01 Within 100 feet of a well used for domestic purposes;
 - 001.02 Within a Class GA area as defined in Title 118 NAC; or
 - <u>001.03</u> In an area or in such a manner that there is a substantial threat of beneficial use impairment to waters of the State as defined in Title 117 NAC and Title 118 NAC.
- <u>002</u> Other locational requirements may be applicable under the Water Well Standards and Contractors' Licensing Act and rules and regulations adopted pursuant to that act.
- <u>003</u> Construction or improvements in a designated 100-year flood plain are to comply with existing federal, state and local flood plain management regulations.
- $\underline{004}$ The facility is obliged to comply with local governmental zoning regulations. It is the responsibility of the owner or operator to determine whether any such zoning regulations exist.
- <u>005</u> Underground storage of bulk liquid pesticide and bulk fertilizer is prohibited. Temporary underground containment of pesticide or fertilizer rinsed or washed off material, runoff, or other accumulations is allowed under the following conditions:
 - <u>005.01</u> A sump open to visual inspection; or
 - <u>005.02</u> A container situated in a concrete or solid masonry lined vault open to visual inspection. The container is to be on or above the surface of the floor such that any leak from the container or appurtenances may be readily detected.
- <u>006</u> If plumbing within a secondary containment or loadout facility is directly connected to a public water supply pipeline servicing the facility, the operator must comply with the Title 179 NAC.
- <u>007</u> If plumbing within a secondary containment or loadout facility is directly connected to a water well, other than a public water supply pipeline, servicing the facility, a backflow prevention device is to be installed to protect the water source. Local plumbing codes or regulations may apply if more restrictive. All equipment is to be installed, operated and maintained in accordance with the manufacturer's recommendations. The minimum safety equipment will be one of the following:

<u>007.01</u> A reduced pressure principle device which meets the American Water Works Association (AWWA) Standard C506-78 for backflow prevention devices; or

<u>007.02</u> Air gap separation. Air gap is a physical separation between the discharge end of a water pipeline and an open or nonpressurized receiving vessel. To have an acceptable air gap, the discharge end of the pipe is to be at least two pipe diameters above the top rim of the receiving vessel. If the discharge pipe is in a secondary containment facility or loadout facility, the discharge end is to be at least two pipe diameters above either the topmost rim of the receiving vessel or the highest liquid holding capacity of the containment facility, whichever is higher.

Chapter 5 - SECONDARY CONTAINMENT FACILITY; DESIGN REQUIREMENTS

<u>001</u> The walls and base of the secondary containment will be designed and constructed to be watertight, to be compatible with the pesticide or fertilizer being stored within the facility, to withstand loading conditions, and to withstand the maximum discharge from the largest container considering the full hydrostatic head of the discharged liquid.

<u>002</u> Secondary containment of bulk liquid pesticides constructed prior to November 14, 1992 and secondary containment of bulk fertilizers constructed on or before July 1, 1994 are to have included one or more of the following:

002.01 Concrete or solid masonry;

<u>002.02</u> A synthetic, metal, or prefabricated bentonite liner, except that a prefabricated bentonite liner will not be considered adequate for secondary containment of pesticides. The liner is to have been installed in accordance with the manufacturer's recommendations:

<u>002.03</u> A soil liner, except that a soil liner will not be considered adequate for secondary containment of pesticides. The soil liner may be natural soil treated with bentonite clay or other comparable material. The seepage rate of the soil liner is not to exceed 1/8 inch per day, as determined by independent laboratory or insitu testing. The soil liner will be a minimum of six inches thick and covered with a minimum of six inches of aggregate or soil cover; or

<u>002.04</u> Tank in a tank.

<u>003</u> Secondary containment of bulk liquid pesticides constructed after November 14, 1992 and secondary containment of bulk fertilizers constructed after July 1, 1994 are to include one or more of the following:

<u>003.01</u> Concrete;

003.02 Metal liner;

<u>003.03</u> A synthetic liner installed according to the manufacturer's specifications and used only for applications specifically approved by the manufacturer;

<u>003.04</u> Tank in a tank; or

- <u>003.05</u> Prefabricated bentonite liner, except that a prefabricated bentonite liner will not be considered adequate for secondary containment of bulk liquid pesticides.
- <u>004</u> Secondary containment for bulk liquid pesticides and bulk fertilizers in a totally covered or enclosed structure are to be constructed with a volume sufficient to contain at a minimum the sum of the maximum possible discharge from the largest container plus ten percent of the capacity of the largest container plus the containment volume displaced by all other structures, containers and equipment inside the secondary containment area.
- <u>005</u> Secondary containment not totally covered or enclosed are to be constructed with the volume specified in <u>004</u> above plus sufficient volume to contain the precipitation from a 25-year, 24-hour storm event on the containment area.
- <u>006</u> Pesticides will not be stored in the same secondary containment area as fertilizers.
- <u>007</u> Storage containers will be anchored or secured to prevent flotation or instability in the event of a release into the containment structure. Only pesticides, associated products, and equipment are to be stored or maintained in the pesticide containment area. Empty containers will not be stored in the containment area unless included in the capacity calculations for the containment facility and anchored or secured to prevent flotation or instability.
- <u>008</u> The containment area is to slope to a collection point or sump that allows liquids to be easily removed. The volume of the sump will not be considered part of the containment volume of the secondary containment facility. Any pump used for material removal is to be manually activated.
- <u>009</u> The secondary containment area will not have a relief outlet or valve. Sanitary and storm sewer drains will not be located within the secondary containment facility.
- 010 Secondary containment facilities for bulk dry pesticides will be:
 - <u>010.01</u> Constructed of steel, reinforced concrete or other rigid materials compatible with the pesticides stored;
 - <u>010.02</u> Capable of withstanding the full hydrostatic head, load and impact of any pesticides, precipitation or other substances, equipment and appurtenances.
- <u>011</u> Stationary containers of bulk dry pesticides will be:
 - <u>011.01</u> Protected from wind and precipitation;
 - <u>011.02</u> Placed on pallets or raised concrete platforms;
 - <u>011.03</u> On a floor extending completely beneath the pallets or platforms; and

<u>011.04</u> Enclosed by a curb a minimum of six inches high that extends at least two feet beyond the perimeter of the container.

Chapter 6 - LOADOUT FACILITY; DESIGN REQUIREMENTS

- <u>001</u> A loadout facility will be designed and constructed to contain fertilizer, pesticides and associated contaminated material spilled or deposited during mixing, loading, unloading, draining, rinsing and washing.
- <u>002</u> The loadout facility will be designed and constructed pursuant to the following minimum requirements:
 - <u>002.01</u> Constructed of concrete, asphalt or other impermeable material. After June 27, 2011, the loadout facility may not be constructed of asphalt;
 - <u>002.02</u> Constructed to withstand the weight of vehicles which will be on the loadout facility;
 - <u>002.03</u> Sized to contain a minimum of 1,800 gallons or 1.5 times the largest container, whichever is smaller. The loadout facility shall be constructed with sufficient surface area, using curbs or other means, to prevent a release from the facility; and
 - <u>002.04</u> After June 27, 2011 new, or modified, loadout facilities must be constructed to have curbs or berms to prevent external stormwater from draining into the loadout facility.
- <u>003</u> The loadout area will slope to a collection point or sump that allows spilled or deposited material to be easily recovered. The volume of the sump will not be considered part of the containment volume of the loadout facility unless specifically approved by the Department. Any pump used for material removal is to be manually activated.
- <u>004</u> The loadout facility will not have a relief outlet or valve. Sanitary and storm sewer drains will not be located within the loadout facility unless specifically approved by the Department.
- <u>005</u> The placement of spill pans or other spill collection methods under the rail car, which divert released pesticides or fertilizers into a loadout facility meeting all other design requirements, will be considered in compliance with this chapter.

Chapter 7 - CONSTRUCTION PLAN

- <u>001</u> A construction plan will be developed for each secondary containment facility and loadout facility required in Chapters 2 and 3. The design will comply with the minimum requirements set forth in these regulations. A management program will be developed and include the recycle, reuse, or disposal method for accumulations or releases collected in the facility. The construction plan will be kept up to date and on file at the facility or the nearest office location for the facility. The plan will include:
 - <u>001.01</u> A scale drawing of plans and specifications for the facility, including storage containers, buildings and loadout areas where applicable.
 - $\underline{001.02}$ A copy of the plumbing diagram for the facility which includes the location, size and type of appurtenances. Specify the type and location of any backflow prevention devices as required by Chapter 4, $\underline{006}$ and $\underline{007}$.
- <u>002</u> The construction plan is to include certification from a Nebraska registered engineer that the facility design complies with these regulations. This certification is not necessary for a secondary containment or loadout facility if, for pesticides, the facility was constructed prior to November 14, 1992 and if, for fertilizers, the facility was constructed on or before July 1, 1994, and all other requirements are met. This certification is also not necessary if the plans and specifications follow generic or standardized designs developed by the industry, university or other governmental personnel or professional engineers and approved by the Department after November 14, 1992. Any changes to the generic or standardized design are to be certified by a professional engineer.
- <u>003</u> A design which does not conform to these regulations may be considered acceptable if a Nebraska registered engineer certifies that such design provides equal or greater protection to waters of the State.

Chapter 8 - MANAGEMENT

- <u>001</u> All facilities, including the containment structure, valves, hoses, pipes and tanks, are to be maintained and operated to function as originally designed. Seams and cracks are to be sealed to prevent leakage. Leaking or faulty appurtenances are to be repaired or replaced at the time of detection.
- <u>002</u> Fertilizer, pesticide and contaminated material spilled or deposited on the loadout facility or on the secondary containment facility are to be promptly recovered. Material not used or recycled, releases unrecovered, or hazardous waste generated may result in the facility being classified as a generator and subject to regulation under Title 128 NAC. All releases shall be reported to the Department pursuant to Title 126 NAC.
 - <u>002.01</u> Fertilizer contaminated material is to be used as fertilizer, recycled, or disposed of in a method approved by the Department.
 - <u>002.02</u> Pesticide contaminated material is to be used or disposed of according to the pesticide label directions or by a method approved by the Department. Care is to be taken to segregate pesticides which are not compatible for use on the same site.
- <u>003</u> Stormwater accumulated in the secondary containment facility or loadout facility which has not been contaminated by a fertilizer, pesticide or other pollutant may be directly pumped from the facility into the normal stormwater drainage system. Any pump used for the removal of stormwater is to be manually activated.
- <u>004</u> Stormwater that comes in contact with pesticide, fertilizer, or pesticide or fertilizer contaminated material within the secondary containment or loadout facility is to be managed as contaminated material as described in 002 above.
- <u>005</u> At a minimum, any collection point or sump is to be cleared daily of any contaminated material. This material will not be allowed to compromise the minimum required containment volume.
- <u>006</u> A release of pesticide, fertilizer, or pesticide or fertilizer contaminated material from the secondary containment facility or loadout facility is to be immediately reported to the Department. The release and soil or other contaminated material is to be promptly recovered and used or disposed of in a manner approved by the Department.
- 007 No fertilizer or pesticide contaminated material will be allowed to be disposed of:

<u>007.01</u> Through a storm sewer system or waters of the State;

<u>007.02</u> Through a treatment system without a National Pollutant Discharge Elimination System (NPDES) permit or, in the case of underground disposal, an Underground Injection Control permit;

<u>007.03</u> Through a sanitary sewer connected to a publicly owned treatment works without prior written approval of the Department and the sanitary sewer authority in accordance with the discharge limitation of a pretreatment agreement or sewer use ordinance; or

<u>007.04</u> In violation of Title 126 NAC or Title 128 NAC.

Chapter 9 - CONTAINERS AND APPURTENANCES; GENERAL REQUIREMENTS

- <u>001</u> Bulk fertilizer and bulk liquid pesticide containers and appurtenances will be constructed, installed and maintained so as to prevent the release of a pesticide or fertilizer. The containers and appurtenances are to be structurally sound, resistant to corrosion, cracking and changes in temperature extremes, and compatible with the products stored therein.
 - <u>001.01</u> Every container connection, except a safety relief connection, will be equipped with a manual shut-off valve.
 - <u>001.02</u> Appurtenances will be adequately supported to prevent sagging and possible breakage because of gravity and other forces encountered in the ordinary course of operation.
 - <u>001.03</u> Containers and appurtenances will be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles or objects.
- <u>002</u> Any pipe connected to bulk liquid pesticide containers, bulk fertilizer containers, or other containers or piping in the secondary containment facility will not be placed through or under the walls or base of the secondary containment facility. All pipes leading to or from the facility will be protected from reasonably foreseeable risks of physical damage and adequately supported.
- <u>003</u> Any pipe connected to bulk liquid pesticide containers, bulk fertilizer containers, or other containers or piping in the secondary containment facility shall not be placed below ground or out of sight without adequate protection against leakage. Adequate protection shall include either line leak detection or an annual leakage test.
- <u>004</u> All bulk fertilizer and bulk liquid pesticide containers and appurtenances will be secured to provide reasonable protection against vandalism or unauthorized access. Valves on containers will be closed and locked or otherwise secured when left unattended, except that a bulk fertilizer or bulk liquid pesticide container used in chemigation will not be required to be closed or locked when used in the act of chemigating.
- <u>005</u> All bulk fertilizer and bulk liquid pesticide containers will be clearly and conspicuously labeled to identify the contents.
- <u>006</u> All bulk fertilizer and bulk liquid pesticide containers and appurtenances will be inspected for leakage and soundness at least once a month when used for storage or handling.
- <u>007</u> All secondary containment facilities will be inspected at least once a month when used for storage and the following records are to be kept on file for at least three years at the storage

facility or the nearest office from which the storage site is administered and submitted to the Director upon request within a reasonable time as determined by the Director:

<u>007.01</u> Monthly facility inspections including date of inspection or maintenance, name of the person that made the inspection, a description of the condition of the facilities, bulk containers and appurtenances, and a description of the specific maintenance performed;

<u>007.02</u> The level in each container used for storage of bulk liquid pesticides or bulk fertilizer is to be measured and recorded at least monthly; and

<u>007.03</u> A quarterly inventory reconciliation accounting for all liquid fertilizer or liquid pesticide placed in each bulk container.